Dissecting Corporate Sustainability Reporting: VW Emissions Scandal case

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ABSTRACT

The concept of socially responsible businesses and sustainability reporting always received certain degree of criticism. But those critiques tend to amplify in the light of corporate scandals like Volkswagen emissions scandal that highlight the dichotomy in reporting and reality. I tired to look into those sustainability reporting critiques through both academic and media lenses keeping in mind the emergence of the scandal. I examined existing sustainability reporting critiques and analyzed them in the light of recent scandal trying to identify some new or dominant trends in sustainability reporting critiques. I also selectively examined Volkswagen's 2013 and 2014 sustainability reports thorough various methods trying to find the justification of the most prevalent critique – the evolution of the report into marketing tool – in this specific case.

KEYWORDS

CSR, Social Responsibility, Criticism, Literature Review, Media Content Analysis, Critical Discourse Analysis, Reforms

INTRODUCTION

Sustainability of the current economy and the ability of corporations to address global challenges related to improving environmental conditions are some of the main issues faced by humans. Focusing the power of business to improve social and environmental conditions has become a priority for policymakers and other stakeholders, and it is a central aim and a purpose of the corporate social responsibility movement (Maguire 2011). Although corporate social responsibility is sometimes regarded as a loosely defined term (Okoye 2010), it is obvious to all stakeholders including businesses themselves that corporate activities can resonate with more responsible business practices (Nwagbara and Reid 2013).

Companies can improve their daily profit generating activities through different socially responsible actions. Though companies themselves prefer not only to act in a socially responsible way, but also inform their stakeholders on their social activism. As a result, recent decades have witnessed an exponential growth in non- or extra-financial reporting on environmental or social performance indicators. A lot of corporations as well as small and medium enterprises, are informing their stakeholders more often about their social and environmental performance through print-based reporting or through their websites (Herzig and Schaltegger 2011). Corporate social responsibility and corporate sustainability reporting are both widely abbreviated to “CSR”, and from a practical perspective companies use both terms interchangeably (Montiel 2008). For the purposes of this research I will use both “Corporate Social Responsibility” and “Corporate Sustainability Reporting” terms interchangeably explaining abbreviation “CSR” depending on the context. However, the main focus of this research is on the analysis of reporting and its final product sustainability report. While there is no internationally agreed definition of corporate sustainability reporting, it is generally understood as the practice of measuring and disclosing sustainability information alongside, or integrated with, company’s existing reporting practices. Currently, 95% of the Global 250 issue sustainability reports (GRI 2013).

The willingness of companies to produce sustainability reports is influenced by several factors. For example, investors and analysts use extra-financial information provided by companies to help analyze the performance of those companies and ultimately inform investment decisions (Radley Yeldar 2012). According to Price Waterhouse and Coopers (2014) the majority of responding investors considered sustainability issues when they were deciding on whether to include or not to include the company in their portfolios. Specific goals of sustainability reporting may also be to ensure acceptance by key stakeholders (e.g.

government, media, or employees) and pressure groups (e.g. environment protection groups, human rights associations) (Herzig and Schaltegger 2011). And as Khoury et al. (1999) suggested, companies assure the acceptance from those stakeholders by covering several aspects of socially responsible behavior such as investment in community outreach, employee relations, creation and maintenance of employment, financial performances or environmental stewardship (Kumar and Sharma 2014).

Environmental stewardship, or environmental protection, is one of the most important dimensions of corporate social responsibility. Emerging in the1980s and 1990s as a reaction to accidents and environmental disasters (such as, for example, Odyssey spill or Exxon Valdez spill) the attention towards the environmental aspect of reporting has increased significantly since then (Herzig and Schaltegger 2011). Environmental performance disclosure and reporting is especially important in industries that are traditionally regarded as those who contribute a lot to environmental degradation - such as oil and coal companies, as well as industries connected to them like electric utilities or transportation (Hoffman et al 2007). For example, car manufacturers, as representatives of the transportation sector, are engaging in CSR activities concerning vehicle recycling and producers' extended responsibility for their products, green supply chain management, and environmental management schemes (Martinuzzi et al. 2011). However, committing to detailed sustainability reporting doesn't make the reports themselves the most reliable source of information on sustainable or socially responsible performance when firms try to reduce their environmental impacts, when they respect labor rights, etc. And as Bruno (1997) described CSR reporting as corporate "greenwashing," "bluewashing," and other forms of disinformation from organizations seeking to repair public reputations and shape positive public images (Laufer 2003). There are many other circulating concerns in both academic and popular literature that usually amplify as firms engage in activities that validate these criticisms, as it happened with the recent Volkswagen (VW) emissions scandal. This scandal represents a case of dichotomy between reporting and reality, as these phenomena manifested in corporate sustainability reporting.

In September 2015, the EPA found that many VW cars being sold in America had a "defeat device" - or software - in their diesel engines that could detect when they were being tested, and change the vehicle's performance accordingly to improve NOx emissions levels (Hotten 2015). Volkswagen has admitted that millions of its diesel cars worldwide were equipped with this software that was used to cheat on emissions tests (Russell 2015). About 11 million cars worldwide produced from 2009 to 2015, including eight million in Europe, were affected (Campbell 2015). This scandal provoked widespread response from industry professionals and media experts. Various journals, magazines and newspapers have released articles on issues raised by VW's emission fraud. One of the topics discussed in several online journals, magazines and expert blogs was the validity of corporate sustainability reporting in the light of emerging scandal. Taking into account that corporate social responsibility and corporate sustainability reporting gained a lot of critical attention from various researches it was interesting to observe how Volkswagen emissions scandal added up to this CSR criticism? Did scandal focus attention on one specific criticism? Did it provide some new ways to look into existent criticism and in what ways did it validate this criticism in this specific case? It was interesting as well to do academic snapshot of a resonance event from one angle – sustainability reporting angle in the case of this research. Furthermore, this study covered the following questions: What are those CSR criticisms related to VW scandal are? How did they contribute to the existing corporate sustainability reporting critiques? I also analyzed VW sustainability reports from 2013 and 2014 in trying to get the better understanding of certain criticisms by looking into actual reports rather than only reviewing other people's opinions. In my analysis I tried to answer the following question: how was VW addressing the emissions issue and air pollution reduction in its most recent sustainability reports from 2013 and 2014 before the whole scandal emerged? Based on all these questions I looked into broader implications by providing recommendations on how social responsibility and sustainability reporting might be reformed to avoid scandals like VW happening again in future.

Background information

VW NOx emissions scandal

The diesel emissions fraud became public in September 2015. On September 18th VW publically admitted the usage of a sophisticated "device" to cheat emission tests (Hotten 2015). This "defeat device" was used by the German automaker to mislead environmental officials by making them think that the cars are meeting emissions standards. The device is not a tangible part of the car, rather it is a software component installed in the board computers within affected cars. Modern cars are dependent on onboard computers in their daily performance, getting data from several data sources. The emissions are also that type of data to be measured and controlled. VW used this measure and control function to reduce nitrogen oxide (NOx) emissions output readings without actually reducing the car's emissions. If they were to go the usual way, they would have used so called AdBlue or urea injection: inside a honeycombed chamber, the scrubbing system sprays a liquid made of 30 percent urea and 70 percent water into the diesel exhaust. This sets off a chemical reaction that converts nitrogen oxides into nitrogen, oxygen, water and small amounts of carbon dioxide - molecules that aren't as harmful to human health (Niiler 2015). However, this whole urea mechanism represents additional costs in form of fuel and manufacturing expenses- the thing desired by neither the producer nor the customers. VW decided to go with nitrogen oxide trap instead - the less expensive option. Diesels with the trap systems run lean and the rhodium (as the part of the trap) causes the storage bed to absorb the NOx from the exhaust stream flowing over it. Periodically, the engine switches to a richer air-fuel mixture that increases the content of unburned hydrocarbons in the exhaust. They react with the NOx and catalyst platinum converting everything to nitrogen, water and carbon dioxide (Motavalli 2015). It is pretty clear that the trap consumes additional fuel to operate reducing the fuel efficiency - one of the most important features for potential buyers. The desire to keep the cars fuel efficient and cheap (through avoiding installment of traditional NOx eliminating mechanisms) might have guided VW to add those couple lines of code in software known as previously mentioned "defeat device" – the fact that will be important later in understanding one of the sustainability reports criticisms.

