Volkswagen Vs. Ford: Critical Evaluation

1.0 Introduction

The purpose of this report is to provide a critical evaluation of the car manufacturing sector. Specifically comparing Volkswagen and Ford in relation to their sustainability. This report will be structured as follows: beginning with analysing corporate social responsibility issues, then focusing on environmental concerns as a result of this industries processes such as emissions to air, land, and water, then assessing the standard of environmental management systems within each company. Sustainability is the facilitation of present resource needs, with the avoidance of hindering the ability of upcoming age groups to satisfy their requirements (Jacobs and Chase, p24). This is achieved by controlling the triple bottom line which consists of measuring a company from a financial, social and environmentally friendly perspective (Ibid.). There is a growing importance for business sustainability as it aids positive future industry outcomes, enhances living conditions, and is an intrinsic want from customers (Sukitsch et al, 2015). The report will begin with the theory, evaluating any contrasting elements amongst Volkswagen and Ford in relation to their approaches to conserve the environment. Then concluding remarks along with recommendations in response to any challenges will be given.

Details of sector researching

2.0 Corporate Social Responsibility (CSR)

CSR can be defined as the duty of an organisation in being accountable for utilizing their assets in a way that values society in an ethical manner, the level of CSR leaves an impression on a consumer’s confidence within a particular business (Snider et al, 2003). CSR is of great importance in the car manufacturing industry as a number of social responsibility issues are highlighted in the production stage, suppliers for the manufacturers are encouraged to embrace a life cycle tactic (Martinuzzi et al., 2011). This consists of focusing on all regions of their producers in relation to CSR concerns, integrating social and ecological features into the production process (Ibid). Examples of CSR include an ethical work environment, charitable contributions and reducing environmental impact (Lee et al, 2013) legislation such as The Companies Act (2006) assist Ford and Volkswagen to maintain adequate CSR (See appendix two).

As specified in (Volkswagen Group, 2017: p8-9) Volkswagen currently participate in around 100 CSR schemes, these include health, education and caring for the environment to name just a few. One example is as part of Volkswagen's protocol, prior to working with a new potential provider, is to undertake a risk assessment on a country in addition to considering other information. A fundamental part of their agreement is to certify suppliers obey their sustainability rules, which is checked annually to maintain the upkeep of their principles (Volkswagen Group, p38-39). In contrast to this there was the notorious story of Fords innovative popular subcompact car known as the pinto. An array of injuries and fatalities were associated with the defective gasoline tank within the pinto, which blew up after crashes into the back end of the car (Gioia, 1992). The vice president of Ford ensured the manufacturing was swift, certifying it would be sold for $2000 and wouldn’t be heavier than 2000 pounds. Crucial safety principles

where consequently jeopardized (Ammar and Haririan, 2014).

Authors (Boccia and Sarnacchiaro, 2017 and Abrantes Ferreira et al, 2010) provide an indication that incorporating and maintaining CSR throughout a company is expensive, however customers favour purchasing from organisations who preserve and invest in CSR, willing to pay more as it positively impacts society. Therefore Volkswagens CSR involvement according to (Gardiner et al, 2003) contributes to fulfilling customers moral beliefs stimulating a competitive advantage, maintaining its reputation and success. From (Lee and Ermann, 1999) it is clear decision makers within Ford where aware and disregarded and hid the safety matter, to attain optimum profit maximisation. This unethical decision which supported a faulty product is one of many factors that contribute to deteriorating ethical values, therefore undesirable publicity is associated with the company due to a loss of trust between the brand and consumer (Ferrell et al, 2015). This differs from their sustainability report (Ford, 2017: p10) which represents honesty and customer safety to their consumers. Ford used a cost benefit analysis which placed a price on a human life, concluding it wasn't worth fixing the gas tank on every car roughly $10 a unit and would have saved nearly 200 lives (Dowie, 1977). The venture would be deemed unsuccessful if changes were made from the start, which would be too expensive (Ibid), resulting in the project being immoral.

2.0 Environment- Emissions to Air

Air pollution can be labelled as a damaging environmental epidemic, with a number of causes leading to an increase in impurities and toxins in the air. The augmentation of air pollution contributes to a variety of health concerns particularly respirational (Nadadur, 2015: p25-27). Hence emissions to air relates to the car manufacturing industry as vehicles exhausts create pollutants that harm the quality of air, this is an issue that has severe consequence, therefore, requiring strict control (Searles, 1988).

