Final Report

To what extent can the implementation of new eco-labelling standards reduce greenwashing practices in the EU fast-fashion industry given the uncertainty of customer behavior?

(Image derived from: *Everything you need to know about the clothing label*.)

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1. Introduction

Presenting a certain degree of social benefits, the fast fashion business model is, however, criticized for promoting consumerism. It adapts and drives constant changes in fashion cycles, resulting in the rapid turnover of textiles and increasing generation of waste. Although companies of the industry make certain operational efforts to address the issue, such are often accused of performing greenwashing in many different forms. In the EU, various eco-label schemes for textiles have been established with varying criteria and standards. The overarching aim is to educate customers on the environmental impact of clothing production and, also, promote environmentally friendly merchandise. A more specific aim, it can be said, is to diminish the prevalence of greenwashing practices in the field. Greenwashing undermines consumers' perceived ability to make informed decisions, by misleading them into thinking they are purchasing environmentally conscious choices, while actually supporting environmentally harmful practices instead. The effectiveness of eco-labeling relies heavily on consumer behavior, addressed in this paper using the Theory of Planned Behavior (TPB). It suggests that a person's intention to purchase sustainable clothing relies on their positive attitudes towards sustainability, the perceived social pressure to buy sustainable clothing and their perceived ability to do so. Eco-labeling can be assumed to affect the latter factor the most, as it - in its ideal form - provides information that enables sustainable purchases.

The purpose of this paper is to investigate the potential overall impact of a new eco-labeling scheme on EU consumers' purchasing behavior towards fast-fashion merchandise. In order to answer the following research question: *to what extent can the implementation of new eco-labelling standards reduce greenwashing practices in the EU fast-fashion industry given the uncertainty of customer behavior?* This paper is structured in three main sections. The first section presents the literature review which focuses on the topics of greenwashing, eco-labelling and consumer purchasing behavior. The second, a brief overview Scenario Planning as the chosen assessment methodology, the reasons justifying its selection for the current case and its implementation steps. In the third section, the focus is on exploring the constructed alternative scenarios, which are used to answer the research question and could also potentially provide recommendations to aid future decision-making.

2. Literature Review

As the prevalence of greenwashing continues to grow in the fast-fashion industry, new cases, previous literature and research begins to emerge, exposing companies and the industry as a whole. A large quantity of the organizations involved are claimed to be deceitful and not staying true to their words which can bear environmental impacts and social issues. Furthermore, today, a number of non-governmental organizations like *The Changing Markets Foundation*, *TerraChoice* or the more popular *Greenpeace*, take on the responsibilities of surveillancing the market within fast-fashion. The non-governmental organizations involved in investigating the greenwashing claims have played a vital role in researching the topic in a broader sense. They found that the largest sector in greenwashing is fashion, which contains over 57 cases of greenwashing carried out by major fashion brands in the EU. The research was carried out as a result of greenwashing and lack of transparency, as consumers are becoming less and less convinced that corporate environmental claims are true (Lyon & Montgomery, 2013).

2.1 Greenwashing

With the purpose of serving as a tool for exposing major fashion corporations, it can be said the public concern regarding the topic has grown rapidly over the years. As briefly mentioned, in a 2021 report from the Changing Markets Foundation regarding major high-street fashion brands, it was found that 60% of their sustainability claims were misleading. Some of these brands had a very surprising amount of claims that did not hold up, finding that 90% to 95% of claims made by certain brands were completely false (Akepa, 2022). These are extremely staggering numbers that need to be significantly lowered for environmental and ethical reasons.

As the topic of greenwashing has been growing due to brands being exposed and the subject being researched further, impressively, there are methods in identifying whether something has been greenwashed or if greenwashing is occuring. One of these approaches is called the seven sins of greenwashing and these sins, “identified by *Terrachoice* in 2007, assist consumers in identifying and understanding misleading and/or false environmental claims”

(Moran & O'Neill, 2022). The seven sins of greenwashing are; hidden trade-off, no proof, vagueness, false labels, irrelevance, the lesser of two evils, fibbing. These pre-established wrongdoings are crucial in identifying greenwashed goods in the fast-fashion industry.

Figure 1.0 - Seven Sins of Greenwashing

(Source derived from: *Greenwashing: Are we really buying green?*)

As displayed in the small infographic, Figure 1.0, the seven sins of greenwashing were analyzed in the very similar Northern American market to see how prevalent each sin was. As the concept is relatively recent, information on the seven sins in an EU scope was rather limited hence the North American market is used as a comparison. It was found that the most common sin of greenwashing was the sin of *No Proof* which applied to 70% of greenwashed clothing products. This sin refers to making environmental claims that cannot be substantiated or backed by accessible supporting information. It is the most common as companies can make claims without providing any factual data or proof, it is also a common tactic used by companies to appeal to environmentally conscious consumers. If this sin were to decrease in occurrence due to the enforcement of eco-labelling which would be expected, a real progressive reduction in greenwashing in the fast fashion industry in the EU could be seen.