According to the EPA (Niiler 2015) the device could differentiate whether the car was actually being driven or was being driven for laboratory testing purposes. The computer sensors monitoring the steering column were performing this function. Under normal driving conditions, the column oscillates as the driver negotiates turns, but during emissions testing, the wheels of the car move with the steering wheel not moving. That seems to have been the signal for the "defeat device" to turn the catalytic scrubber (a control device that is used to remove some particulates and/or gases from industrial exhaust streams) up to full power, allowing the car to pass the test (Niiler 2015). The whole cheating code represented the effective solution to the tradeoff between cost and necessity to follow regulations. But being effective solution, it never represented the legal one.

VW started installing the defeat device back in 2009, but the first suspicions on the presence of this device started emerging only in 2013 (Lawrence et al 2015). Discrepancies in the European tests on the diesel models of the VW Passat, the VW Jetta and the BMW X5 last year gave Peter Mock an idea to replicate the tests under American clean air standards (Plungis and Hull 2015). Mock was the representative of German branch of International

Council of Clean Transportation who asked for the assistance of his American counterpart John German. What is surprising that initially both of them tried to show that diesel is actually clean and discrepancies are basically accidental. To prove this they drove the cars over more than 1,200 miles from San Diego to Seattle with the pre-installed portable emission measurement system. This system could be put in the car's trunk with an attached probe placed in the exhaust pipe, and the researchers from West Virginia University provided that device. As the result of these tests two Volkswagen diesels — a 2012 Jetta and a 2013 Passat — were found to emit far more nitrogen oxide on the road than expected, and the EPA and California Air Board were immediately informed (Ewing and Mouawad 2015). VW tried to blame ordinary technical inaccuracies first, but then after meeting with regulators in 2014, the automaker agreed to fix the problem with a voluntary recall of 500,000 cars (Niiler 2015). However, the recall wasn't sufficient enough, and in August 2015 the EPA said it wouldn't certify VW's 2016 diesels until the company can explain the previous discrepancies. Not having another choice, on 18th of August VW had to admit to the EPA the presence of defeat device on most of the cars manufactured from 2009 to 2015. Ironically, the news on cheating came just after VW received Dow Jones Sustainability's Indexes award on being the world's most sustainable automobile group. Later, on September 18th, the E.P.A. announced VW's violation and the news makes headlines worldwide. From that point of time the series of events were triggered.

Corporate Sustainability Reporting: history, guidelines and value

There is certain degree of confusion in between two terms, which have the same acronym – CSR. However, there is some difference in between corporate social responsibility and corporate sustainability reporting. Though businesses tried to be responsible since the early stages of human history and throughout it, the reporting part started emerging relatively recently. Through the years of concern over the environmental and social issues, official reporting emerged with the development of modern corporations and financial reporting (Buhr in Unerman et al 2007).

The concept of social responsibility and sustainability include multiple dimensions like labor practices, financial responsibility, environmental implications, etc. As far as this research is more about environmental aspect of reporting, I will look deeper into the history of environmental reporting. The modern from of environmental disclosure emerged from reporting in the US during the late 1980s, in response to the increasing volume of emissions data put into the public by the US 1987 SARA [Superfund Amendments and Reauthorization Act] the «right to know» legislation which started the Toxic Release Inventory (Baue 2004). Another important milestone in promoting environmental reporting through the concept of sustainability was the 1987 Bruntland Report *Our common future* from United Nations World Commission on Environment and Development (Singh et al 2009). Another significant report was the report from Deloitte Touche Komatsu and SustainAbility called *Coming Clean* which helped to develop further the value and the process of corporate environmental reporting. Starting from 1993 this report laid foundations of reporting through 5 stages for the first reporting companies. These 5 stages were supposed to lead to the final product that was linking environmental, economic and social aspects of corporate performance (Buhr in Unerman et al 2007). Another reason driving active engagement of corporations in sustainability and environmental reporting was the occurrence of environmental scandals or disasters. Unexpected events as environmental catastrophes like, for example, widely recognized Exxon Valdez oil spill or Bhopal chemical disaster capture wide public and media attention. Soon after such shocks, new regulation or new practices such as environmental reporting got enacted (Kahn 2007).

The rise of sustainability and environmental reporting was also due to the value reporting was supposed to be creating. Companies might have multiple reasons or incentives that drive their reporting initiatives whether they are reporting on environmental aspect, labor practices, or anything else related to corporate responsibility. I compiled the following list of benefits of reporting to companies and to the society based on the reports by Kolk (2003), GRI (2013), Cerin (2002), Marsden (2000), and Willis (2003):

- public communication: ability to convey the corporate message internally and externally in managing stakeholder relationships, alliances and partnerships
- investor communication: risk management information delivered to investors in guiding their investing decisions, the linking of financial and non-financial reporting
- benefits for reputation: improves corporate internal/external transparency practices
- ability to increase efficiency, reduce some costs, create new jobs
- helps to plan companies strategy aligning it with green economy and sustainable development concepts
- strengthens competitive advantage

- the tool of tracking progress of certain aspects of environmental and socially responsible performance

As any corporate tool actively integrated into business operations, sustainability reporting has some guidelines to follow. The guidelines and procedures are listed and standardized though several international bodies like GRI (Global Reporting Initiatives), the International Standards Organization (ISO), the World Business Council for Sustainable Development (WBCSD), SustainAbility, and etc. (Adams and Narayan in Unerman et al 2007). There are also a number of more localized organizations which set reporting standards according to local specific conditions. Though having a lot of organization specific reporting standards, all of these organizations have one thing in common when it comes to reporting - they all provide guidelines , but it is up to company to choose what to report or not to report. Sustainability reporting (and environmental as a part of it) is a voluntary action, and voluntarism is the fundamental aspect of reporting. This voluntary aspect of reporting helps companies benchmark their individual sustainability performance and ensures transparency in sustainability information (Skibola 2011).

METHODS

Study System and Data Collection

This study is composed of three main parts. A literature review of academic articles that critiques corporate sustainability reporting; a media content analysis of the VW emissions scandal through several media sources such as non-academic journals, online newspapers, magazines, and blogs; and, finally, a critical discourse analysis of VW's most recent Corporate Sustainability Reports from 2013 and 2014. Academic articles were accessed through Ebscohost's Business Source Complete search engine provided by UC Berkeley Library and using the Google Scholar search tool. Media articles and blogs were accessed through Factivia and Google, utilizing the search tags: "VW emissions scandal" and "CSR". I also downloaded the two recent sustainability reports provided by VW for public use. I chose the report from 2013 and 2014 because they represent the reports that were released just before the scandal broke out in 2015 ensuring the temporal proximity to the actual scandal.

Data Analysis

Literature Review of Academic Articles

This portion of research is dedicated to literature review. The focus is on academic articles expressing critique of the CSR concept. The criticism of CSR as a trend gaining more attention in light of big corporate scandals is the central theme of this literature review, with attempts to identify the most frequent and the strongest points of criticism of CSR in peer-reviewed articles from academic literature sources.

Media content analysis

Content analysis is a research technique that is based on measuring the amount of violence, negative portrayals of women or any other trends in a sampling of some mass media sources (Berger 1991). In this paper I analyzed the contents of the number of articles related to corporate sustainability reporting in connection to VW emissions scandal. I chose to analyze media sources in relation to VW scandal and sustainability reporting/social responsibility because academic sources have certain time lag in reacting to events and analyzing them from academic viewpoint. Media sources were much faster in their response, and provided required information to analyze.

