



How Does Greenwashing Effect the Firm, the Industry and the Society - the Case of the VW Emission Scandal

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Abstract: Volkswagen AG, the second biggest car-manufacturer of the world has admitted in September 2015 that they used special defeat devices in their 2.0 liter diesel cars to pass the emission tests. This kind of greenwashing is not only immoral but a legal case as well. The scandal has relevant consequences not only for the firm itself but for the automotive industry and for the whole society. The major contribution of the paper is to show the uncontrollable ripple effect of the scandal which may last longer than the original case, and therefore shows that greenwashing doesn't worth it.

Keywords: greenwashing, Volkswagen, ripple effect

1 The meaning and forms of greenwashing

As in the last five decades environmentally conscious – or at least environmentally sensitive- consumer groups have emerged, companies tried to serve them with their green(er) products and services – however some companies only tried to take advantage on it and sold their traditional products with green claims and green slogans without any real green performance. This –partly or totally – deliberate misleading activity of firms are examined in the marketing literature more frequently.

The term “greenwashing” has been used from 1989, as a combination of two words: green and brainwashing.¹ The meaning of this new term was easily understood when in 1990 there was a trade-fair in Washington where the most polluters companies e.g. DuPont, the American Nuclear Society and the Society of Plastics Industry tried to show themselves as green organizations²

According to Greenpeace, greenwashing is “the cynical use of environmental themes to whitewash corporate misbehavior.”³ On their homepage it is also described as “the act of misleading consumers regarding the environmental

¹ <https://www.merriam-webster.com/dictionary/greenwashing>

² <http://stopgreenwash.org/introduction> (20.11.2016)

³ <http://stopgreenwash.org/> (20.11.2016.)

practices of a company or the environmental benefits of a product or service”.⁴ Greenpeace identifies 4 forms of greenwashing: (1) dirty business, when firms show some green steps but basically their production is unsustainable; (2) ad bluster means exaggerated green claims in marketing communication when companies spend more money on advertising than on real green actions; (3) political spin reflects to the hidden lobby against stricter environmental regulation; (4) when firms communicate their environmental actions as virtues although they only fulfil the legal requirements.

Lyon and Maxwell (2011) define greenwashing as the selective disclosure of positive information without full disclosure of negative information so as to create an overly positive corporate image.

The main features of greenwashing activity are: (1) an information disclosure decision, (2) deliberate, (3) initiated by companies, and (4) beneficial to firms and costly to society. (Boven and Aragon-Correa, 2014)

The typical forms of greenwashing⁵ are when there is no proof or evidence behind a green statement related to the product; or when there is a hidden trade-off behind the greener product attribute (e.g. there is no chlorine in it but there is other toxin). Another form of greenwashing is using false, green-like labels (which seem to be made by an independent organization or seem to be official but actually they aren't). Providing irrelevant, vague information about the product is also typical for greenwashers (e.g. the product is said to be no harmful for the whales – but whales have never been affected by the given product category). Another technique is to promote the product as a lesser of two evils (e.g. cigarette made of organic tobacco leaves). Last, but not least, there are also cases when a simple lie (fibbing) is its form.

It is important to underline that some of these sins above are unethical but loose legislation or superficial consumers could also be blamed for them (e.g. providing irrelevant information) – however some of these sins can be categorized as criminal actions because they definitely brake the existing rules.

The automotive industry is definitely under pressure to decrease its environmental impact as low air quality and greenhouse gas emission are the first on the agenda of environmental protection. According to the 2016 EPA report⁶, in the U. S. transportation is responsible for 26% of the greenhouse gas emission (following electric power industry, which is the first with its 30% share), and light-duty vehicles contribute with 61% to the negative effect of transportation on air quality. 96% of the greenhouse gas emission of transportation is CO₂, the rests are N₂O, CH₄ and HFCs.⁷

⁴ <http://stopgreenwash.org/> (20.11.2016.)