In terms of previous research on the topic, overall it was found that more than 1.300 scholarly articles and papers on the internet contain the word “greenwash”, studying the topic or carrying out an individual case study on a specific corporation (Gatti et al., 2019). A large majority of these articles and papers have the sole aim of focusing on an explicit case and debunking the sustainable claim rather than focusing on how to solve or reduce the prevalence of greenwashing as a whole. Interestingly, the matter was studied further by Gatti et al. (2019), who researched over 90 articles of greenwashing through quantitative data analysis, to establish exactly what aspect of greenwashing that was being criticized or researched. It was found that “the majority of papers (78.7%) discussed greenwashing in the fields of corporate communication, marketing and management. It is particularly interesting to note that only 12.8% of articles focused on law and legislation” (Gatti et al., 2019). This wide disparity in the research gap regarding the topic of greenwashing was interesting to see as one field was clearly more researched than the latter, therefore it became an issue of further study. As only a small number of papers were written within the scope of law and legislation, our group wanted to focus on an understudied topic being the enforcement of new eco-labelling policies in the EU.

2.2 Eco-Labelling

Aside from greenwashing, another more crucial aspect to the research question is the implementation of eco-labeling policies. In an academic paper written by researchers in Poland, they found that “the ecolabeling or certification are good tools to gain the consumer’s trust. Some studies on the consumption theory showed that there is a strong relation between the consumption values and the green trust” (Adamkiewicz et al., 2022, p. 3). In essence, the process of eco-labelling a product can significantly change the consumer perception, displaying that the product is perhaps of superior quality or of higher value. Additionally, similarly to that of organic food, some consumers are willing to spend more than others on a good that is deemed environmentally sustainable. Furthermore, a report by the European Commission in 2018 on stakeholder consultations found that around half of the products bearing environmental claims in the EU market were found to be misleading or non-compliant with EU rules. The study also found that the most common type of environmental claim made on products was related to the use of natural resources, such as claims about the product being biodegradable or compostable.

From reviewing previous literature on the topic of eco-labelling, it was deemed as a possibly efficient solution in reducing greenwashing practices in the fast fashion industry in the EU.

The effectiveness of current eco-labeling policies in the fast-fashion industry in the EU is a matter of debate and can vary depending on the specific policy and its implementation. Some studies suggest that eco-labelling policies have been successful in promoting sustainable practices in the fashion industry and increasing consumer awareness about environmentally friendly products. For example, the EU Ecolabel, which is a voluntary label that certifies products with high environmental standards, has been in place since 1992 and has helped to raise awareness among consumers about environmentally friendly products (*EU Ecolabel*). However, there are also challenges to the effectiveness of eco-labelling policies. One of the main challenges is the issue of greenwashing. This can undermine the credibility of eco-labelling policies and lead to confusion among consumers. Additionally, there can also be a lack of consistent standards for eco-labelling across the EU as they are not currently mandatory, which can make it difficult for consumers to compare products and make informed purchasing decisions. Another flaw of the current EU Ecolabel is that many fast-fashion companies hide behind the logo, using it essentially as a form of virtue signaling rather than using it as a comprehensive system. Overall, current eco-labelling policies in the fashion industry in the EU have been arguably insufficient in promoting sustainable practices and raising awareness about environmentally friendly products.

2.3 Consumer Behaviour

In the industry of fast-fashion, there are several factors that can influence consumer behavior. These factors may vary from person-to-person, bearing different effects depending on the demographic, which for fast-fashion is mainly those between 15 and 29 years of age (Gupta, 2018). Some examples of these factors may be things such as economics, as one's disposable income may influence consumer confidence and macroeconomic trends that can then affect behavior. For example, a global pandemic may cause a downturn in the economy leading consumers to spend their money on cheaper, unsustainable clothes. However, a survey carried out by Accenture, a consultancy agency, established that 50% of 6000 consumers from 11 different countries were willing to pay more for sustainable products (*Accenture Chemicals*

Global Consumer Sustainability Survey 2019). This data shows that there is also a clear demand for sustainable goods in the industry. Furthermore, there are technological factors that can alter consumer behavior. For example, recent technological advancements in society such as the rise of e-commerce and the increasing use of social media can also influence consumer behavior in the fast-fashion industry. To elaborate, the availability of sustainable fashion products online and the use of social media to share sustainable recommendations can make it easier for consumers to discover and purchase new, greener items.