Media content analysis manifests in two tracts: quantitative and qualitative. Though qualitative analysis is considered to be a little pseudo-scientific due to its certain level of subjectivity, this paper will employ a reasoned qualitative content analysis approach. According to Neuendorf (2002) there are four main approaches to media content analysis: descriptive, inferential, psychometric, and predictive. I focused mainly on a descriptive approach in trying to describe experts' opinions and interpretations in blogs and articles. I identified parallels in general critique of the CSR movement and CSR critique generated particularly by media sources in the light of VW scandal with the aim of identifying how academic critiques got reflected in media sources.

Critical discourse analysis of VW 2013 and 2014 CSRs

First I read VW's 2013 and 2014 sustainability reports in an uncritical manner, only familiarizing myself with their content. Later I dived into analyzing in the light of emissions controversy outbreak in September 2015.

VW's sustainability reports are composed of five main sections: Strategy, Economy, People, Environment, Indicators and Goals. Consistent with the goals of this specific analysis, I paid more attention to "Environment" section. As was previously noted, the VW scandal primarily concerns emissions of NOx. Counting how many times various gases, not only NOx, were mentioned in that section, I weighed how many times NOx emissions were addressed specifically relative to other environmentally unfriendly gases. NOx emissions are particularly important due to their direct relation to VW scandal: NOx is the main gas being emitted as the result of modifications. In addition, NOx is the trigger that initiated all the critical response and made look into the whole VW reporting questioning its validity.

Qualitative analysis was partially performed through the framework of elite theory. According to Arslan (2005) the main message of elite theory is that power, control and influence are confined to a small number of elite groups (Arslan 2005 in Pupovac 2014). Some corporations do operate with enough power to qualify them as the representative of an elite group. Elites can exercise their influence through various methods. One of these methods is utilization of annual reports, sustainability reports and corporate social reports to establish their superiority, to strengthen their image, and to emphasize their importance as the global corporation.

The Volkswagen Group was considered an elite corporation for the purposes of this research. Before the emergence of the scandal VW surpassed Toyota as the number one auto manufacturer with 5.04 million cars sold annually (Bomey 2015). VW can qualify to be an elite corporation due its close relation to Germany's national image. Volkswagen has an iconic role as a symbol of West Germany's economic revival after Nazi rule and the destruction of World War II (Automotive New Europe 2015). In addition, VW's economic elite status is formed though the large contributions of this corporation in forms of taxes and multiple royalties to the, for example, German government. Finally, VW can claim a social elite status as well - Volkswagen employs nearly 600,000 people around the world, and more than a third of the 775,000 people who work in the auto industry in Germany (Petroff 2015).

As far as VW is an elite corporation in multiple dimensions of "elite" definition, several aspects of "elites" criticism also apply to VW. Elite corporations have wealth, status, privilege and power and with these virtues come stakeholders' elevated expectations on transparency and public accountability at least in such documents as various financial or non-financial reports Under this pressure elites tend to produce detailed CSRs, but their content is meant to build positive or an image of more socially responsible company by reporting in the way which is comfortable and beneficial for multinational corporation rather than to the rest of the society. Elite corporations also tend to report in the way that emphasizes their influential positions and leading roles, thereby imposing on the public their special status and dominating positions (Pupovac 2014). The "elite" theory might also explain why overly empowered corporations with huge influence tend to cheat and produce scandals like VW emissions scandal, not really thinking about consequences relying on their power and well-established image too much. "Elite" theory helped me to analyze the report from that aspect.

I also read critically to observe some other trends established in reports and to look into the ways the VW group reported their environmental performance, in general, using the following questions to frame study findings:

- What is the prevalent genre of the whole document? Does it sound like a marketing brochure? Does the tone of reporting sound like advertising?
- What visuals were used by VW group in presenting environmental information? How they were related to the information presented? Did they cover several years or provide only snapshot information?
- Did VW employ omission in presenting their environmental performance? What aspects were omitted? In order to identify omission I will check the consistency of the report with recommended environmental performance indicators to be covered according to Global Reporting Initiative's CSR writing guidelines presented in Appendix #1.
- Did VW use presuppositions – reporting certain indicators as granted?
- Who is depicted as agent in VW's reports in fulfilling their environmental responsibilities?
- Whom VW seems to be addressing in reporting all their socially responsible activities?

RESULTS

Literature review: scholarly critique of Corporate Sustainability Reporting/Corporate Social Responsibility

Corporate Social Responsibility and Corporate Sustainability Reporting were specifically created to establish the communication channel on businesses' sustainable/socially responsible behaviors. This communication is important for stakeholders, for scholars and for the companies themselves because it might affect stakeholders' purchasing and investing decisions. However, corporate social responsibility or corporate sustainability reports are usually accompanied by skepticism and mistrust towards companies among both stakeholders and scholars (Lock 2015). Reports are criticized from several aspects and after reviewing a number of articles from various academic sources I identified four main causes they are criticized for: PR/marketing application, information asymmetry, lack of uniformity in reporting standards, and flaws undermining the purpose of sustainability reporting.

A lot of researchers brought up one of the most prevalent critiques of sustainability reporting which is the use of sustainability reports as a marketing tool. This marketing tool helps to influence positively public's perceptions of company's image. Criticism of CSR has been put forth by many authors including Catka et al (2004), Lepoutre and Heene (2006), Banarjee (2007), Cilliberti et al (2008), Johnson et al (2008), Mullerat (2009), and Heath (2010) (Dudovskiy 2012). Corporate sustainability reports can be used as tools for forming positive image and establishing profitable public relations: when customer/investors appreciate company's social activism and are willing to purchase/invest into company itself and its products. This practice is often integrated with "brand management", helping to form company's image in stakeholders' minds (Mark-Herbert and Schantz 2007). Reports have impact on strategic planning, governance, stakeholder engagement, risk management, decision making, data collection and management systems, performance measurement, performance management, public relations and communications (Adams 2007). Companies with clean records usually use the primary function of reporting: stakeholder engagement and strategic planning. Those companies who have engaged into questionable activities or even sustainability-related scandals might use reporting benefits for restoring tarnished reputation and image. Companies are trying to 'clean up their act' solely for the purpose of accommodating social pressures, but with the main objective of maintaining or increasing profits (Hamman and Acutt 2010). And, in general, whenever companies start receiving typically negative reviews from the media regarding their social responsibility performance, they tend to make reporting more and more positive. This trend was observed in a study of H&M and Nike disclosures (ACCA 2010). Finally, it is worthwhile to mention that a company's image is usually perceived through relation to other companies. And some companies do use reports to make this image look better in stakeholders' eyes. Some papers show that firms with a competitive mindset might still engage in green washing to construct a competitive advantage (Touboul and Roulet 2012). With greenwashing defined in this context as the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service (Delmas and Burbano 2011).

This competitive advantage is sustained through exploring their internal strengths through responding to environmental opportunities. According to the several researches like in Rosen (2001), Russo and Fouts (1997), Starik and Rands (1995) and Dechant and Altman (1994) superior environmental performance leads to above-average industry performance. This enhanced performance is reached through their better reputation that resonates with various stakeholder groups (Jose and Lee 2007).

Corporate social responsibility reporting was initially introduced as a way of eliminating information asymmetry between companies and stakeholders with information asymmetry being defined as when one of the participating sides don't have proper access to information just like the other side does. But in using corporate sustainability reports as a public relation (PR) tool, sometimes companies tend to present inherently wrong, incomplete or partially modified information/data. As a result, instead of eliminating information asymmetry companies tend to exacerbate this phenomenon. For example, companies provide only partial truths or make incomplete, superficial or image-related changes to give the impression of accommodating social interests not informing society about partiality of those changes. Some non-governmental organizations (NGOs) complain that self-governance by companies is insufficient, if only because the information produced is far too limited to be valuable to consumer and interest groups (Dubbink et al 2008). In addition, there is some gap in corporate sustainable reporting (CSR) and corporate sustainable actions (CSA) – the gap that companies tend to conceal. Companies also enlarge the information asymmetry by presenting all their operations in a positive light only, thereby omitting reporting in negative performance (Ditlev-Simonsen 2014). The other critique contributing to information asymmetry arguments is that a business will always be better informed than any of its stakeholders no matter what because of a power imbalance based on wealth and access to resources, such as knowledge (Hamman and Acutt 2010).