⁵ <http://sinsofgreenwashing.com/findings/the-seven-sins/>

⁶ Fast Facts: U.S.. Transportation Sector Greenhouse Gas Emissions 1990-2014, EPA June 2016

⁷ <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100ONBL.pdf>

Sometimes this pressure forces technological inventions, sometimes it only generates greenwashing.

2 The main features of the VW scandal

The Volkswagen Group is the second biggest car-manufacturers of the world.⁸ Well-known brands of the company are Audi, Porsche, Ducati, Seat, Suzuki, Skoda, Lamborghini, Scania, MAN, Bugatti and Bentley beside Volkswagen.

The US Environmental Protection Agency (EPA) has alleged that Volkswagen Group of America (VW) violated the Clean Air Act (CAA) by developing and installing emissions control system ‘defeat devices’ (software) in model year 2009–2015 vehicles with 2.0 litre diesel engines. Defeat software is designed to detect when emissions tests are being run and turn on pollution controls so that a vehicle can meet air quality standards. During normal road use, the pollution controls are disabled to enhance engine performance and fuel economy, but these changes also increase emissions, of nitrogen oxides (NOx) for example. On-road emissions testing suggests that in-use NOx emissions for these vehicles are a factor of 10 to 40 above the EPA standard.⁹

VW has admitted the inclusion of defeat devices for 482.000 vehicles during the given period. (Barrett et al. 2015) All over the world almost 11 million diesel cars are affected by the scandal.¹⁰

VW definitely lied on the greenhouse gas emission of its diesel cars, so it was a fibbing-type greenwashing. In addition, this scandal is worth examining in details because it shows special elements which are not typical in other greenwashing cases. The most important features of this scandal are the high media attention both in the U.S. and in Europe, its length, and the fact that it affects political level.

⁸ <http://www.forbes.com/sites/andreamurphy/2015/05/06/2015-global-2000-the-worlds-biggest-auto-companies/#4f856d106e48>

⁹ <https://www.epa.gov/vw/learn-about-volkswagen-violations>

¹⁰ <http://fortune.com/2015/09/23/volkswagen-stock-drop/> 10.09.2016.

3 Important consequences of the VW scandal

3.1. Consequences for the VW group

The expected steps after such a scandal would be: Admit-Stop-Compensate-Change. First the company should admit if they did something wrong, and they have to stop this bad behavior immediately. Third step is to compensate (both financially and emotionally) those who suffered any harm or drawback from the greenwashing activity (not only direct customers but all the stakeholders). Finally, the company has to find a good alternative to solve the problem.

Unfortunately, there has already been a problem with the first step. VW only admitted its cheating when its try to a voluntary recall in December 2014 failed to resolve the excess emissions, and when EPA and the California Air Resources Board (CARB) would not approve VW 2016 model year diesel vehicles, (Barrett et al, 2015)

After the admission, responsibility should be taken by the top management. Taken into consideration the length and the deliberateness of the greenwashing action, it was not surprising that the highest level of top management had to react. At this stage VW's CEO, Martin Winterkorn, who had been the CEO of VW from 2007, has resigned at 23rd September, 2015.

However, resignation doesn't mean necessarily responsibility taking. Winterkorn added: "I am not aware of any wrongdoing on my part." He said he was stepping down because Volkswagen needs "a fresh start" in the wake of the crisis. "I am shocked by the events of the past few days. Above all, I am stunned that misconduct on such a scale was possible in the VW Group." ¹¹

The new CEO, Matthias Müller has taken his place from 25th September 2015 who formerly worked together with Winterkorn and had been the CEO of Porsche.

At the same time, intensive marketing communication campaign has been started to show the commitment of the new leadership to solve the problem.

First, the company has changed its self-confident slogan (Das Auto - The car) to a more simple and less boastful one (Volkswagen).

¹¹ <http://www.forbes.com/sites/joannmuller/2015/09/23/volkswagen-chief-resigns-more-heads-to-roll-in-diesel-tailpipe-scam/#55fa68824016> 10.09.2016.