Additionally there is the psychological aspect of consuming. It can be said that psychological factors such as attitudes, beliefs, and motivations can also influence consumer behavior in the fashion industry. For example, a consumer's motivation to be environmentally conscious may lead them to choose environmentally friendly fashion products. On the flip-side, some consumers do not necessarily care for environmentally friendly products as they may prioritize other things such as price, or they simply don't care for the environment. To provide a statistic regarding the psychological factor of consumer behavior in the EU fast-fashion industry, a survey by McKinsey & Company found that 67% of consumers in the UK and Germany consider environmental sustainability when making fashion purchases (Granskog et al., 2021). Lastly there are personal factors that may sway behavior such as age, education level and cultural background, influencing fashion preferences and purchasing decisions. In essence, all consumers are unique and have a prominent or deciding factor that influences their personal behavior, these factors mentioned are just some of the key elements involved in consumer behavior.

3. Assessment: Scenario planning

3.1.1 Reasoning for assessment method

As established in the literature review, greenwashing in the fast fashion industry has become a complex issue that urgently needs to be addressed due to the drastic impacts of this industry on its overall environment. Considering that the market for fast fashion items is expected to grow by approximately 10% by 2027 this only reinforces the need to assess this

industry as its impacts are likely to only get worse (Statista, 2023). Additionally, there is a strong need to assess future alternatives and gather more understanding on what influences this industry and their practices as well as drivers of change that can shift the way in which it operates. The scenario planning assessment is used to engage with this issue as precisely as possible given how challenging it is to predict the future due to the complexity and uncertainty around this topic. Furthermore, this will explore the benefits and limitations of new forms of eco-labelling as a regulatory approach to address greenwashing in the fast fashion industry.

3.1.2 Scenario planning

As a methodological approach, scenario development allows for the creation of different futures which can be plausible, possible or preferable. Each scenario makes different assumptions regarding a set of key variables that could shape systems change in the future (Hichert et al., 2021). The main objective of scenario development is not to predict the future, it is to explore different coherent scenarios and learn from reflecting on the future to improve decision-making in the present (Glenn & Gordon, 2009). Additionally, this does not aim at generating one unique solution to the issue that is addressed, rather this acknowledges that the future is uncertain and that exploring and planning ahead can support better decision making in the present. The knowledge generated with the scenarios will serve as the basis for the recommendations that will be made to the fast-fashion industry, policymakers and consumers. Scenario planning is adequately used in this project as it properly embraces the uncertainty that lies in our two main drivers. Consumer behavior brings a lot of uncertainty to the future of greenwashing in the fast fashion industry due to how quickly it can change and how difficult it is to predict. In addition to this, eco-labelling also brings uncertainty regarding its relationship with greenwashing as its efficiency has yet to be proven. The consequences of the previous forms of eco-labeling also brings uncertainty to this since the stakeholders might judge it as inefficient therefore making it harder to implement. Lastly, the challenges that a new form of eco-labeling implies such as the firm's reactions to the new regulations as well as other important socio-economic factors add to this degree of uncertainty.

3.1.3 Theory of Planned Behavior

Incorporated in the assessment, the Theory of Planned Behavior (TPB), by Ajzen (1985), provides a basic conceptual framework to predict future consumer behavior. By addressing the factors *Attitudes*, *Subjective Norms* and *Perceived Behavioral Control*, TPB can be used to predict a person's intention to engage in a specific behavior. However, the theory presents several inherent limitations; also, its use in the paper does not account for changes in the significance of the three factors according to EU country, nor are more variables of interest included to extend the theory. Thus, future consumer behavior remains with a considerable degree of uncertainty, due to the framework's limitations to accurately predict it.

3.2 Overview of assessment framework

To carry out the scenario planning effort appropriately, the group followed a step by step process from Rowland et al. (2014) which can be seen in the figure below. This divides the effort in three main phases and different steps.

Phase one is about preparation and scoping, it includes three different steps that aim at starting the project in the right way and defining why and how it will be done. This includes: 1. Identifying the key issue and establishing the project team, 2. Defining what the purpose of the scenario planning is and what the researchers are expecting to get out of it and 3. Selecting the right approach to obtain the desired result. In this step it is also essential to understand what information is available to limit the scope. Phase two is about building and refining scenarios, it includes six main steps that aim at identifying the key uncertainties and developing an initial set of narratives. Once the first scenarios are developed it is essential to highlight the associated assumptions and eventually translate them to a visual product. Finally, phase three is about using the scenarios, this phase aims at identifying management options, future decision points and selecting actions to implement based on the final scenarios. Once all steps are completed, the final step consists of creating different monitoring points that help assess the scenarios when they are being used.