All these critiques on companies partially covering or completely neglecting social responsibility information might arise from another inherent weakness that is covered in academic literature too: lack of uniformity in corporate sustainability reporting. The internationally accepted CSR regulations are those of the Global Reporting Initiative (GRI), which issued its first comprehensive reporting guidelines in 2002 and its G3 Reporting Framework in October 2006 (Ballou 2006). But no regulatory body enforces those guidelines leaving a lot of room for flexibility. This claim is supported by the fact that many reports simply state the company's policies and intentions toward social and environmental issues, but provide no data for stakeholders' to reference or track the change (Kolk 2003). As I mentioned previously, there is no regulatory body to enforce the data reporting and check the quality of this data. Even if data supporting sustainability claims is provided, there is no regulatory body to verify whether these data are valid. Any reporting document including non-financial ones represent some value to investors in their investing decisions. Investors expect companies to provide documentation confirming that the companies comply with ethical requirements or environmentally friendly performance. Maybe to avoid events like the ones which broke after VW's cheating was revealed and their stocks plunged almost 50% of their pre-scandal level (La Monica 2015). Unlike financial reports, which are "double checked" by professional auditing services, non-financial reports can be endorsed by official auditors, but are not in most cases. Auditing services come at a very high cost, and companies, especially the small ones, prefer to avoid unnecessary expenses. Specially referencing smaller companies, there is another aspect where the lack of uniformity may arise. Bigger companies use corporate sustainability reporting as a tool to increase their influence when smaller companies might be discouraged to do some proper reporting due to its cost.

Another widely criticized aspect of corporate sustainability reporting is that this practice is fundamentally flawed. Some argue that the only social responsibility of corporations is to make profit for their shareholders (Mele 2008). And the fact that businesses are taking on social responsibilities may lead to distortions of the market and interfere with the government fulfilling its responsibilities of enforcing and regulating socially beneficial behavior (Hamman and Acutt 2010). In addition to going against to distribution of roles in economy, the cause standing behind CSR is described as inherently wrong in a number of academic sources. The ultimate goal of their actions favors an ostensible commitment to benefit stakeholders rather than a genuine dedication to effectively increase the stakeholders' welfare (Lim and Tsutsui 2012). Reporting itself emerged as the response to increased public pressure being something economically "unnatural" to firms. If companies are trying to 'clean up their act' solely for the purpose of accommodating social pressures, but with the main objective of maintaining or increasing profits, then wherever serious trade-offs arise between CSR and the financial aspect, the likely strategy will be to give the impression that they are being responsible while really caring only about profit (Hamman and Acutt 2010). The unprecedented growth of CSR may lead some to feel a sense of optimism about the power of market mechanisms to deliver social and environmental change. But markets often fail, especially when it comes to delivering public goods; therefore, we have to be concerned that CSR activities are subject to the same limitations of markets (Doane 2005).

The Volkswagen emissions scandal and Corporate Sustainability Reporting/Corporate Social Responsibility in Media coverage

The VW emissions scandal has had a huge resonance in media. Hundreds of media outlets have released, or are still releasing articles, opinion blogs, expert reviews, interviews, and many other print and web-based materials on this topic. Google gives 12,500,000 results under the tag "Volkswagen emissions scandal" and 17,500,000 results under the tag "Volkswagen emissions scandal" with 323 million results under the tag "Volkswagen" (as of 02/28/2016). More than 5% of all the mentions of Volkswagen in web are attributed to the scandal, making this corporate disaster one of the biggest ones in automobile industry from the media coverage perspective. In comparison, I provide the search results on another big recent automobile industry scandal with Toyota. In 2014, Toyota paid a $1.2 billion fine, the largest ever paid by an automaker, to avoid criminal prosecution for the troubles the cars had with the accelerators getting stuck. The tag "Toyota" gives 392,000,000 results with only 580,000 results under the tag "Toyota scandal" (which comprises less than 1% of all the Toyota related searches).

Popular media has covered the emissions fraud through various lenses. Some of the articles reported the scandal in a descriptive style. Other articles offered a critical coverage evaluating the level of impact of this scandal in relation to other topics including VW and the future of diesel, VW and future of electric vehicles, VW and international environmental regulations, VW and emissions controls of other auto manufacturers, etc. One of the topics that were covered in relation to the Volkswagen emissions scandal was the topic of CSR (Corporate Social Responsibility or Corporate Sustainability Reporting). Putting into Google "Volkswagen scandal and CSR", I got 156,000 results. I summarize the main concerns being evoked by the media in the following paragraphs.

As I have stated before, corporate social responsibility, as well as corporate sustainability reporting, was under the media's close attention and generated a certain level of criticism since large corporate scandals involving big oil started emerging in 1980s. The level of that criticism tended to intensify in light of corporate scandals. The overall tone of most analyzed articles can be characterized as negative and pessimistic. Authors' major concerns were about the validity of corporate social reports, considered on the whole and with regards to the content they offer to stakeholders. Matthew Lynn of The Telegraph pointed out that reporting is the tool that helps companies to parade their virtues while their real situation within companies might be much worse (2015). Several columnists brought up this argument of reporting representing a marketing tool, PR instrument and advertising venue. For example, Dr. Du and Dr. Merill expressed their opinion on Triplepundit.com, writing that deceptions such as Volkswagen's not only tarnish the reputation of other automakers and even corporations in unrelated industries, but they also undermine the public's trust in the business, and heighten consumers' cynicism about greenwashing– and now "green-frauding". John Izzo (2015) noted that scandals like VW's scandal make stakeholders believe that social responsibility reports generated by companies are nothing more than a marketing brochure. As he writes: "This scandal [the VW scandal] is likely to fuel consumer belief that companies are more interested in greenwashing and doing the occasional good deed or project than changing their core values". He verifies the fact that reports are indeed tools of communication, but scandals like VW's lower the true value and effectiveness of this communication: trust in corporate communication is likely to decrease - making the job of corporate communicators even tougher. Some reputable companies do produce carefully planned truthful reports tying, for instance, sustainable performance, to executive's pays. But scandals like VW's tend to undermine public trust to corporate sector as the whole.

Not only are the reports themselves, and their content are being criticized in the light of conflict, the whole CSR movement or CSR system is under doubt. Matthew Lynn, for example, talks about the internal departments responsible for implementing all sustainability initiatives and generating sustainability reports. Companies spend millions of dollars to supporting those departments, but those departments may end up producing useless reports full of superficial or, even sores, intentionally falsified statements (Lynn 2015). And instead of serving the cause of informing stakeholders and building truly sustainable businesses, they "are providing moral cover for companies that allow their own internal standards to get worse and worse" (Lynn 2015). And as Enrique Dans from *Forbes* described, CSR departments work across industries: "a head of CSR is appointed, given an air of respectability, and runs a department the job of which is to keep the company's image clean, despite the filth it is mired in, as is clearly the case with Volkswagen" (2015).

Corporate Social Responsibility and Reporting involves not only internal players. The outside participants involved into the system received criticism from the media, as well. For example, agencies that are hired to review the reports to verify their contents (just like in financial reporting) received their portion of criticism too. In particular, journalists and columnists required all of us to ask how external agencies can better verify corporate claims so that information is not taken at face-value but subject to more careful scrutiny (Hardyment

2015). Other external players include rating agencies and organizations like Dow Jones Sustainability Index that tend to praise corporations for their relative sustainability efforts. But then the same corporation gets caught amidst biggest environmental scandal of the decade raising a lot of concerns regarding the validity of those indexes and ratings. I mention his fact to show that whole reporting system seems to be affected by reporting's imperfections. As Lauren Hepler from *Greenbiz.com* mentioned, corporate rankings lack environmental accountability being reliant on self-reporting practices. This lack of environmental accountability extends across industries casting a shade on CSR in general (2015). Ultimately, as Favotto and Kollman strengthened this argument by stating: "…we have to question if the concept of corporate social responsibility (CSR) has any meaning at all" (2015).