Figure 1
The change of the basic slogan of VW¹²

Second, VW put apology-ads into newspapers and magazines. PR activity is strong, and visible – and is for the wide audience. The message is clear: "We have broken the most important part in our vehicles: your trust", the long-copy ad goes on to say that "we know that actions speak louder than words. So we will directly contact every customer affected and resolve the issue for them".

The ad also details which car models may be in need of attention, while asking owners to "please rest assured that our vehicles are safe and roadworthy and that we'll continue to do everything we can to win back your trust".¹³

VW owners affected by the scandal have got a message from VW also with an apology and further action plan. What is missing is the more detailed explanation of the problem.

¹² source: <http://qz.com/580701/volkswagens-new-slogan-is-a-lesson-in-humility/10.09.2016>.

¹³ <http://www.newsworks.org.uk/News-and-Opinion/volkswagen-apologises-with-print-ad 08.09.2016>.

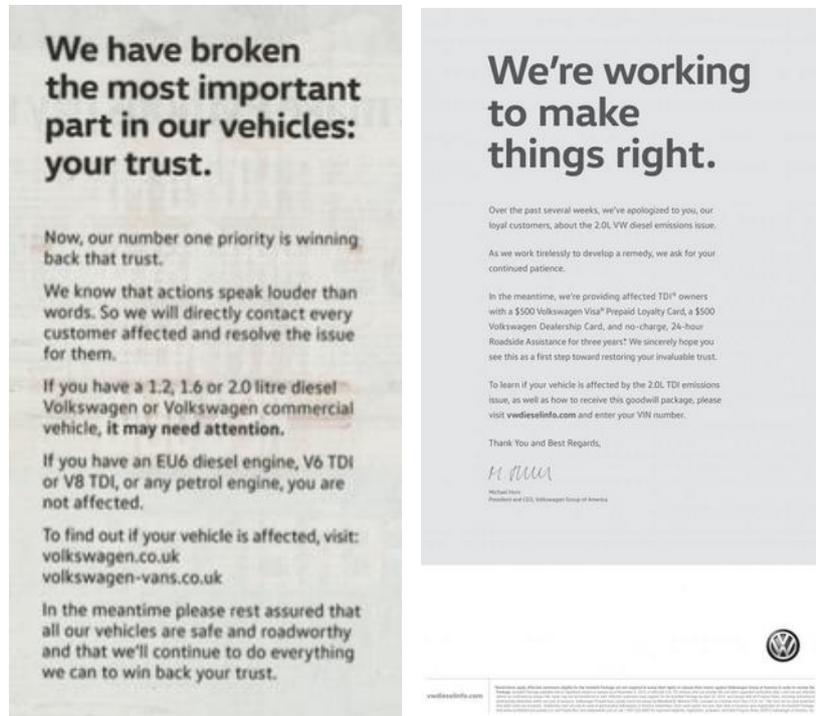


Figure 2

Communication messages of VW after the scandal in Saturday's national newspapers in England¹⁴

These advertisements mean high costs for the company which would have been spent on research and development of efficient technologies.

VW has already apologized at the highest level. In April, 2016 CEO of VW personally apologised to president Obama for the scandal.¹⁵

Despite of the change in top management positions and the marketing messages could not prevent or undo the loss of VW market capitalization – the company has lost more than 25 % of its stock-prices.

¹⁴ <https://www.marketingweek.com/2015/10/12/volkswagen-kicks-off-brand-rebuild-with-marketing-push/> 10.09.2016.

¹⁵ http://www.nytimes.com/2016/04/29/business/international/volkswagen-legal-costs-emissions-cheating.html?_r=0 10.09.2016.

„Dear Volkswagen Customer,

We regret to inform you that the Type EA 189 engine built into your vehicle with the Vehicle Identification Number XXXXXXXXX you submitted, is affected by software that may cause discrepancies in the values for oxides of nitrogen (NO_x) during dynamometer runs. Your car is safe from a technical standpoint and roadworthy.