Figure 2.0 - Overview of the scenario planning process

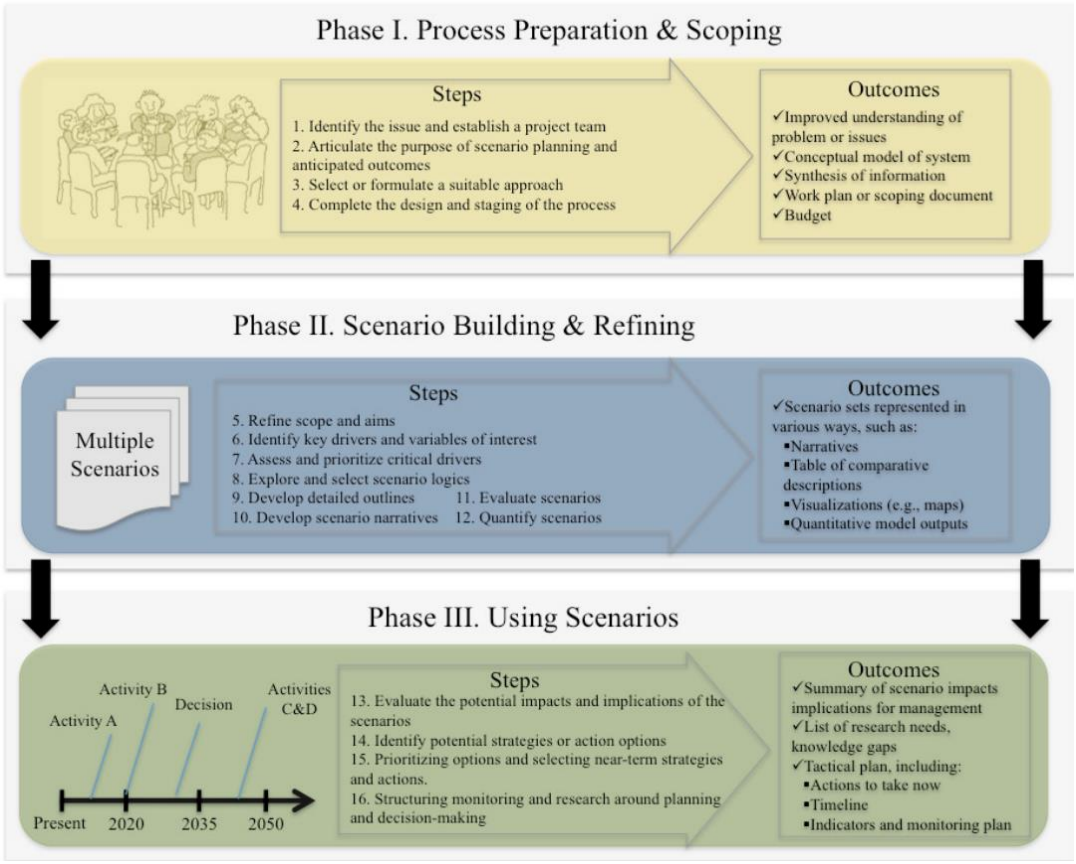


Figure 2 derived from: (Rowland, E. R., Cross, M. S., & Hartmann, H. (2014))

3.3 Phase I: Preparation & Scoping

In phase one, the preparation for the scenario development begins. This phase is split in four steps: the first step of the assessment aims at identifying the issue and establishing a project team. In this case, the issue is the prevalence of greenwashing in the fast-fashion industry within the European Union and the uncertainty that surrounds eco-labelling as a regulatory measure. This project will be done to evaluate how the issue can be reduced through the implementation of new eco-labelling standards considering the uncertainty of consumer behavior. Unfortunately, due to time constraints the project team will not be as diverse as it should be since no important stakeholders will be involved in the process.

The second step aims at articulating the purpose and the anticipated outcomes of this method. The purpose of the chosen method is to understand the consequences of an alternative adaptation option and explore what opportunities and challenges it would bring. This aims at questioning the current standards of eco-labelling and highlighting the need for improvement. The time-frame considered is short (i.e. a 10-year timespan) with a specific focus on the EU. The type of knowledge that will be primarily used is a mix of formal and informal for example, expert opinion, imagination and previous academic work. Ultimately, the scenarios will be used to support the selection and justification of options.