The criticism of reports, of actors involved in creating these reports and of companies described, considered together, undermines the corporate social responsibility as a phenomenon, as a movement, as a tool and as a necessity in modern corporate world. VW's scandal has played a big role in resurfacing criticisms and doubts around this practice. As Adams writes in her article on *Economia.com*: "The VW emissions scandal must shake up corporate governance and risk management, and accountants and non-executive directors should consider how they work in the light of it. In today's broader interconnected world, consumers and regulators will not put up with questionable business practices – especially where they have been self-proclaimed as 'responsible', 'ecological' and 'leading' (2015). This scandal will have consequences for the CSR, and as Matthew Lynn suggests it might even signal the death of the corporate social responsibility movement and of sustainability reporting as well.

Other media sources seem to be slightly more optimistic about CSR, though they also call for fundamental changes to reform the system. Kollman and Favotto suggest better governmental regulations (2015). After identifying failure of CSR, Dans recommends some internal regulatory and management upgrades by which companies can regulate CSR departments and make their work more transparent (2015). Jessica Lyons from *Environmentalleader.com* is more action oriented and suggests that "sometimes the only way to correct sustainability violations is to protect the environment in some other way" (2015), pointing to the fact that the gap between CSA (Corporate Sustainability Action) and CSR (Corporate Sustainability Reporting) should be reduced.

Though many media sources were exposing flaws in Corporate Sustainability Reporting (that became more even more defined in the light of VW scandal) and highlighting some required reforms, some authors looked deeper, beyond the scandal itself and pointed one important fact: the CSR must be fundamentally wrong. As Enrique Dans from *Forbes* affirms: "The problem with CSR pretty much comes down to this: we are asking companies to self-regulate. Furthermore, we must be doing something wrong when the majority of people see CSR as superfluous, a luxury that mustn't get in the way of making profits or giving us that delicious feeling of acceleration when we put our foot down" (2015). Self-regulation is essential to reporting, it the basis of voluntarily disclosure. Profit making is the fundamental responsibility of any firm; profit is what defines firms place in economy (Friedman 1970). CSR seems to go against both of these fundamental definitions, making the existence of CSR very questionable.

Discourse Analysis of VW 2013 and 2014 Corporate Sustainability Reports

Qualitative and Quantitative Analyses

Both the 2013 and 2014 VW CSR reports follow the same structures, covering parallel dimensions of corporate responsibility. Both documents try to establish the certain elite status of VW by showcasing leading, first, outstanding roles in the Volkswagen Group's environmental performance and various awards for their environmental initiatives:

"The Volkswagen Group is ***the first car manufacturer*** *to commit to this ambitious target, which equates to an average fuel consumption of less than four liters per 100 km across all segments and vehicle classes" (2013)*

"In September 2013, CDP listed us in their ***Performance and Disclosure Leadership Index*** *for* ***the first time*** *and in the same year presented the group with* ***an award for*** *its performance" (2013)*

"In November 2013 the ***Volkswagen brand was awarded*** *the "Green Controlling Prize" by the International Controller's Association (ICV) for its successful environmental controlling through the "Think. Blue. Factory" program" (2013)*

"In 1996 the Volkswagen ***brand became the first automaker in the world*** *to introduce an environmental management certified to ISO 14001, for the "development of motor vehicles with continuously improved environmental properties" in its Technical Development department" (2014)*

"In 2014, ***the Volkswagen Group was again awarded*** *99 out of possible 100 points for its transparency, and a top grade A for its performance, as well as being listed in both Leadership" Indices (2014)*

"In October 2013, ***the Volkswagen Group became the first German automaker*** *to join Clean Shipping Network" (2014)*

Bolded statements establish VW claims on being superior, and I think this coverage of top spots being occupied help to form he competitive advantage over the other firms. The opportunity to state its competitive advantage over the other manufacturers does make VW's report read like a marketing brochure in which they are trying to convince the stakeholders to choose them because they have better products, better performance, and they engage in more responsible social behavior where it comes to environmentalist goals.

Reports not only sound like marketing reports, they also look like ones. The "Environment" section contains a number of visuals. However, the majority of those visuals are not directly related to the environment. Some of the pictures represent scenes that simply picture the environment (Fig. 3) but do not add value into reporting. Another type of images that instead of adding reporting value by presenting, for example, trends in reduction, just take up space and distract from important indicators that are important for investing or purchasing decisions of stakeholders are the images of environmentally efficient Volkswagen Group car models (Fig. 1 and Fig. 2). Those kinds of images especially make the report look like a marketing brochure showcasing the products and attracting customers.

Fig 1. Volkswagen's The Scania G 410 Euro 6 semitrailer tractor and The Skoda Octavia Greenline. Examples of visuals that don't add up reporting value, but show up corporate products

Fig 2. Volkswagen the SEAT Leon and a truck with a Scania Euro VI engine from 2013 report. Another products being presented without additional informative value

Fig 3. Volkswagen's environmental projects in German Wetland and Mexican landscapes.

Examples of visuals that take space but provide zero value to stakeholders

Another type of illustrations that I noticed in both 2013 and 2014 reports was visuals representing restatement of information already presented in textual format. It might be nice for summary purposes but those kinds of visuals definitely don't add up reporting value in providing vital information on actual reduction of wasted generated or gases emitted. The space taken in the reports must maximize informational needs of various stakeholders to guide their choices in purchasing, investing or endorsing. The restatement can't add up additional information points.

The other thing about visuals in both 2013 and 2014 reports is that VW used the same images in both reports with no considerable change detected (Fig. 4). It would have been valuable to observe some trends, some changes or improved efficiency portrayed through tables or graphs. But in the case of those visuals, it seems like VW just copied them through two reports just to fill up the space and hit the required volume.

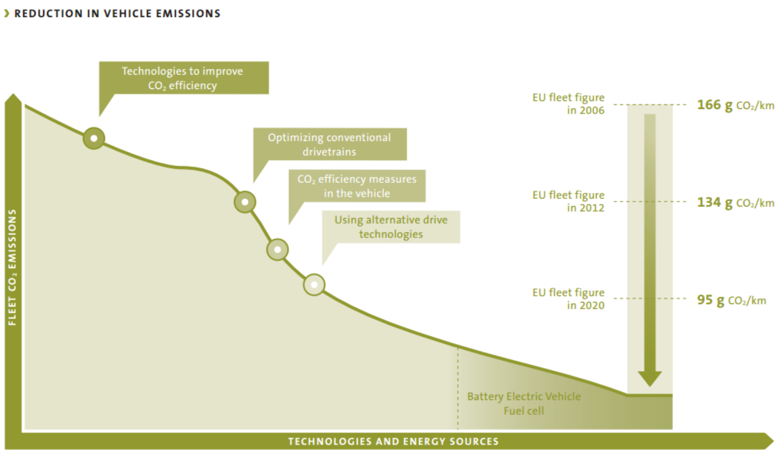

Fig 4. Reduction in vehicle emissions. The image found in both 2013 report on page 95 and 2014 report on page 98

Another notable observation is that both reports have dedicated a great part of the reports to reporting not about things being done, but rather cover a lot of projects, targets or plans that are to be fulfilled:

“By 2018 the Volkswagen Group ***wants to become*** *the world’s most sustainable automobile manufacturer and has set itself some ambitious environmental targets in order to achieve this” (2013)*

“In Europe the limit for new-car-fleet-average emissions ***will be reduced*** *to 95 g CO_2/km by 2021” (2013)*

“By 2018, the Volkswagen Group ***is aiming to be*** *the world’s most environmentally compatible automaker” (2014)*

“One of our ***key goals is to*** *cut is to cut CO_2 emissions from our European new car fleet to 95 g/km by 2020, to reduce fuel consumption by between 10 and 15% in each new model compared to its predecessors, to have the lowest fuel consumption levels in every vehicle class (for Volkswagen brand), to expand range of alternative powertrains, to achieve top rankings, ratings and awards for selected products, and to become market leaders in electric mobility by 2018” (2014)*

‘Specifically, ***we are aiming for*** *25% reductions in energy and water consumption, CO_2 and solvent emissions and waste disposal per manufactured unit compared with 2010” (2014)*

There is nothing inherently wrong with sharing the future plans or acquainting the public the public with company’s strategic planning, but in light of the scandal it may represent an attempt to justify the potentially not that outstanding present performance with the promises of an environmentally better future.