We are very sorry to have broken your trust and are working at full speed to find a technical solution Volkswagen will cover the cost relating directly to this repair.

We will be in touch with you directly to explain what steps are required. We'll do any rectification work at our cost.

Yours faithfully,

Volkswagen.”

Figure 3

The message sent for the consumers by VW after the scandal¹⁶

Du (2015) provides strong evidence from the Chinese stock market that greenwashing is significantly negatively associated with cumulative abnormal returns (CAR)¹⁷ around the exposure of greenwashing. In addition, corporate environmental performance is significantly positively associated with CAR around the exposure of greenwashing. Du suggests that corporate environmental performance has two distinct effects on CAR around the exposure of greenwashing: the competitive effect for environmentally friendly firms and the contagious effect for potential environmental wrongdoers, respectively. (Du, 2015).

This tremendous decrease in the share-prices could be experienced not only because of the damaged reputation of VW and the potential loss of market-share in the near future, but because of the financial burden what compensation and penalties mean. The firm has to compensate its buyers in the US (482.000 2-liter diesel engine Volkswagen and Audi owners) but also has to pay a penalty to government agencies. Altogether it will cost \$10.2 billion for the company. “Owners of the VW cars, which date to the 2009 model year, can either sell their vehicles back to the company at the pre-scandal value or let the company fix the vehicle for free, one person said. In either case, owners would also get \$1,000 to

¹⁶ <http://www.autocar.co.uk/blogs/industry/opinion-volkswagen-and-art-saying-sorry>

¹⁷ abnormal return= actual return-expected return

\$7,000 depending on their cars' age, with an average payment of about \$5,000, one of the people said.”¹⁸ Penalties may mean in theory \$18 billion¹⁹.