The Volkswagen diesel emissions scandal took place in 2015, hiding from US environmental supervisors that unsafe nitrogen oxide levels where being produced from their vehicles (Rhodes, 2016). Rhodes (2016) states this was due to 'defeat devices' being built-in into their diesel cars during production which intended to evade most emission assessments, and disregarding The Clean Air Act (See Appendix Two). Ford on the other hand have a number of practices in place to condense greenhouse gas emissions within the manufacturing of their vehicles, one being participation in carbon reduction schemes (Ford Motor Company, 2017: p31). The purpose of this government practice is to motivate a company to cut emissions such as carbon dioxide, which diminishes the destructive impression left on the environment and encourages customers to support an eco-friendly organisation (Gössling et al, 2007).

Volkswagens reputation was tarnished as customers felt betrayed and lied to after it being perceived they were encouraging a greener environment by purchasing from the company (Prseton, 2015). They also got caught up in legal matters associated with personal well-being, defrauding and expenses in regard to fines (Tuttle, 2015). This contradicts their principles which emphasises the importance of air quality, with the goal of reducing the damaging effects their manufacturing processes have on the environment by 20% within the next seven years (Volkswagen Group, 2017: p13). Due to Fords government policy, the level of deaths, asthma attacks and other illnesses will reduce significantly and jobs will form from monitoring pollution (Cunningham and Cunningham, 2018:p371-372). In 2010 Ford intended to lower the total of

harmful emissions formed from each vehicle by 30% within the next fifteen years, this goal was exceeded just last year (Ford Motor Company, 2017:p31).

3.1 Emissions to Water

Water pollution can be referred to as the contamination of waters natural content, due to the presence of harmful toxins and chemicals which results in it becoming unusable and damaging to aquatic life (Cunningham and Cunningham, 2018:p402). Factories including those used for car production are regarded as ‘point sources’, they are considered a direct cause for contamination including water pollution, expelling from a specific location. Whereas ‘non-point sources’ would include car exhausts, which are challenging to pin point the basis of pollution as it ascends from numerous places simultaneously (Gorsevski et al., 2008 Cunningham and Cunningham, 2018: p402).

Ford motor company received carbon disclosure projects (CDP) highest honour award for their water conservation projects, which highlights their strong responsibility to sustaining a healthy environment. (CPD, 2017: p20). Volkswagen were also contained in CDPs list as a strong water sustainability company, following the CEO water mandate program, which ensures water is used and treated in an environmentally beneficial way (Volkswagen, 2017: p 65). By 2017 Ford had cut water use per car by roughly 30%, they use the program partnership for a cleaner environment (PACE) to implement sustainable practices including the use of water amongst their suppliers. Examples include recycling rainwater and treated waste water, meaning all Ford providers involved in PACE will save almost 800 million gallons of water by 2022 (Ford Motor Company, 2017: p34). Volkswagen have made a small decline in water use per vehicle of 0.13m³, with the volume of waste water produced per car decreasing by just over 20% since 2010 (Volkswagen, 2017:p 65-66).

The recycling of water both fresh and waste is essential in preventing water shortages due to its scarcity (Volkswagen, 2017:p65, Ford, 2017: p33). It also prevents water pollution destructing the environment which can be caused when water isn’t managed in a sustainable manner, and is expelled containing toxins into multiple water sources (Ibid).

3.2 Emissions to Land

The depositing of waste on any land is a form of pollution, waste is any unwanted left-over material which can be accumulated through the production process such as landfills (Harrison, 2001: p378). Harrison (2001: p379) states waste must be managed accordingly, there are a number of methods to do so ranked from most appropriate to least (See Appendix Three).

In relation to Volkswagen and Ford, both companies have strong practices in place to manage and reduce their waste (Volkswagen, 2017: p66, Ford, 2017: p35). Although Ford have achieved more impressive results attaining zero waste to landfills within Europe between 2011 and 2016, from a normality of 6000 tonnes of waste a year (Media.ford.com, 2016). This means none of their production waste will reach any landfill site with 85 sites currently achieving this status (Ford, 2017: p35). This is reached through more economical packaging, waste reduction through technology, organising waste to promote recycling and concentrating on the core causes of waste to landfill (Ibid). Volkswagen rely on recycled resources within production allowing for cars to be over 80% recyclable by the end of their use (Volkswagen, 2017:p64).