The third step is about formulating a suitable approach to the scenario planning effort. A suitable approach to scenario planning in the context of our research question is a hybrid scenario approach which involves multiple factors that could influence the effectiveness of implementing a new eco-labeling scheme. The steps of developing and evaluating the scenarios based on the likelihood of their occurrence and potential impact would involve qualitative methods. This would require expert judgment and interpretation, which would be qualitative methods. First the group will gather data on the current state of the fast-fashion industry, including; the prevalence of greenwashing practices, the level of customer awareness and understanding, and resources currently dedicated to enforcing eco-labelling standards. Then the group will need to identify the key drivers that could influence the effectiveness of the eco-labelling standards, such as: the overall level of commitment to sustainability within the fast-fashion industry, the level of resources dedicated to enforcing the standards, and once again the level of customer awareness and understanding. Thirdly, using this information, a set of scenarios would be developed, each representing a different possible outcome. These scenarios would consider different combinations of the key drivers identified, exploring possible outcomes. Lastly, the scenarios would be evaluated based on the likelihood of their occurrence and the potential impact on greenwashing practices in the fast-fashion industry. This would allow for a comprehensive view of the situation, identifying the most likely outcome and the best course of action going forwards.

3.4 Phase II: Scenario building and Refining

3.4.1 Refine scope and aims with key participants

A crucial step before developing critical scenarios, the scope of the research needs to be well-established. It is important because, paraphrasing Wiseman et al. (2011), an excessively narrow scope may lead the researcher to miss important elements, while if it is too wide it can make the results irrelevant. In our case, the main interrogation is stated in the research question: "To what extent can the implementation of new eco-labelling standards reduce greenwashing practices in the EU fast-fashion industry given the uncertainty of customer behavior?". Other more fundamental questions such as the efficiency of labeling as a regulatory measure? What are the other current ways in which the EU is addressing this issue? What impact is this under-regulated fast fashion industry having on its environment?

Now that the scope is refined, more on the ideal participants for this project. To create accurate scenarios, the key participants that should be involved in the process are economists, risk assessors, government and regulatory agency officials, CEOs of textile and fast-fashion companies, the target consumer demographic (i.e. 15-29 year-olds), NGO representatives, environmental scientists and manufacturers. Given the time and resource constraints, only part of the aforementioned participants were considered to develop the scope and assessment, through the use of research documents.

3.4.2 Identify key drivers and variables of interest related to the focus question

This step is crucial to building strong and accurate scenarios since here, the information concerning key drivers with high certainty are being assessed and structured to provide facts to support later steps. Considering non-climate factors are significant in our scenario planning effort, the key drivers are identified through a STEEP analysis. A STEEP analysis is one of the many approaches that exist when trying to structure information, it considers social, technological, environmental, economic and political forces of change. This approach is convenient due to its simplicity and the small amount of sources involved. In table 1, below the key information regarding the potential external factors is covered with the aim to bring the developed scenarios as close to reality as possible.

Table 1.0 - STEEP analysis of the fast fashion industry and the prevalence of greenwashing.

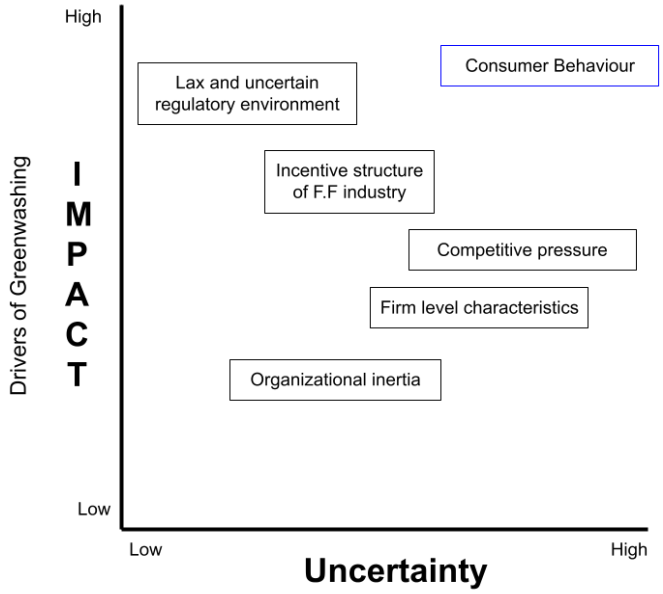
Societal	There is an increasing awareness and concern about environmental issues among consumers which is leading to a growing demand for environmentally friendly products. According to a study by Nielsen (2018), 66% of global consumers are willing to pay more for sustainable brands. This trend is especially pronounced among younger consumers, with 72% of millennials and 71% of Gen Z saying that they would pay more for sustainable products (Nielsen, 2018).
Technological	There are advancements in technology that are making it easier for companies to create and market environmentally friendly products. For example, digital platforms and social media are providing new opportunities for companies to reach consumers with sustainable messaging and to track and monitor their environmental performance (Cui et al., 2020). Additionally, developments in materials science and manufacturing are enabling companies to create more environmentally friendly products (Cui et al., 2020). Some other technological factors are taken into account however given that our topic focuses on real life distribution they are judged less significant considering our scope.
Environmental	The negative environmental impact of fast fashion, including water pollution, carbon emissions, and waste generation, is becoming more widely recognized and can impact consumer perceptions and government regulations. For example, according to a report by the Ellen MacArthur Foundation (2017), the fashion industry is responsible for 10% of global carbon emissions and is the second-largest consumer of the world's water resources. Furthermore, increasing awareness of environmental issues is leading to stricter regulations and higher standards for companies in terms of environmental performance. Governments around the world are implementing regulations and policies designed to reduce greenhouse gas emissions and encourage the use of renewable energy (United Nations Framework Convention on Climate Change, 2020). Additionally, consumers and civil society organizations are exerting pressure on companies to improve their environmental performance (Cui et al., 2020).
Economic	Here we need to consider the rising cost of raw materials, energy, and labor, as well as the increasing demand for sustainable and ethically-made products, that can affect the bottom line of fast fashion companies. Additionally, the growing market for environmentally friendly products is creating new opportunities for companies to profit. According to a report by Grand View Research,

