



Consumers' Perception of Greenwashing in the Food Industry

Bachelor Thesis for Obtaining the Degree
Bachelor of Science in International Management

Submitted to Dr. Marion Garaus

Anna Maria Erhardt

62003663

Vienna, 30th January 2024

Affidavit

I hereby affirm that this Bachelor's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed. In particular, I did not use any text generators or other paraphrasing tools. My thesis was not proofread.

The thesis was not submitted in the same or in a substantially similar version, not even partially, to another examination board and was not published elsewhere.

30th January 2024

Date

Signature

Abstract

Greenwashing is a deceptive marketing strategy employed by firms that deliberately mislead consumers. This tactic, also known as green image washing, involves selectively disclosing positive information about a company's environmental or social performance while not disclosing any negative information. This selective disclosure aims to create a positive corporate image. Given the various consequences greenwashing poses to consumers and society, it is crucial to explore this concept and understand the extent to which consumers are exposed to such deceptive tactics.

This thesis investigates consumers' perceptions of greenwashing in the food industry. In detail, the researcher aims to explore to what extent consumers are aware of and perceive greenwashing in the food industry, how consumers' perception of greenwashing in the food industry influences their purchasing decisions and behaviours, and what criteria consumers use to evaluate and identify greenwashing in the food industry.

An online survey was conducted employing a qualitative research approach with an exploratory research design. The literature review of the thesis involved reviewing and analysing secondary data to gain deeper insights into greenwashing and its implications in the food industry. Primary data was obtained through an online questionnaire, in which a total of 57 participants aged between 21 and 72 engaged in the study. The collected data was subsequently analysed using inductive content analysis. The data gathered from the online survey suggests that consumers are aware of and perceive greenwashing in the food industry. Furthermore, findings show that consumer perception of greenwashing influences purchasing decisions by consumers and that consumers seek criteria to evaluate and identify greenwashing in the food industry.

It is recommended that further studies are conducted in the field of greenwashing, as consumers' understanding and education are advised. Such efforts have the potential to enhance transparency in the food industry, encourage more informed consumer choices and promote sustainable practices. Moreover, further research could

empower regulatory bodies to devise more effective measures, ensuring a market that combats deceptive marketing practices and provides a platform for genuinely environmentally sustainable brands to be prominently recognised.

Table of Contents

Affidavit	2
Abstract	3
Table of Contents	5
List of Tables	7
List of Figures	7
1 Introduction	8
1.1 <i>Aim of the Study</i>	9
1.2 <i>Structure of the Thesis</i>	10
2 Literature Review	12
2.1 <i>Green Marketing and Green Consumption</i>	12
2.1.1 Green Marketing.....	12
2.1.2 Green Consumption.....	13
2.2 <i>Greenwashing</i>	14
2.2.1 Evolution of Greenwashing.....	14
2.2.2 Definition of Greenwashing.....	15
2.2.3 Greenwashing in the Food Industry.....	17
2.3 <i>Types of Greenwashing</i>	19
2.3.1 Major Classifications of Greenwashing.....	19
2.3.2 Claim Greenwashing	20
2.3.3 Executorial Greenwashing	21
2.3.4 Seven Sins of Greenwashing.....	22
2.4 <i>Consequences of Greenwashing</i>	24
2.4.1 Consequences on Consumers.....	25
2.4.2 Consequences on Stakeholders	25
2.4.3 Consequences on Corporations.....	25
2.4.4 Consequences on Society	26
2.5 <i>Consumer Perception and Behaviour</i>	26

2.5.1	Factors Influencing Consumer Perception.....	26
2.5.2	The Role of Trust in Consumer Decision-Making.....	28
2.5.3	Consumer Attitude Toward Environmental and Sustainable Claims.....	29
2.5.4	Consumer Behaviour in Response to Greenwashing.....	31
3	Methodology.....	32
3.1	<i>Research Design.....</i>	32
3.2	<i>Sampling Approach.....</i>	34
3.3	<i>Survey Development.....</i>	34
3.4	<i>Data Collection and Analysis.....</i>	37
3.5	<i>Ethical Considerations.....</i>	40
4	Results.....	41
4.1	<i>Sample Demographics.....</i>	42
4.2	<i>Awareness and Understanding of Greenwashing.....</i>	42
4.3	<i>Purchase Behaviour and Awareness of Greenwashing.....</i>	46
4.4	<i>Consumer Reactions.....</i>	48
4.5	<i>Perceptions of Green Marketing.....</i>	51
4.6	<i>The Impact of Greenwashing on Purchasing Decisions.....</i>	55
4.7	<i>Sources of Certification.....</i>	57
5	Discussion.....	59
6	Implications.....	64
7	Limitations and Future Research.....	66
8	Conclusion.....	68
9	Bibliography.....	70
	Appendices.....	79
	<i>Appendix 1.....</i>	79