They have used waste disposal audits since 2015, as well as technological systems to evaluate waste management processes at each site aiding the determination of what materials can be reused (Volkswagen, 2017: p67). Although there has been a surge in hazardous waste due to producing more passenger cars and lightweight vehicles from around 9.3kg per vehicle in 2010 to roughly 10.3 in 2016 (Ibid).

Reducing these companies landfill use prevents greenhouse gas emissions produced from decaying organic waste, stops leachate which is a toxic liquid formed when water filters through waste polluting land, and decreases the risk of toxins leaking into the soil from the waste (Harrison, 2001: p401).

3.3 Environmental Management Systems

An environmental management system (EMS) refers to the controlling of preparation and administration with regard to an organisations environmental processes (Oliveira et al., 2016 and Swink et al, 2017). In regards to the car production sector it plays a role in the pollution of the world's atmosphere, which requires management to develop the industries ecological performance and accountability (González et al, 2008). In relation to EMS is ISO 14001 which is a universally accepted group of certification standards which guarantee that all industry processes always consider the consequences to the environment (Whitelaw, 2004:p4-5). One requirement of ISO 14001 for EMS to operate is the Plan-Do-Check-Act cycle, which enables continual improvement to be reached within an organisation (Kitazawa and Sarkis, 2000). This consists of preparation for an improvement through changing an organisational aim resulting in an environmental policy (Bereskie et al, 2017, Kitazawa and Sarkis, 2000). Then operating and applying the change, followed by monitoring the performance of the change. Finally identify further alterations for continuous improvement to be achieved (Ibid).

Ford was the first automotive organisation to reach ISO 14001 standards within their suppliers and their production facilities globally by 1999, which has been a cost saving development and reduced any damage they cause to the environment (Wilson, 2001). Volkswagen are ISO 14001 qualified as well. However they have additional standards in place including voluntary membership of the Eco-Management and Audit Scheme (EMAS), which demands a more extensive range of requests to assess report and continually enhance conservation of the environment (Beske et al, 2008). This is more challenging to achieve with stricter guidelines, obeying environmental laws which defend and maintain land, air, and water (Weiß and Bentlage, 2006:p82-83). Connor and Niemi (2001) propose the development of the FES which is the Ford environmental system which adhered to ISO 14001 as well as current environmental plans such as waste and pollution prevention (See Appendix Four).

Both organisations must maintain this high level of EMS at ISO 14001 standards to certify the protection of the environment, save costs, develop company communications and enhanced corporate image due to conforming with legislation (Zutshi and Sohal, 2004).

4.0 Conclusion and Recommendations

Despite both Ford and Volkswagens involvement in many environmental practices to reduce emissions, including carbon reduction schemes and zero waste to landfills. It is evident that Ford's sustainability efforts are more impressive than Volkswagens in term of the strict policies

they abide by and their achievements, such as Ford receiving an A for CDPs water sustainability award, while Volkswagen was ranked lower. However, both have had previous public humiliations such as the Volkswagen emissions scandal and the Ford pintos exploding gas tank, which tarnished their reputations and caused damage to the environment therefore a few recommendations should be introduced. Volkswagen continue to promote diesel cars as resourceful even after the diesel emissions scandal (Hering, 2018), releasing nitrogen oxide emissions thirty-five times the American limit (Burki, 2015). Therefore they should stop the production of diesel cars completely. Diesel contributes to air pollution more than petrol cars producing around 30% more nitrogen oxide, a toxin that creates breathing problems and can be cancerous (Nieuwenhuis, 2017). Volkswagen should also aim to achieve zero waste to landfills, as their volume of metallic waste has risen and around 20% of all other waste is not recycled contributing to landfill pollution such as greenhouse gases (Volkswagen, 2017:p67). However, cars and transportation, in general, are key contributors to polluting the environment no matter the level of sustainable policies in place (Leduc et al., 2010). It is evident both companies should concentrate on producing only hybrid cars as they create cleaner energy and are less polluting, implement further research on alternate fuels such as biofuels to reduce greenhouse gases and make their vehicles more lightweight decreasing the level of fuel used (Ibid).