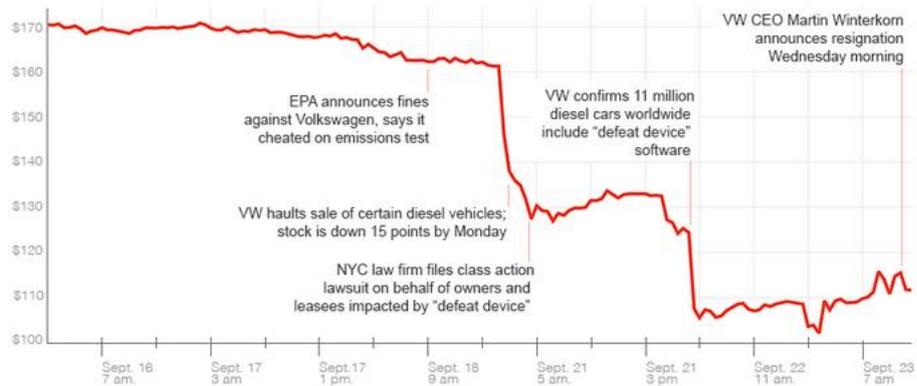


Figure 4
Share prices of VW AG in the days of the scandal²⁰

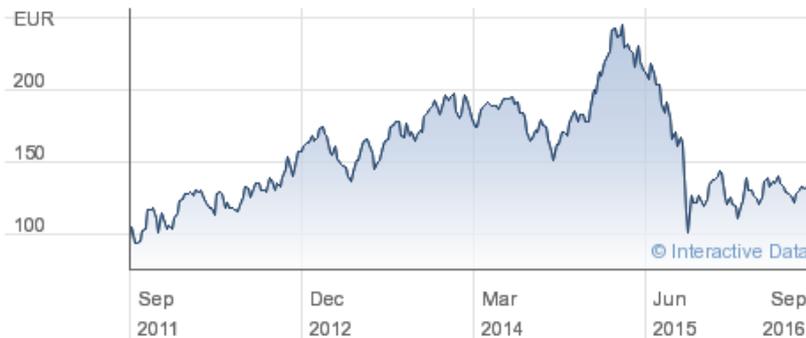


Figure 5
The share-prices of VW from 2011 till 2016²¹

¹⁸ <http://bigstory.ap.org/article/7331e2a146d24645820afa4d4328747b/ap-source-vw-pay-about-102b-settle-emissions-claims> 08.09.2016.
¹⁹ <http://www.nytimes.com/2016/04/29/business/international/volkswagen-legal-costs-emissions-cheating.html> 10.09.2016.
²⁰ <http://fortune.com/2015/09/23/volkswagen-stock-drop/> 10.09.2016.
²¹ <http://www.hl.co.uk/shares/shares-search-results/v/volkswagen-ag-ordinary-npv> 08.09.2016.

When Barrage et al. (2014) examined the effects of BP oil spill²² effect on BP's position, they found three relevant consequences: (1) there was a significant reaction from the consumers – BP retail prices declined by 25 % while BP volume declined by 3.6 percent. (2) In areas, where green preferences of consumer were stronger, the impact of the oil spill was definitely stronger. (3) However, where BP showed more intensive advertising activity before the disaster, the negative effect of the spill was lower.

They found that “the impact of the oil spill on BP prices was significantly less severe in areas with more BP pre-spill advertising. These results are robust to a variety of specification checks such as controlling for BP's corporate advertising during the spill and for other types of advertising that may have affected demand for BP-branded retail gasoline stations” (Barrage et al, 2014. p.5.)

Damaged reputation can already be seen in lower sales numbers of VW models. For example, in Europe the company sold 3,1 % less cars than a year before (Jan. 2016 vs Jan. 2015), even in Germany sales declined by 5,2 %. On the Russian market the market-loss is more relevant (27%). On the U.S. market sales declined by 7.6 %. Interestingly, in China, sales improved by 15.4 % - as being the biggest market for VW the whole (300.000 sold in China from the 520.000 new VW car sold worldwide in January 2016), the companies market-position is not devastated by the scandal.²³

3.2. Consequences for the industry

Although VW is responsible for the manipulation scandal, not only the company itself has to pay its price. Share-prices of the main competitors of VW have also decreased after the scandal: Toyota lost -3.24%, BMW -3.88%, Honda -13.73%, Ford -12.42%, General Motors -4.32%, Mercedes -6.51% and Fiat -5.97%.²⁴

²² The Deepwater Horizon drilling rig explosion was the April 20, 2010 explosion and subsequent fire on the drilling unit, which was owned and operated by Transocean and drilling for BP, 60 km southeast of the Louisiana coast. The explosion killed 11 workers and injured 17 others. The same blowout that caused the explosion also caused a massive offshore oil spill in the Gulf of Mexico, considered the largest accidental marine oil spill in the world, and the largest environmental disaster in U.S. history

²³ <http://www.volkswagen.hu/hirek-es-hirlevel/hirek/1045-koezel-valtozatlan-eredmennyel-kezdt-ez-evet-a-volkswagen-s> 08.09.2016.

²⁴ <http://bruegel.org/2015/09/chart-of-the-week-the-impact-of-volkswagen-on-the-automobile-stock-market/> 10.09.2016.