	the global market for green packaging is expected to reach $290 billion by 2025 (Grand View Research, 2020). Finally, companies that invest in sustainability are more likely to be rewarded by investors, with sustainable companies having a higher return on assets and higher valuations than their peers (Bansal & Roth, 2000)..
Political	Governments are increasingly imposing regulations and penalties on companies that engage in greenwashing. For example, in the European Union, the Unfair Commercial Practices Directive (UCPD) prohibits companies from making misleading environmental claims (European Union, 2005). Additionally, the EU has implemented the Eco-label regulation that sets the criteria for environmental claims made on products and services (European Union, 2008). Companies that fail to comply with these regulations can face fines and penalties, as well as damage to their reputation.

3.4.3 Assess and prioritize critical drivers

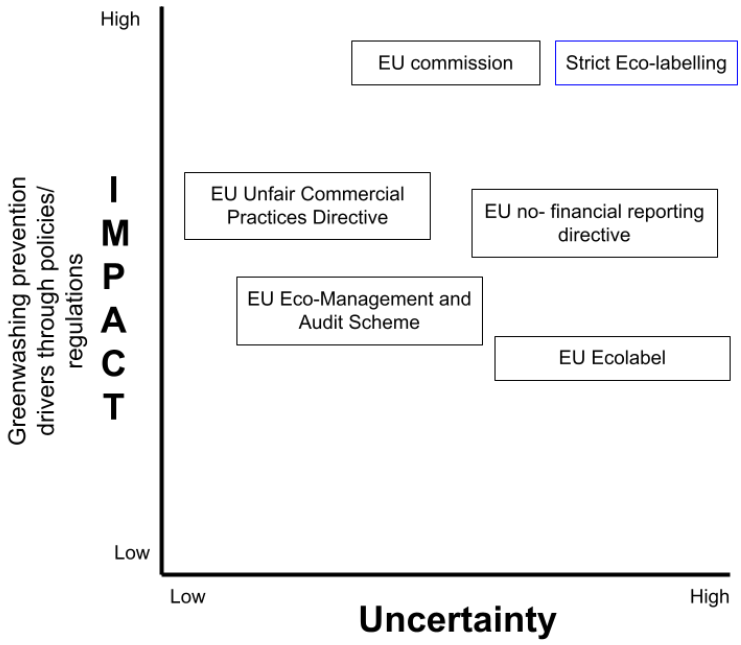
According to Rowland et al. (2014), the aim of this step is to establish the high impact, low predictability external driving forces. Uncertain driving forces are essential to create different scenarios that embrace uncertainty. In this step, unfortunately the team lacked time, technical capabilities and resources to repeatedly visualize different scenarios based on a large pool of potential drivers. Nevertheless, sufficient critical drivers have been assessed, prioritized and later selected to build the scenarios. In order to visualize these drivers in a more comprehensive manner, a graphical approach will be used. The first figure will illustrate the drivers of greenwashing in the fast fashion industry, the most uncertain and impactful being consumer behavior. The second figure illustrates the greenwashing prevention drivers through policies and regulations, with strict eco-labelling being the most uncertain and impactful.

Figure 3.0 Drivers of greenwashing in the fast fashion industry



Here consumer behavior is chosen as the least certain and most impactful driver since as previously established throughout the paper, despite using a framework consumer behavior remains very difficult to accurately predict. It is also judged impactful due to how intricately linked it is to the issue of greenwashing. Consumers are the ones being fooled in this issue therefore understanding this and taking into account helps prevent scenarios in which inadequate measures are taken that do not consider the inconsistency in consumer behavior.