List of Tables

Table 1: “Alternative Research Designs” (based on: (Creswell, 2014, p.12)).....	32
Table 2: “Structure of the Online Survey”.....	35
Table 3: “Participants’ Definition and Understanding of Greenwashing”.....	43
Table 4: “Consumer Reactions to Greenwashing in the Food Industry”.....	48
Table 5: “Consumers’ Perceptions of Green Marketing”.....	51
Table 6: “Impact of Environmental Claims on Purchasing Decisions”.....	55

List of Figures

Figure 1: “Major Classifications of Greenwashing” (based on: (Netto et al., 2020, p.7)).....	19
Figure 2: “Types of Claims” (based on: (Netto et al., 2020, p.7)).....	20
Figure 3: “Claim Deceptiveness” (based on: (Netto et al., 2020, p.8)).....	21
Figure 4: “The Consequences of Greenwashing” (based on: (Yang et al., 2020, p.1498)).....	24
Figure 5: “Factors Influencing the Formation of Consumer Perception” (based on: (Beloucif et al., 2017, p.40)).....	27
Figure 6: “Brand Image, Security and Perceived Risk on Trust and Purchase Decision” (based on: (Mahliza, 2020, p.144)).....	28
Figure 7: “Preparation, Organizing and Resulting Phases in the Content Analysis Process.” (based on: (Elo and Kyngäs, 2008, p.110)).....	38

1 Introduction

Green marketing prioritises environmental protection in the context of product consumption (Martinez et al., 2020, p.3). It serves as a strategic approach for fostering sustainable development and ensuring stakeholder satisfaction while incorporating environmental and ethical values into organisations. Consumers are gravitating towards environmentally friendly products as the attention to environmental protection has increased (Yavad & Pathak, 2017, p.114). Research conducted by Nielsen Media (Netto et al., 2020, p.1) concludes that 66% of consumers globally are willing to pay a higher price for environmentally friendly products. Moreover, a survey published in the Harvard Business Review (White et al., 2019, p.127) concludes that 65% of consumers would buy eco-friendly products. As green consumption increased, companies began associating their products with environmental practices. As a result, some of these practices have been deemed greenwashing (Martinez et al., 2020, p.4).

The term greenwashing was introduced by Jay Westerveld in 1983 when the activist accused hotels of asking their guests to reuse their towels. This cost-saving approach had no environmental impact, even though the hotels claimed there was no hidden motive behind the water conservation strategy (Orange & Cohen, 2010, p.1). Ultimately, Westerveld introduced the term greenwashing into his term paper, attracting significant attention from the wider media (Watson, 2017, p.38). Since then, the emergence of the green marketing strategy has been dominant across industries. Greenwashing is a green marketing strategy that uses deceptive marketing claims to mislead consumers into believing that a product is environmentally friendly while drawing attention away from the environmental drawbacks it poses (Lyon & Maxwell, 2011, p.5).

Besides being a widely used marketing strategy, greenwashing poses severe consequences for the consumer and society. Companies lose consumers' trust when pursuing greenwashing activities, which impacts the whole supply chain of food products and the food industry (Wobker et al., 2015, p.754). Brands that pursue legitimate environmental sustainability often find it hard to win consumers' trust in an industry full of consumer skepticism (Chen et al., 2013).

As environmental problems and public awareness increase, stakeholders are progressively aware of environmental considerations (Netto et al., 2020, p.1). According to Wang et al. (2023, p.2), the number of academic literature publications addressing the issue of greenwashing is increasing, but it remains relatively limited. In this regard, it is crucial to contribute to the knowledge creation in this field. The researcher of this thesis aims to explore greenwashing in the food industry, and therefore, exploring and gaining a deeper understanding of consumers' perceptions regarding greenwashing within the food industry is essential. The subsequent section will inform the reader of the overarching purpose and objectives which underpin this research.