Two other important aspects to be discussed are the agent and the audience that VW seems to be addressing. In its report, the Volkswagen Group is using the pronoun “we” and “our” quite a bit:

“In 2013 ***we*** *moved a significant step closer to meeting* ***our*** *goals in terms of production product design and intelligent mobility concepts” (2013)*

“With ***our*** *intermediate target of reducing CO_2 emissions from the European new-car fleet to 120 gCO_2/km by 2015* ***we*** *will already be 12 g below legal requirement”(2013)*

*“****We*** *have also established a Group-wide network of climate and energy experts to foster knowledge-sharing between all brands and regions” (2013)*

*“****We*** *have to think in terms of all possible technical solutions including sophisticated vehicles and powertrain measures as well as alternative drive systems” (2014)*

*“****We*** *want every individual in* ***our*** *well-informed, qualified workforce to be actively involved” (2014)*

*“****Our*** *principal strategies for achieving these aims include intelligent, networked vehicles, new, supplementary business models and services, accompanied by initiatives for transport, urban planning and social change” (2014)*

The extensive usage of “we” and “our” pronouns hides the main agent who is performing or not performing all that environmental improvements. In case of failure, this makes it difficult for a critic to find someone to blame for a particular failing. Though there are mentions of such bodies as The Group Chief Officer for the Environment, Energy and

New Business Areas, the Corporate Environmental & Energy Steering Group, environmental officers, and Group Environmental Conferences, the abundance of generic pronouns definitely comes into attention while reading those reports.

Omissions are not widely exercised in both reports, indicating the VW generally stuck to aspects of proper reporting as defined by GRI. In the 2013 report, 100 % of environmental performance indexes are covered in the report and according to VW's own claims all indicators are "fully reported". In 2014 report only 3 out of 34 environmental (or only 8%) indicators from fourth edition (G4) of the reporting guidelines of the Global Initiative (GRI) are being omitted. However, even if VW qualifies all indicators as being "fully reported" there is certain level of imbalance in information being presented. Like, for example, in the following quantitative observation. In 2013 report's "Environment" section, the word "CO_2" or "carbon" was mentioned about 75 times. While "NO_x" or "nitrogen" was mentioned only 7 times, which is about 10,7 times less than "CO_2". The same situation is almost identically replicated in 2014 report: "CO_2" is mentioned 75 times when "NO_x" is mentioned only about 6 times. Though there are not special regulations on what extent this or that gas should be mentioned within report, the under representation and lack of details in reporting NOx emissions in the light of ongoing scandal makes

DISCUSSION/CONCLUSION

In my analyses of academic and media sources, many different outlets for various reasons criticized Corporate Social Responsibility and Corporate Sustainability Reporting. There is extensive amount of criticism present in academic literature. Some papers are entirely dedicated to discussing some major flaws of sustainability reporting or corporate social responsibility, while others criticize them without making criticism the main focus of the paper. As I have previously noted in *Results* section, I classified those disadvantages/critiques into four major unifying categories. First critique is that sustainability reports are extensively used as a PR/marketing tools to gain competitive advantage, to influence brand perception, to mitigate risk in times of crisis and to create favorable image in stakeholder' eyes. Second critique goes into corporations having the control over the information regarding its operations/functions and having the power over that information. As the result, instead of eliminating information gaps, corporations tend to make this gap even larger using the reports as the main tools. Third category includes researchers noting the lack of uniformity in reporting standards in regards to many various factors as well as the lack of regulating body or proper control systems like required verification or external auditing. The last broad criticism category talks about the reasons that drove the appearance and the validation of sustainability reporting's existence of reporting being fundamentally flawed. Companies exist to generate profit, and the attempt to obligate them with the necessity to be socially responsible might conflict with that basic function. Underlying explanation of this argument is that CSR as a concept simplifies some rather complex arguments and fails to acknowledge the trade-offs between the financial health of the company and ethical outcomes (Doane 2005). This fundamental flaw might be the main root of all other drawbacks of sustainability reporting which eventually might shift the focus company and turn the reporting document into another profit generating marketing tool. The most popular understanding of CSR bases itself on the notion of stakeholders' expectations which are of important concern to corporate marketing (Balmer and Greyser 2006 in Podnar and Golob 2007). In trying to satisfy those expectations and enhancing the connection of CSR with the corporation wide marketing, companies tend to underestimate the main reporting value of the sustainability reporting - capturing the current situation rather than influencing the future perceptions.

All these criticisms have been circulating in academia since CSR concept started emerging in 80s and 90s. But the criticisms tend to amplify in the light of scandals that question corporate ethical standards and sustainability reports that are supposed to supervise those standards. Scholarly publications have a certain time lag in covering, analyzing, and interpreting, and reacting to corporate misconducts because unlike popular media scientific method requires more research, validation and time. That is why it is useful to observe media response that is more immediate and can provide "on the spot" opinions. Deconstructing the Volkswagen emissions scandal, the media dissected it in relation to different aspects that questioned the value of reporting. In reviewing a variety of articles from different sources, I observed several major trends. I noticed that one prevalent criticism emerging in the light of scandal was the usage of sustainability reports in marketing purposes namely in brand management efforts – the argument that was brought up by academic sources too. Though marketing usage is one of the biggest modern concerns over reports, it is critical to understand the deeper controversies embedded in the very core of the reporting and the attempts to build responsible businesses. I also observed the fact that media sources paid attention to VW installed that code trying to save money for their customers, thus increasing the chances of selling more of their cars, and thereby contributing to the criticism about fundamental flaws brought up in academic literature review (they chose profit over social responsibility). And while installing defeat device on their cars, they produced reports that made them look like a corporation with the huge commitment to social responsibility and with the highest sustainability standards. This observation contributes to the criticism relating to the marketing implications of reporting one more time again. Overall tonality of media sources of criticism appearing right after emissions scandal broke out looked very negative and pessimistic. Media sources were very categorical in predicting the sustainability reporting's inability to exist after Volkswagen controversy and the validation of CSR criticism, while academic sources tended to be cautious in such conclusions.

The look at the VW sustainability reports themselves re-emphasized the main argument of the obvious marketing application of a tool that is supposed to have only reporting value. Reports tend to showcase the extensive usage of generic pronouns, the template like structure of the report which is replicated form year to year, the attempts to emphasize leading roles and positions, the presence of visuals without important stakeholder information, the extensive incorporation of future tense without larger snapshotting of the current sustainability indicators. The implications of "Elite theory" emphasized the marketing application of report – reporting achievements, superiority, stellar performance at the cost of factual information. The way they were addressing NOx emissions or nitrogen in general – the significant part of the whole scandal – also validated the failure of reporting element of sustainability reports. Only mentioning the NOx emissions just following the GRI guidelines, VW failed to address the issue and providing another argument for the sustainability reporting critics. All this observations obtained through critical discourse analysis point out on the most prevalent criticism which is the intention to design and to use the reports as advertising brochures eliminating the ability of stakeholders to make informed decisions on companies' (in this particular case, on Volkswagen's) socially responsible performance.

Limitations

Although I tried to provide robust analysis of multiple academic sources and media sources, it is still hard to reach the maximum robustness providing the fullest review of existing criticism of corporate sustainability reporting. The emergence of trend back in 1970-80s resulted in a huge amount of papers that cannot be fully analyzed in this paper due to such constraints as lack of time and inability to take into account certain papers because of their price, their limited accessibility or their language. The same is the situation with media resources – the relative novelty of the emissions scandal makes the appearance of new articles quite frequent. It is impossible from practical purposes to read them all and to keep updating the number of sources all the time.