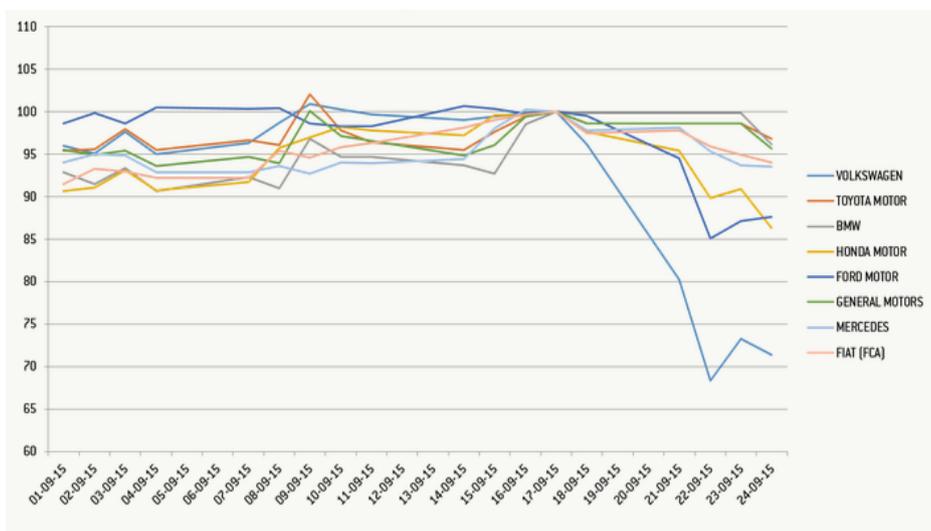


Figure 6
Stock prices of VW and its main competitors after the scandal (Sept, 2015)²⁵

According to Bruegel the potential reason "is that markets may fear stronger and more stringent enforcement of environment regulation affecting all global car producers. It is also possible that the Diesel technology's reputation as a "clean fuel" will be fundamentally discredited, undermining profitability in other companies as well."²⁶

From the consumer side higher level of cynicism, lack of trust toward any messages from the car manufacturers is a rational reaction. That makes the task of marketing-managers more difficult in the future.

3.3. Consequences for the society

Air pollution is not only dangerous because it contributes to global warming but because it has direct negative effect on human health. Initial estimations in the press of the impact already incurred on public health range from 16 to 106 premature mortalities, but Barrett et al. (2015) made precise investigation and their calculation estimated 59 premature deaths as a consequence of the higher level of air pollution in the U.S. due to the formerly mentioned VW diesel cars.

²⁵ <http://bruegel.org/2015/09/chart-of-the-week-the-impact-of-volkswagen-on-the-automobile-stock-market/> 10.09.2016.

²⁶ <http://bruegel.org/2015/09/chart-of-the-week-the-impact-of-volkswagen-on-the-automobile-stock-market/>

Translating the higher air pollution measures into direct death cases can help for the public to realize the seriousness of the unfair behavior.

In addition, researchers estimate an additional 31 cases of chronic bronchitis and 34 hospital admissions from respiratory and heart problems. Individuals would also suffer around 120 000 'minor restricted activity days', including work loss days. (Barrett et al. 2015)

VW's greenwashing case may also result in the lack of trust toward environmental protection institutions and the effectiveness of their procedures because this misleading could last for many years while noone detected it.

According to the German Spiegel, "Meeting minutes, correspondence and conversation records (...) show that the European Commission and member states knew, since 2010 at the latest, that the extremely harmful emissions from diesel cars were strikingly higher than legal levels. (...) According to EU officials, pressure from countries with a strong auto industry, most notably Germany, significantly reduced interest in an investigation. Instead of doing something about the environmental policy violation, the Commission and the member states passed the buck to each other." "The winners in this fight over responsibility are the automakers, like Opel and Mercedes, who have exploited it to shirk their own responsibility. The Volkswagen Group, which will be paying billions of euros in fines in the United States, can feel secure against criminal prosecution in Europe."²⁷

The VW case can also affect the whole German image. Angela Merkel, in comments published on her web site, said she didn't believe the reputation of the "Made in Germany" logo has been damaged by the diesel scandal but warned against "taking it lightly."²⁸

3.4. The ripple effect of the VW scandal

Long-term, ripple effect of the scandal can ruin the reputation of the firm more, than the direct consequences of it, as it has become a "term", a case which sets an example for emission scandals, and therefore the brand or company name will be the synonyme for the incorrect behavior.