1.1 Aim of the Study

This study aims to investigate the impact of greenwashing in the food industry and how the deceptive marketing strategy influences consumers' perceptions. Therefore, it is crucial to understand the extent to which consumers are aware of greenwashing in the food industry and whether or not they perceive the green marketing strategy. Additionally, the thesis explores how consumers' perception of greenwashing in the food industry influences their purchasing decisions and behaviours. Furthermore, it is vital to study consumers' criteria to evaluate and identify greenwashing in the food industry.

In accordance, the author of this thesis has formulated three research questions:

- 1) *To what extent are consumers aware of, and perceive, greenwashing in the food industry?*
- 2) *How does consumer perception of greenwashing in the food industry influence their purchasing decisions and behaviour?*
- 3) *What criteria do consumers use to evaluate and identify greenwashing in the food industry?*

To answer the proposed research questions, academic literature served as a foundation of knowledge. Additionally, an online survey was conducted to explore consumers' perceptions and knowledge on the subject of greenwashing in the food industry. The qualitative research approach allowed the author to focus on consumers' perceptions and attitudes towards greenwashing.

This thesis aims to contribute to the understanding of consumers' perceptions of greenwashing in the food industry and to what extent consumers are aware of, and perceive, greenwashing in the sector. Furthermore, the thesis aims to explore if greenwashing influences consumers' purchasing decisions and behaviours and what criteria consumers use to identify greenwashing in the food industry. This research intends to contribute to consumer empowerment, increased transparency in the food industry, and can be used by academics, consumers, and firms operating in the food industry to identify the extent and influence of greenwashing. While extending the understanding of consumers' perceptions of greenwashing in the sector, this thesis aspires to have practical implications. The thesis seeks to empower consumers to make informed choices by exploring factors which influence consumers' perceptions. Moreover, the findings may be utilised by businesses, policymakers, or consumers to develop strategies which promote ethical and transparent policies that enhance consumers' trust and foster positive changes in the food industry.

1.2 Structure of the Thesis

This research paper is divided into six distinct sections, with each section playing an integral role in the comprehensive examination of greenwashing within the food industry. The primary focus of this study is to investigate the marketing strategies of greenwashing employed and their implications for consumer perception.

The introduction serves as the foundational section of this research paper. It begins by presenting the research topic and articulating the study's overarching aim. Within this section, the research scope is defined through the formulation of research questions and objectives. Furthermore, the introduction also underscores the relevance of understanding greenwashing in our society, setting the stage for the

subsequent exploration of the marketing strategies employed and their impact on consumers' perceptions.

Subsequently, the literature review provides a comprehensive overview of existing knowledge in the field of greenwashing. This part offers insights into the evolution of greenwashing and defining the term. In this regard, this part of the thesis analyses various forms of greenwashing, with a particular focus on three noteworthy classifications, namely "executional greenwashing", "claim greenwashing", and the "seven sins of greenwashing". Moreover, the consequences of greenwashing on various levels will be discussed, and consumers' perception and behaviour will be mentioned in detail, including factors which influence consumer perception, the role of trust in consumer decision-making, consumers' attitudes toward green claims and consumer behaviour in response to greenwashing. By exploring the aspects mentioned, the researcher aims to enrich the comprehension of the deceptive marketing practices deployed in the food industry and how they manifest in consumer perception, thereby contributing to a more profound insight into the phenomenon of greenwashing within the context of the research topic.

Afterwards, the methodology section will present the study's research design, sampling approach and survey development. Afterwards, the data collection methods and techniques of analysis will be discussed. The results section will present the survey outcomes in detail, and the findings will be interpreted in more detail in the discussion section of this thesis. The discussion will be based on the research objectives and the literature which has been reviewed. Theoretical insights and empirical findings will be utilised to gain a comprehensive understanding of greenwashing in the food industry and the consumer's perception of deceptive marketing strategies. Additionally, the implications, limitations of the research and future research propositions will be formulated and explained. Lastly, the outcomes and research questions will be summarised in the conclusion section of this research report.