The conclusions that I reached as the result of this paper are not validated by the presence of analysis of other sustainability reports, making the conclusion limited only to one only corporation - Volkswagen. In general this research exposes other common limitations of any case research: the lack of adequate quantitative evidence to support inferences, the difficulty of obtaining experimental and statistical control, the problem of replicability (Bhattacherjee 2012).

Broader Implications and Future Study

This research identified the overall concertation of media on the evolution of reports into marketing brochures, while one of the aspects of academic critique emphasized the importance of understanding the deeper reasons standing behind this evolution. Though it is really hard to understand and to combat some fundamental flaws, it is quite attainable to research more on the possibility of reforms. At the heart of the practical debate over corporate social accountability are fundamental questions of regulation and voluntary nature of reporting (Laufer 2003). It is important to understand the existing criticism, but it is much more important to analyze the information in an attempt to offer some valuable insights on the nature of possible reforms based on these criticisms.

It is important to recognize that scandals like Volkswagen tend to expose the flaws and disadvantages of any system. And the future research should concentrate not only on visualizing those imperfections, but on the ways of eliminating them to prevent dichotomies in reporting and reality. Reporting should stimulate the development of proper sustainable management systems integrated into everyday business practices and the core structure of any company. I tried to identify some major categories of existing criticism in academic and media sources as well as seeing those criticisms in the light of the scandal directly related to social responsibility and in the sustainability reports themselves. The future research should concentrate on initiating required reforms that will eliminate existing criticisms, prevent scandals like VW resulting in a better final product - corporate sustainable reports.

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REFERENCES

ACCA [the Association of Chartered Certified Accountants]. 2010. Social Responsibility Disclosure Practices: Evidence from Bangladesh. ACCA, London, UK

Ballou, B., D.L. Heitiger, and C.E. Landes. 2006. The Future of Corporate Sustainability Reporting. Journal of Accountancy. http://www.journalofaccountancy.com/issues/2006/dec/thefutureofcorporatesustainabilityreporting.html

Baue, W. 2004. A Brief History of Sustainability Reporting. http://www.socialfunds.com/news/print.cgi?sfArticleId=1459

Bhattacherjee, A. 2012. Social Science Research: Principles, Methods, and Practices. Textbooks Collections. Book 3. http://scholarcommons.usf.edu/oa_textbooks/3

Berger, A. 1991. Media research techniques. Newbury Park, CA: Sage.

Bomey. N. 2015. VW surpasses Toyota as world's largest automaker in the first half of 2015. USA Today. http://www.usatoday.com/story/money/2015/07/28/volkswagen-surpasses-toyota-worlds-largest-automaker-first-half-2015/30772509/

Cerin, P. 2002. Communication in Corporate Environmental Reports. Corporate Social Responsibility and Environmental Management 9: 46-66

Dans, E. 2015. Volkswagen and The Failure of Corporate Social Responsibility. Forbes. http://www.forbes.com/sites/enriquedans/2015/09/27/volkswagen-and-the-failure-of-corporate-social-responsibility/#31dc12cc6128

Delmas, M.A., and V.C. Burbano. 2011. The Drivers of Greenwashing. California Management Review 54: 64-87

Ditlev-Simonsen, C.D. 2014. Are non-financial (CSR) reports trustworthy? A study of the extent to which non-financial reports reflect the media' perception of the company's behavior. Issues in Social and Environmental Accounting 8: 116-133

Doane, D. 2005. The Myth of CSR. Stanford Social Innovation Review. http://ssir.org/articles/entry/the_myth_of_csr

Du, S, and D. Merill-Sands. 2015. The VW scandal continues: Implications for Corporate Social Responsibility. Triple Pundit. http://www.triplepundit.com/2016/01/vw-scandal-continues-implications-corporate-social-responsibility/

Dubbink, W., J. Graafland, and L. van Liedekerke. 2008. CSR, Transparency and the Role of Intermediate Organizations. Journal of Business Ethics 82: 391-406

Dudovskiy, J. 2012. Criticism associated with Corporate Social Responsibility. Research Methodology. http://research-methodology.net/criticism-associated-with-corporate-social-responsibility-csr/

Ewing, J., and J. Mouawad. 2015. Volkswagen Faces Major Spending Cuts and regulatory Deadlines. The New York Times. http://www.nytimes.com/2015/11/19/business/international/volkswagen-faces-major-spending-cuts-and-regulatory-deadlines.html

Friedman, M. (1970). The Social Responsibility of Business is to Increase its Profits. The New York Times Magazine. http://www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html

Global Reporting Initiative (GRI). 2011. Sustainability Reporting Guidelines: Version G3.1. https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-TechnicalProtocol.pdf. Retrieved February 23, 2013.

Global Reporting Initiative (GRI). 2013. A smart EU policy approach to non-financial information disclosure. https://www.globalreporting.org/resourcelibrary/GRI-non-paper-Report-or-Explain.pdf

Haman, R., and N. Acutt. 2010. How should civil society (and the government) respond to 'corporate social responisbility'? A critique of business motivations and the potential for partnerships. Development Southern Africa 20: 255-270

Hardyment, R. 2015. CSR after Volkswagen scandal. TriplePundit. http://www.triplepundit.com/2015/10/csr-volkswagen-scandal/#

Hepler, L. 2015. Volkswagen and the dark side of corporate sustainability. GreenBiz Group. https://www.greenbiz.com/article/volkswagen-and-dark-side-corporate-sustainability

Herzig, C., and S. Schaltegger. 2011. Corporate Social Responsibility. Pages 151-169 in J. Godemann and G. Michelsen, editors. Sustainability Communication Interdisciplinary Perspectives and Theoretical Foundations. Springer Science.

Hoffman, A. J., and M.Ventresca. 2002. Organizations, Policy and the Natural Environment:

Institutional and Strategic Perspectives. Stanford University Press. Stanford, CA

Hotten, R. 2015. Volkswagen: The scandal explained. BBC News. http://www.bbc.com/news/business-34324772

Izzo, J. 2015. VW Scandal a Growing-Up Time for the CSR Movement. Sustainable Brands. http://www.sustainablebrands.com/news_and_views/marketing_comms/dr_john_izzo/vw_scandal_growing-_time_csr_movement

Jose, A., and S. M. Lee. 2007. Environmental Reporting of Global Corporations: A Content Analysis Based on Website Disclosure. Journal of Business Ethics 72: 307-321

Kahn, M. 2007. Environmental Disasters as Risk Regulation Catalysts? The Role of Bhopal, Chernobyl, Exxon Valdez, Love Canal, and Three Mile Island in Shaping U.S. Environmental Law. Journal of Risk and Uncertainty 35: 17-43

Kolk, A. 2004. A decade of sustainability reporting: developments and significance. International Journal on Environment and Sustainable Development 3:51-64

Kolk, A. 2008. Sustainability, Accountability and Corporate Governance: Exploring Multinationals' Reporting Practice. Business Strategy and Environment 18:1-15

Kollman, K., and A. Favotto. 2015. How VW took the corporate ethics industry to the brink. The Conversation. http://theconversation.com/how-vw-took-the-corporate-ethics-industry-to-the-brink-49351

Koplin, J., S. Seuring and M. Mesterharm. 2007. Incorporating sustainability into supply management in the automotive industry: the case of the Volkswagen AG. Journal of Cleaner Production 15:1053-1062

Kumar, R., and S. Sharma. Corporate Social Responsibility – A study on hotel industry. Asian Journal on Interdisciplinary Studies 4:25-32

La Monica, P.R. 2015. Volkswagen has plunged 50%. Will it ever recover? CNN Money. http://money.cnn.com/2015/09/24/investing/volkswagen-vw-emissions-scandal-stock/