This ripple-effect has already been experienced in marketing communication. PETA, which is the largest organization for protecting animal rights (People for the Ethical Treatment of the Animal), used VW logo to pay attention for vegan lifestyle. Although its message is that there is a bigger scandal than the VW case,

²⁷ <http://www.spiegel.de/international/business/volkswagen-how-officials-ignored-years-of-emissions-evidence-a-1108325.html>

²⁸ <http://www.wsj.com/articles/merkel-urges-volkswagen-to-make-full-disclosure-in-emissions-scandal-1446290032> 10.09.2016.

it uses the VW example because they think that there is a common knowledge in the society about it, so referring to it helps people to decode the message.



Figure 7

PETA billboard – using the VW scandal as an example²⁹

Another example of the ripple-effect of the VW case as a flagship example of a greenwashing phenomenon took place in Europe. During the Paris Climate Talks (COP21), guerilla actions were taken by some environmental activists. The Brandalism group replaced approximately 600 bilboards (citylights) with critical messages in connection with climate change and they highlighted the responsibility of companies and politicians. The VW scandal also gave munition to that.

²⁹ <http://www.peta.org/blog/theres-a-bigger-emissions-scandal-than-volkswagen-says-new-billboard/>



Figure 8

Guerilla marketing billboard for Paris Climate Talks – using VW scandal as an example³⁰

The text on the citylight poster is rather cynical: “Now that we’ve been caught, we’re trying to make you think we care about the environment. But we are not the only one.”

In the age of hashtags it is also remarkable that the “#Dieselgate” term has been coined. As Nixon name has intertwined with Watergate forever, maybe Volkswagen will have difficulties to get rid of this stain on its image.

³⁰ <http://www.citylab.com/design/2015/11/cop21-paris-climate-billboard-artist-volkswagen-brandalism/417897/>



Figure 9

Dieselgate pictures on the net (Source: https://www.google.hu/search?q=dieselgate&client=firefox-b&source=lnms&tbm=isch&sa=X&ved=0ahUKewjTrd2P0NrQAhWFDywKHf4XBxIQ_AUICcgB&biw=1366&bih=657)

Why these examples mean a real danger to the reputation of the firm? Because VW has n't got any control on such consequences of its own immoral actions.

Conclusions

The VW scandal is not the only greenwashing case in the automotive industry. "There are still some egregious examples of greenwashing, such as Mazda's use of the Dr Seuss cartoon character The Lorax 'to speak for the trees' and endorse Mazda's SkyActiv technology with a 'Certified Truffula Tree Seal of Approval' from the charismatic cartoon animals" (Bowen and Aragon-Correa, 2014) Honda settled a class action suit for false and misleading statements regarding the fuel efficiency of a hybrid vehicle. Honda advertised that its Civic Hybrid got approximately 50 miles per gallon (MPG) when in fact it got around 30. This practice was also a long-term case: between 2003-2009. (Delmas, Burbano, 2011, p.64).

VW now is doing all the actions what are necessary to survive the scandal: it has admitted their sin, they stopped continuing using the defeat device, they offered compensation for their clients and will pay the fines as well. The CEO also took - at least, partly- the responsibility. However, hard times are not over yet. Just in these days London and France have announced need for compensation (London mayor Sadiq Khan issues £2.5m VW congestion charge call 20 Nov, 2016)³¹ To survive this financial crisis, VW announced they will fire 30.000 workers till 2020 in order to improve profit.³²

³¹ http://www.basingstokegazette.co.uk/news/national/14917037.London_mayor_urges_VW_to_fully_compensate_capital_over_emissions_scandal/

³² <http://www.origo.hu/gazdasag/20161118-a-vw-4-ev-alatt-30-ezer-embernek-mond-fol.html>

What surprising is that consumer boycott hasn't been started as a reaction of the scandal – although it could have been a clear message for the company and for the society. So there might be a speculation that consumers don't really care about the air pollution of diesel cars in general.

To prevent such greenwashing cases, Baldassare and Campo (2016) suggest a self-assessment matrix to companies. The two dimensions of the matrix are being sustainable and appearing sustainable. A transparent company suits both, but for opaque companies to appear is more important than to be sustainable. VW has to work honestly on changing its position in this matrix in the future.

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