2 Literature Review

In order to understand greenwashing in the food industry and the consumer's perception of the green marketing approach, key terms and factors will be explored by utilising existing literature. Furthermore, common greenwashing tactics will be examined, and examples of greenwashing will be included to facilitate a more profound comprehension of the concept. Moreover, the literature review will shed light on the consequences of greenwashing and consumers' attitudes toward green claims and deceptive marketing practices.

2.1 Green Marketing and Green Consumption

2.1.1 Green Marketing

The growing concern about social and environmental issues encourages consumers to use environmentally friendly products if they have the information and knowledge that their purchase will result in a high level of environmental impact (Martinez et al., 2020, p.3). According to Moravcikova et al. (2017, p.1), over the next five years, six out of ten companies will invest in environmentally friendly endeavours. As mentioned in the process of globalisation, companies may gain a competitive advantage by implementing green principles regardless of their size (Kirilova & Bancheva, 2017, p.493). Green marketing is a tool for stakeholder satisfaction and sustainable development, as it incorporates environmental and ethical values into companies (Martinez et al., 2020, p.3). Green marketing (also called eco-marketing, social marketing, organic marketing, sustainability marketing, and environmental marketing) does not fall under a general definition, but a widespread aspect is marketing management with an element of environmental awareness (Zhu & Sarkis, 2016, p.290).

The process of green marketing identifies, predicts, and satisfies the needs of consumers and society in a sustainable and profitable manner (Martinez et al., 2020, p.3). Moreover, it demonstrates the importance of ensuring environmental protection for consumers in responsible product usage. Nevertheless, not all companies use green marketing to gain consumer awareness of environmental benefits; instead, they

incorporate these considerations into their marketing strategy to gain competitive advantage (Polonsky, 2011, p.1311). As many companies utilise false green claims, it is increasingly challenging for companies to be noticed by consumers who are genuinely concerned about the environment. These false green claims are considered unreliable, and the environmental attributes are unclear (Chen et al., 2013). A key component of green marketing is maintaining a trustworthy and loyal relationship with consumers, as in today's green marketing environment, a lack of consumer confidence is present (Lewandowska et al., 2017, p.31).

Green marketing is an effective tool to reinforce a firm's image in response to society's needs and wants. Nevertheless, unethical behaviour has negative implications for the corporate image of companies, which ultimately suggests that green marketing has corporate image implications (Ko et al., 2013, p.1711). In this manner, by implementing environmental concepts in productions and operations, companies will need to analyse the truthfulness and legitimacy of their claims, as they should aim to avoid consumer distrust and an assumption that the product suggests the practice of greenwashing (Chen & Chai, 2010).

2.1.2 Green Consumption

The transition toward more sustainable consumption practices is referred to as "green consumption". This shift in behaviour is becoming increasingly evident in developed nations as consumers strive to reduce their environmental footprint through their purchasing choices (Martinez et al., 2020, p.4). Green consumers pay increasing attention to the quality and price of brands which seek environmental protection and adopt conservation strategies (Martinez et al., 2020, p.4). This consumption approach could aid environmental sustainability and was initially proposed to maximise consumption of green products and, in return, maximise sales. Furthermore, the objective of green consumption is to encourage consumers to purchase sustainable products in the immediate future, with the aspiration of consumers adopting a more green lifestyle in the long run (Chen & Peng, 2012). With an increase in this consumption manner, firms began to associate their offerings with environmental

practices, but ultimately, some of these actions were deemed greenwashing (Furlow, 2010).

2.2 Greenwashing

2.2.1 Evolution of Greenwashing

The term greenwashing originated in 1986 when consumers received most of their news from print media, television and radio. Due to limited access to information from a consumer's side, corporations were able to present themselves as environmentalists even though they might engage in environmentally unsustainable practices (Watson, 2017, p.38). Greenwashing was performed way before the term originated. The nuclear power division of Westinghouse was an early pioneer in greenwashing (Watson, 2017, p.38). As the anti-nuclear movement in the 1960s caused societal concerns about the environmental impacts, the firm launched a series of advertisements which exhibited the safety and cleanliness of the power plants. In the mid-1980s, the oil company Chevron launched advertisements that won an Effie advertising award, which portrayed their employees protecting sea turtles, butterflies and bears (Watson, 2017, p.38). The campaign with the slogan "People Do" became scandalous among environmentalists as they noticed that the sustainability claims covered up questionable environmental records (Watson, 2017, p.38).