Lawrence, D., B. Elgin and V. Silver. 2015. How Could Volkswagen's Top Engineers Not Have Known. Bloomberg Businessweek. http://www.bloomberg.com/news/articles/2015-10-21/how-could-volkswagen-s-top-engineers-not-have-known

Laufer, W.S. 2003. Social Accountability and Corporate Greenwashing. Journal of Business Ethics 43: 253-261

Lim, A., and K. Tsutsui. 2012. Globalization and Commitment in Corporate Social Responsibility: Cross-National Analyses of Institutional and Political-Economy Effects. American Sociological Review 77: 69-98

Lock, I. 2015. Credibility in CSR Communication: Concepts, methods and Analyses. Thesis, Universita della Svizzera italiana, Lugano. Switzerland

Lynn, M. 2015. Corporate Social Responsibility has become a racket – and a dangerous one. The Telegraph. http://www.telegraph.co.uk/finance/newsbysector/industry/11896546/Corporate-Social-Responsibility-has-become-a-racket-and-a-dangerous-one.html

Lyons, J. 2015. 3 Lessons Learned from VW, Exxon Scandals. Environmental Leader. http://www.environmentalleader.com/2015/11/12/3-lessons-learned-from-vw-exxon-scandals/

Maguire, M. 2011. The Future of Corporate Social Responsibility Reporting. The Frederick S. Pardee Center for the Study of the Longer-Range Future. http://www.bu.edu/pardee/files/2011/01/PardeeIIB-019-Jan-2011.pdf

Macnamara, J. 2010. Media content analysis: its uses, benefits and best practice methodology. Asia Pacific Public Relations Journal 6: 1-34

Margolick, M., and D. Russell. 2004. Corporate greenhouse gas reduction targets. Arlington, VA: Pew Center on Global Climate Change/Global Change Strategies International.

Mark-Herbert, C., and C. von Schantz. 2007. Communicating Corporate Social Responsibility:Brand Management. Electronic Journal of Business Ethics and Organizational Studies 12: 4-11

Marsden, C. 2000. The new corporate citizenship of big business: Part of the solution to sustainability? Business and Society Review, Spring 105: 9-26.

Martinuzzi, A. et al. 2011. CSR Activities and Impact of the Automotive Sector. RIMAS Working Papers.

Mele, D. 2008. Corporate Social Responsibility theories. Pages 47-82 *in* A. Crane, D. Matten, A. McWilliams, J. Moon, and D. S. Siegel, editors. The Oxford Handbook of Corporate Social Responsibility. Oxford University Press, New York, NY, USA

Montiel, I. 2008. Corporate Social Responsibility and Corporate Sustainability: Separate Pasts,Common Futures. Organization & Environment 21: 245-269

Neuendorf, K. 2002. The Content Analysis Guidebook, Thousand Oaks, CA: Sage Publications.

Niiler, E. 2015. VW could fool the EPA, but it couldn't trick chemistry. Wired. http://www.wired.com/2015/09/vw-fool-epa-couldnt-trick-chemistry/

Nwagbra, U., and P. Reid. 2013. Corporate Social Responsibility (CSR) and Management Trends: Changing Times and Changing Strategies. Economic Insights – Trends and Challenges 2: 12-19

Okoye, A. 2010. Theorising Corporate Social Responsibility as an Essentially Contested Concept. Journal of Business Ethics 89: 613-627

Petroff, A. 2015. What Volkswagen means to the German Economy. CNN Money. http://money.cnn.com/2015/09/22/news/economy/volkswagen-germany-cars-economy/

Plungis, J., and D. Hull. 2015. VW's Emissions Cheating found by Curious Clean-Air Group. Bloomberg. http://www.bloomberg.com/news/articles/2015-09-19/volkswagen-emissions-cheating-found-by-curious-clean-air-group

PricewaterhouseCoopers (PwC). 2014. Sustainability goes mainstream: Insights into investor view. https://www.pwc.com/us/en/pwc-investor-resource-institute/publications/assets/pwc-sustainability-goes-mainstream-investor-views.pdf

Podnar, K., and U. Golob. 2007. CSR expectations: the focus of corporate marketing. Corporate Communications: An International Journal 12:326-340.

Pupovac, S. 2014. A Critical Discourse Analysis of Oil Spill Disclosure: A Case of Royal Dutch Shell in Nigeria. University of Wollongong. http://ro.uow.edu.au/cgi/viewcontent.cgi?article=5208&context=theses

Radley Yeldar. 2012. The value of extra-financial disclosure. What investors and analysts said. https://www.globalreporting.org/resourcelibrary/The-value-of-extra-financial-disclosure.pdf

Russel, K., G. Gates, J. Keller and D.Watkins. 2015. How Volkswagen Got Away with Diesel Deception. International Business. http://www.nytimes.com/interactive/2015/business/international/vw-diesel-emissions-scandal-explained.html

Singh, R. K., H. R. Murty, S. K. Gupta, and A. K. Dikshit. 2009. An overview of sustainability assessment methodologies. Ecological Indicators 9:189-212.

Skibola, N. 2011. Navigating The Voluntary Sustainability Reporting Maze. http://www.businessinsider.com/navigating-the-voluntary-sustainability-reporting-maze-2011-2

Touboul, S., and T. Roulet. 2015. The Intentions with Which the Road is Paved: Attitudes to Liberalism as Determinants of Greenwashing. Journal of Business Ethics 128: 305-320

Unerman, J., J. Bebbington and B. O'Dwyer. 2007. Sustainability Accounting and Accountability. Routledge, New York, NY, USA.

Volkswagen. 2013. CEO Water Mandate. Volkswagen Group. http://ceowatermandate.org/files/endorsing/VW2013.pdf

Volkswagen. 2014. Sustainability Report 2014. Volkswagen Group. http://www.volkswagenag.com/content/vwcorp/info_center/en/publications/2015/04/group-sustainability-report-2014.bin.html/binarystorageitem/file/Volkswagen_Sustainability_Report_2014.pdf

Willis, A. 2003. The Role of the Global Reporting Initiative's Sustainability Reporting Guidelines in the Social Screening of Investments. Journal of Business Ethics 43: 233-237

APPENDIX A: GRI reporting indices

Table A1: Description of G4 environmental indicators

Management Approach	
MATERIALS	
EN1	Materials used by weight or volume
EN2	Percentage of materials used that are recycled input materials
ENERGY	
EN3	Energy consumption within the organization
EN4	Energy consumption outside the organization
EN5	Energy intensity
EN6	Reduction of energy consumption
EN7	Reduction in energy requirements of products and services
WATER	
EN8	Total water withdrawal by source
EN9	Water resources significantly affected
EN10	Water recycled and reused
BIODIVERSITY	
EN11	Operational sites in protected areas
EN12	Impact on protected areas or areas of high biodiversity value
EN13	Habitats protected and restored
EN14	Affected endangered animals and plant species
EMISSIONS	
EN15	Direct GHG emissions (Scope 1)
EN16	Energy indirect GHG emissions (Scope 2)
EN17	Other indirect GHG emissions (Scope 3)
EN18	GHG emissions intensity
EN19	Reduction of GHG emissions
EN20	Emissions of ozone-depleting substances
EN21	NOx, SOx and other significant air emissions
EFFLUENTS AND WASTES	
EN22	Total water discharge by quality and destination
EN23	Total weight of waste by type and disposal method
EN24	Total number and volume of significant spills
EN25	Handling of hazardous waste
EN26	Water bodies significantly affected by discharges of water and runoff
PRODUCTS AND SERVICES	
EN27	Mitigation of environmental impacts of products and services
EN28	Reclaimed products and packaging
EN29	Fines and sanctions for non-compliance with environmental regulations
TRANSPORT	
EN30	Significant environmental impacts of transporting products
OVERALL	
EN31	Environmental protection expenditure and investments
SUPPLIER ENV ASSESMENT	
EN32	Percentage of new suppliers that were screened using environmental criteria
EN33	Significant environmental effects of supply chains
ENVIRONMENTAL GRIEVANCE MECHANISMS	

EN34	Grievances about environmental impacts