Figure 4.0 Greenwashing prevention drivers through policies and regulations

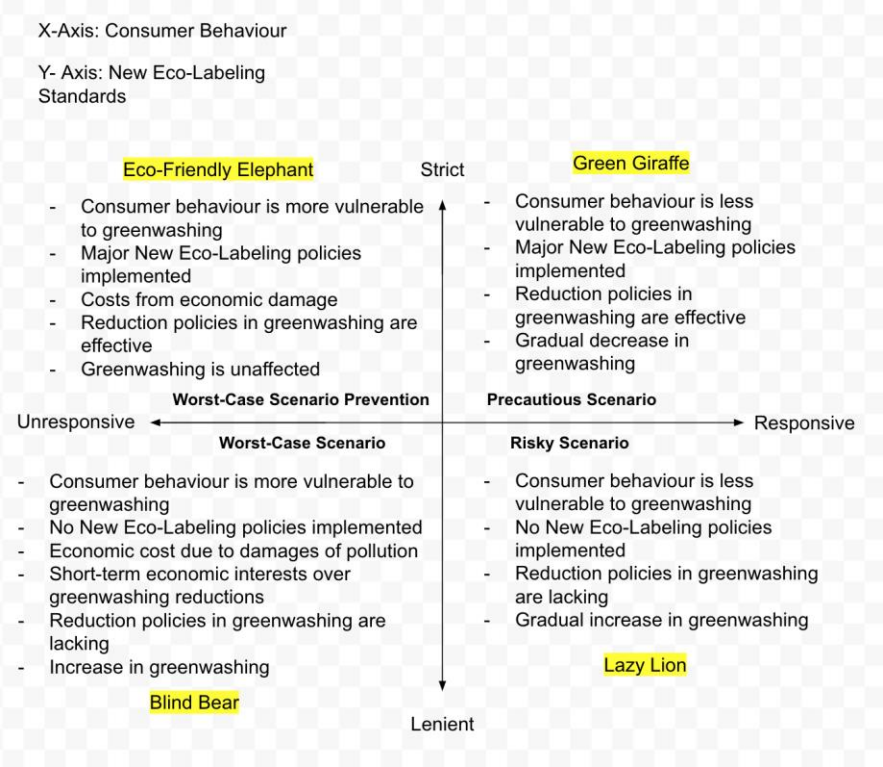


The strict Eco-labelling policy has been chosen as a high impact high uncertainty force due to the potential that it can have if it is comprehensive and well-designed. It remains highly uncertain though due to the fact that there are no current plans for such a measure and also due to the current EU ecolabel in place. The EU eco-label itself was judged to have little impact and high uncertainty in regards to greenwashing prevention.

3.4.4 Explore and select scenario logic

Before creating the scenarios, it's important to select a method for the scenario planning process. To keep things simple, this study will use the Basic Quadrant approach. This method focuses on two key variables that are uncertain and generates four different scenarios as a result. Using this method allows for a diverse range of scenarios to be developed. The illustration below demonstrates the various scenarios that emerge based on the two drivers that are used.

Figure 5.0 Basic quadrant



3.4.5 Develop detailed outlines of the time evolution scenarios

Greenwashing is a time-sensitive issue, as the longer the government delays addressing its prevalence effectively, the harder it tends to become to solve it. Such is the case because the more time greenwashing practices go unchecked or under-reported, the more harm it causes to consumers, the environment and truly environmentally-conscious companies. Furthermore, if consumer demand for environmentally-friendly products rises in the EU over the years, more consumers become vulnerable to these practices.

3.4.6 Develop scenario narratives

In the precautious scenario (named *Green Giraffe*), the government would enforce laws with stricter eco-labelling criteria to prevent greenwashing and unmeaningful labels. The European Commission had previously planned to implement a similar policy, so the fast-fashion industry in the EU would be prepared for stricter regulations. The consumer behavior in this scenario becomes more responsive, meaning that customers inform themselves and the demand for truly sustainable products increases. This would result in a more transparent and therefore sustainable fast fashion industry which would be held accountable for the true quality of their products. Fast fashion companies would be unable to hide behind certifications as it is currently the case, this new form of eco-labelling would directly assess the materials as well as the production method which in this future becomes vital information for most consumers. Overall the frequency of greenwashing cases would decrease and the whole industry would shift to more sustainable practices.

In the worst-case prevention scenario (named *Eco-Friendly Elephant*), the government would rapidly implement a new EU eco-labeling policy in order to address the increasing prevalence of greenwashing and minimize its negative effects. Here, the now increasing demand for eco-friendly clothing would trend down, as people become more unresponsive to the clothing products' sustainability. Future advancements in technology could make it easier for operations to occur in an environmentally-friendly manner, yet the decreased demand for eco-friendly merchandise may reduce the incentive for companies to do so. Additionally, profits of fast fashion companies that engage in greenwashing would not be significantly affected, eco-labeling leads to less behavior changes on less responsive consumers.