The term greenwashing then evolved in 1983, when the activist Jay Westerveld took part in an undergraduate research trip to Samoa. At the resort, he noticed a sign requesting the guests to reuse their towels to reduce ecological damage. The hotels claimed that they had no hidden motives behind the water conservation strategy, but ultimately, this approach was deemed a pure cost-saving method with no environmental impact (Orange & Cohen, 2010, p.1). Three years later, Westerveld introduced the term greenwashing into his term paper, and shortly after, the wider media caught attention to the phenomenon of greenwashing (Watson, 2017, p.38).

In the early 1990s, consumers began to show an increasing awareness of sustainability issues. Surveys portrayed that the environmental records of corporations were a significant factor influencing consumers' purchasing decisions. By the end of the

decade, the term was introduced to the Oxford Dictionary and hence gained a greater reputation (Watson, 2017, p.38). In accordance with a survey conducted by Nielsen in 2015, 66% of consumers are willing to pay an extra amount for products which are environmentally sustainable. For millennials, this number is at 72% (Ashton, 2016).

2.2.2 Definition of Greenwashing

The term greenwashing derives from the phrase environmental whitewash, implying corporate deception (Karliner, 1997). Also known as eco-washing, eco-whitening, whitewash, eco-bleaching, green sheen or green image washing, the term implies advertising in which green marketing is applied to promote a perception that the products of an organisation respect the environment and aim to increase the benefits for it (Martinez et al., 2020, p.4). Precisely, greenwashing is a form of disinformation from organisations to consumers that seeks to shape a company's public image and public reputation. In agreement with Lyon and Montgomery (2015, p.225), eco-washing misleads consumers about the environmental benefits of products or services and companies' environmental practices. Similarly, Wang et al. (2023, p.1-2) state that several psychologists, ethicists and environmentalists have reached the joint conclusion that the marketing strategy of greenwashing deliberately misleads consumers, aims to create false impressions and is generally not backed up by any facts. In addition, greenwashing selectively discloses positive information on the social or environmental performance of a company, with a lack of full disclosure of the negative information, creating a positive corporate image. This implies that greenwashing has aspects distant from truth and techniques which confuse or deceive the consumer (Lyon & Maxwell, 2011, p.5).

In the late 2000s, there had been an increase in regulatory and reporting databases on green image washing due to an increase in green advertising between 2006 and 2009 (Parguel et al., 2011, p.15). Society demands transparency regarding companies' information about environmental impact and activities. This must be preceded by a dynamic communication method to educate consumers and exhibit awareness (Antunes et al., 2015). The Federal Trade Commission has supplied guidelines for the use of environmental marketing claims. These guidelines are supposed to reduce the

chance of marketers creating deceptive or false marketing claims. The regulations state that claims should be understandable, clear and utilise plain language. Furthermore, marketing claims should specify if they relate to the packaging, the product, or a service. In addition, an overstatement of a benefit or comparative environmental claims should not confuse the consumer (Guides for the Use of Environmental Marketing Claims, 2012). Several companies utilise green marketing communications to create an eco-friendly and socially engaged image, aiming to achieve a better brand attitude and, ultimately, purchase intentions (Netto et al., 2020, p.2).

Companies employ greenwashing because they have been paying a closer look at environmental issues in response to environmental pollution and the consequences it poses to seek commercialisation and advancements of green products (Chen & Chang, 2013). Moreover, stakeholders are becoming more conscious of environmental considerations and compel corporations to disclose information regarding their ecological conduct and offer environmentally friendly products (Netto et al., 2020, p.1). Ever since the rise of the environmental movement in the 1960s and its presence ever since, environmental marketing has been in close proximity (Lane, 2013, p.280). The transformation of environmental protection, which used to be a solely social benefit, now blends with economic gains. The merge of social benefits and economic gains is the marketing strategy of corporate greenwashing (Wang et al., 2023, p.1).

As visible in an article by Terra Choice (2010), 95% of Canadian and USA products which claim to be green committed at least one of the “sins of greenwashing”. A significant problem with greenwashing is that green skepticism has increased with greenwashing and could ultimately hinder green marketing (Chen et al., 2013). This is due to the fact that consumers find it hard to differentiate between factual green claims and green marketing initiatives. A practical example of greenwashing is IKEA, a Swedish furniture and hardware company that uses 1% of the world’s wood every year (Peel-Yates, 2021). The company was accused of greenwashing in 2020 when an 18-month investigation concluded that IKEA uses illegally felled woods from forests of the Ukrainian Carpathians. The wood needed to make the beech chairs was certified by the FSC (Forest Stewardship Council), which is a leading green certifier for timber.

Unsure why the FSC certified the wood, this places a negative light on the credibility of the FSC as a global timber certifier and on IKEA, which claimed to use green timber (Peel-Yates, 2021).

2.2.3 Greenwashing in the Food Industry

In accordance with Maslow's hierarchy of needs, food is a basic physiological need of humans. As a result, humanity is dependent on the food industry and is easily influenced by greenwashing means. Through greenwashing, the food industry does not consider the recipient's dignity but functions purely out of profit-driven motivation (Wyrostkiewicz, 2014, p.22). Greenwashing even reaches beyond the point of manipulating society to an extent where it poses a threat to public health and the environment (Dahl, 2010, p.248).

Food industry manufacturers started implementing sustainable production methods in line with increased environmental awareness across business sectors. Traditional green communication strategies in advertising aided in promoting these less resource-intensive products. Shortly after, some companies overstated the benefits of their activities and misled consumers in two distinct forms. One being "claim greenwashing", which uses written information, and "executional greenwashing", which includes marketing communication based on implicit features (Labrecque et al., 2013). The rational evaluation process of this method is derived from textual elements. The implicit components are the ones which trigger an unconscious affective mechanism of persuasion in the end-users (Schmuck et al., 2018, p.127). Nevertheless, greenwashing in the food industry is hard to define, but generally, phrases such as "organic", "natural", and "eco-friendly" appear in food marketing strategies, even though chemicals are included in the recipes (Shahrin et al., 2017, p.3205). This results in organisations with a genuine interest in protecting and informing consumers having to function in a ruined market (Shahrin et al., 2017, p.3205).

Some marketing strategies of food firms have gained consumers' trust, such as green branding and green advertising, which enhances trust in brands (Lavuri et al., 2022). Equally, consumer skepticism has been visible in the last few years. Research suggests

that firms in the food industry should stop deceptive advertisement strategies to respect environmental protection as this will reduce consumer confusion and, in return, enhance green trust to prevent consumers from switching to non-green products (Mustiko & Sutikno, 2015, p.436). An example of a company that has practised greenwashing in the food and beverage industry is Oatly, a brand which specialises in oat-based dairy alternatives. Multiple of their advertisements have faced criticism from the Advertising Standards Authority (ASA) (“Oatly Ads Banned over ‘Misleading’ Environmental Claims,” 2022). One ad utilised the slogan “Need help talking to dad about milk?” which compared the carbon footprint of dairy milk to Oatly’s milk, as well as omnivorous and vegan diets. After complaints by ASA, Oatly failed to back up their claims and stated that they should have been more precise with their claims. Moreover, another advertisement portrayed a text on the screen which stated that Oatly generates 73% less carbon dioxide than regular milk in the whole production process. After the authority claimed the ad to be misleading, it turned out that this statistic was only a comparison between one of their products, the Oatly Barista Edition, to regular full-cream milk. Lastly, another significant advertisement of Oatly which was deemed greenwashed was a newspaper ad of Oatly which stated: “Today, more than 25% of the world’s greenhouse gases are generated by the food industry, and meat and dairy account for more than half of that”. The Advertising Standards Authority also claimed this statistic to be misleading for consumers, as Oatly included eggs and fish into meat and dairy, whereas a layperson might not have done it this way (“Oatly Ads Banned over ‘Misleading’ Environmental Claims,” 2022).

Lipton Ice Tea has also been accused of greenwashing by the Advertising Standards Authority with an advertisement in August of 2021 (Bray, 2022). The poster featured a text which stated, “Deliciously refreshing, 100% recycled”. A small asterisk suggested that the bottle was in fact made from recycled plastic, but this claim excludes the lid and label. ASA claimed that “100% recycled” misleads consumers and implies that the whole bottle, including the lid and label, are made from completely recycled materials (Bray, 2022).