In the risky scenario (named *Lazy Lion*), as eco-labelling implementation becomes more lenient and consumer behavior is more responsive, the government would prioritize the economy over implementing new policies to address greenwashing in the fast-fashion industry. They would only impose policies if greenwashing becomes a greater threat to the economy or environment such as the blind bear scenario. These could be factors such as increases in water pollution, carbon emissions and textile waste generation. In this scenario, consumer behavior becomes less vulnerable to greenwashing due to the increase in behavior responsiveness, however they can still be fooled due to inadequate eco-labeling standards in which they trust.

In the worst-case scenario (named *Blind Bear*), the government would still prioritize the economy over addressing greenwashing and increasing consumer demand. However, if they delay implementing new eco-labelling policies, more elements will be put at risk due to the pollution caused by greenwashing.

3.5 Phase III: Using scenarios

The need to educate consumers further about greenwashing is clearly illustrated in the scenarios *Green Giraffe* and *Eco-friendly Elephant*, where the implemented eco-labeling scheme is strict but outcomes are different. In the *Green Giraffe* there is an anticipated decrease in misleading claims pertaining to the environmental standards of the clothes that are being sold; in *Eco-friendly Elephant*, these trends would presumably remain unaffected. Assuming that eco-labelling would not lead to a change in Attitude among consumers, policy-makers and other stakeholders would be required to introduce educational programs and awareness campaigns to amplify the effect of eco-labels. Concrete ways to do this could be through media campaigns, in which eco-labelling organizations and governments can curate content to increase public awareness about eco-labelling and its benefits, leading to overall changes Attitude, Subjective Norms and Perceived Behavioral Control. Online resources, e.g. websites and social media platforms, can provide information about labels and how to recognize eco-labelled products. Failing to do so would render the labels ineffective as customers would uphold existing behavior.

In the scenarios of lenient governmental eco-labeling schemes, *Blind Bear* and *Lazy Lion*, consumers will also uphold their purchasing behavior. Ceteris paribus, an overall increase in greenwashing can be anticipated. Considering that eco-labels firstly are guiding tools that can increase customers' sense of Perceived behavioral Control by providing information, policy-makers would be required to conduct an analysis of environmental, social, and economic factors to best decide upon measures to incentivize change in the fast fashion industry. Such measures require comprehensive stakeholder engagement and involvement, comprising consumers, firms, retailers and non-government organizations. Agents in the industry would have to be

incentivized to transition from “quick-to-market’’ business models to sustainable business practices. NGOs can advise governments on what the most precise and accurate legislative measures would be to facilitate and incentivize sustainable business practices. The outcome of these processes can later be encompassed into a verification and enforcement system in which eco-labels can be incorporated as one of several measures to help guide the consumers on the business practices of the clothing brands they buy their clothes from.

4. Conclusion

To conclude, eco-labels in the fast-fashion industry can be efficient to a certain extent, but cannot be considered a complete solution to all the issues the fast-fashion industry creates. An eco-label is not efficient if it does not have relevant and cohesive standards and criteria, nor if the transparency and accountability in the labeling process is subpar. Ultimately, a more comprehensive and systemic approach is needed to address the environmental and social challenges posed by fast fashion, such as the business models of fashion companies. Currently, fast-fashion companies operate mainly on a ‘quick-to-market model’, where companies prioritize speed and flexibility to quickly produce and sell clothes at a low cost.

Furthermore, eco-labelling will not be efficient without relevant and efficient regulation and legislation. Regulations that limit the negative environmental impact of the production process, enforcement of transparency and traceability in the supply chains, establishment and enforcement of labor standards to ensure healthy and fair working conditions, and incentives and support for development of circular economy principles would have to be considered and assessed alongside an eco-labelling system. A third significant factor is the behavior of the consumer, which also has to be changed in order for eco-labels to be effective. In the literature review, it was found that consumers may be willing to pay more for a product that is proven to be sustainable; concurrently, there is literature that suggests that consumer perception and behavior would not change as a result of claims of misleading advertisements. These findings suggest that only consumers with a pre-established knowledge on sustainability would react to

the introduction of eco-labels, but eco-labels as isolated measures would not contribute to a change of consumer behavior. Consumers have to be guided and educated on the content, design and verification methods of the labels in order to make informed decisions.

As explained in the evaluation, it can be said that the recommended scenario to implement standards is the *Green Giraffe,* which predicts an anticipated decrease in misleading claims and an increase in a stricter eco-labelling scheme. In general, eco-labels can help raise awareness about the impact of fast-fashion on the environment and workers, and encourage companies to adopt more sustainable practices. However, the fast-fashion industry's root issues must be addressed more coherently, and eco-label cannot be considered a driver of meaningful change, but rather a way to guide consumers on whether the company who is selling the product has implemented other drivers of change.

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