2.3 Types of Greenwashing

2.3.1 Major Classifications of Greenwashing

To understand the complex issue of greenwashing, it is crucial to explore different classifications of the term and the tactics employed by companies to safeguard their bottom lines while appearing environmentally responsible. Netto et al. (2020, p.7) identified major classifications of greenwashing (see Figure 1).

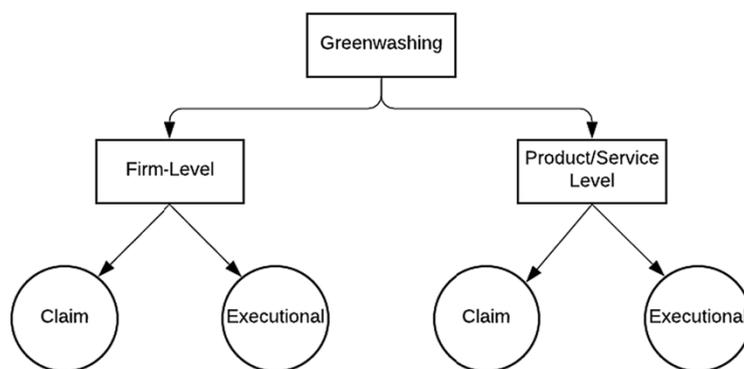


Figure 1: "Major Classifications of Greenwashing" (based on: (Netto et al., 2020. P.7))

According to Delmas and Burbano (2011, p.64), an increasing number of corporations are participating in the deceptive practices of greenwashing, which misleads consumers regarding the environmental practices or the eco-friendly attributes of their offerings. This could either be pursued on a firm level or on a product/service level. Firm-level greenwashing is the act of misleading consumers in regard to the environmental practices of an organisation. An example of greenwashing at the company level can be seen in the "Ecomagination" campaign by General Electric, where the company promoted environmental initiatives while simultaneously opposing new clean air EPA regulations (Delmas & Burbano, 2011, p.66). Product/service level greenwashing is when consumers are misled regarding the environmental benefits of a particular product or service. An instance of this level of greenwashing is LG's miscertified refrigerators, meant to indicate energy efficiency. Later on, it was discovered that ten models of the refrigerators did not meet the required standards for certification (Delmas & Burbano, 2011, p.66).

2.3.2 Claim Greenwashing

A majority of research has placed a focus on claim greenwashing, which utilises textual elements which refer to environmental benefits of a product or service (Netto et al., 2020, p.7). A study conducted by Carlson et al. (1993, p.38) developed two categorisations for green claims: (1) claim type and (2) claim deceptiveness. In the following, both will be discussed in order to highlight different types of greenwashing claims.

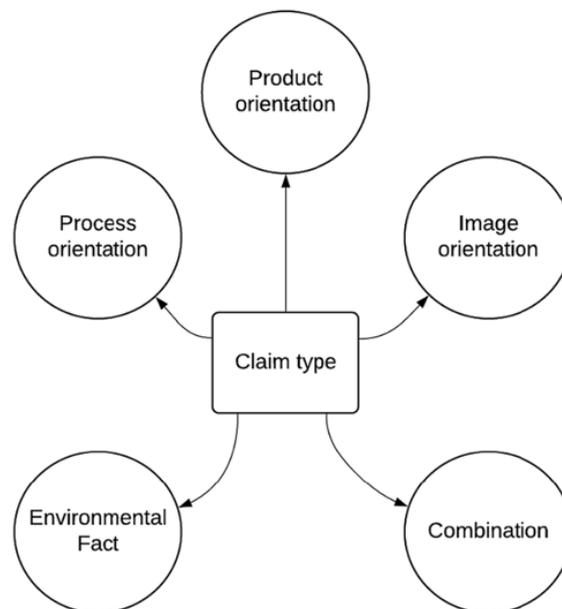


Figure 2: “Types of Claims” (based on: (Netto et al., 2020, p.7))

The different types of claims can be categorised into five distinct groups (see Figure 2). The first one is “Product Orientation”, which suggests that the claims revolve around highlighting the environmental attributes of a product. “Process Orientation” means that the claim emphasises the ecological excellence of a production process or the eco-friendly disposal methods that are being employed (Baum, 2012). “Image Orientation” implies that the claims are centered on enhancing the organisation’s eco-friendly image, for example, associating the firm with environmental causes or activities. “Environmental Fact” classifies claims that involve independently verifiable statements about the environment (Tateishi, 2017). Lastly, claims that fall under the

category “Combination” include a blend of at least two of the categories mentioned (Carlson et al., 1993, p.31).

The types of claims mentioned above can again be classified into a classification scheme, claim deceptiveness (see Figure 3).

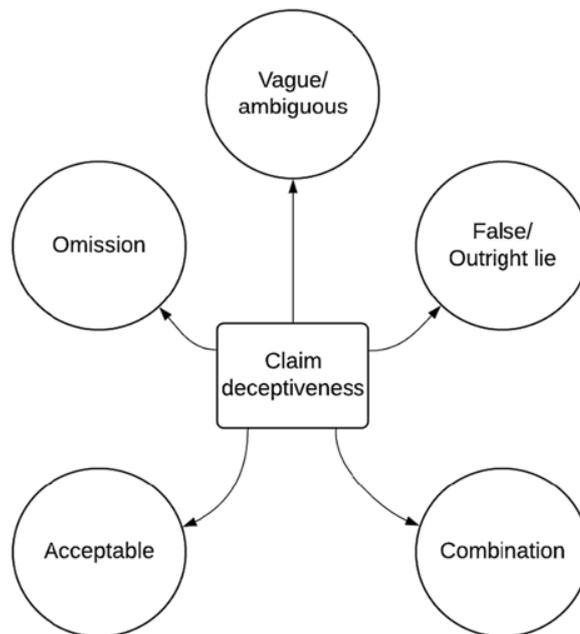


Figure 3: “Claim Deceptiveness” (based on: (Netto et al., 2020, p.7))

The first being “Vague/Ambiguous” claims, which are broad, vague or claims which lack clear definitions. “Omission” claims miss relevant evidence to evaluate the validity of the claim (Tateishi, 2017). “False or Outright Lie” claims are inaccurate, as the name suggests, and “Acceptable” claims are ones without deceptive features. Lastly, the category “Combination” consists of claims with two or more of the above categories (Carlson et al., 1993, p.31).

2.3.3 Executional Greenwashing

Executional greenwashing is a form of greenwashing that does not use any claims but utilises nature-evoking elements such as sounds or images using specific colours (Parguel et al., 2015, p.2). Examples of such nature-evoking elements are sounds of birds or seas, blue or green colours, natural landscapes with mountains and forests,

endangered animals or renewable energy sources such as waterfalls and winds. These nature-inspired elements may portray a false perception of the brand, in detail of its greenness and sustainability measures (Hartmann & Apaolaza-Ibanes, 2009). Moreover, these elements might trigger environmental inferences by evoking imagery in the consumers. According to an empirical study conducted by Parguel et al. (2015), executional elements that evoked nature pursued a high perception of the brand's greenness among consumers (only non-expert consumers were interviewed). Whereas expert consumers were not affected on a significant level (Pargual, 2015, p.28).

2.3.4 Seven Sins of Greenwashing

The "Seven Sins of Greenwashing" are a set of deceptive marketing practices utilised by firms to make their products or services seem more environmentally friendly than they truly are. These tactics create a false impression among consumers, making them believe that they are making responsible choices when, in reality, the company's claims are unfounded. The "sins" were first identified by TerraChoice in 2010, an environmental marketing consulting firm, which now serve as a valuable framework for recognising greenwashing practices (TerraChoice, 2010). The seven sins are as follows:

The Sin of Hidden Trade-Off: The sin of hidden trade-off suggests that a company makes a claim based on a limited set of characteristics while ignoring significant impacts in other areas. To add, the company might claim a product is "green" without attention to other environmental issues (TerraChoice, 2010, as cited in Dahl, 2010, p.249; Mustiko & Sutikno, 2015, p.437; Nedelea et al., 2017, p.4; Netto et al., 2020, p.8-9). Examples include cleaning products that claim to be "chemical-free" but fail to inform consumers that they contain harmful environmental pollutants. Also, food manufacturers label their snacks as "low fat" but do not mention the excessive sugar content.

The Sin of No Proof: This sin defines environmental claims which lack reliable evidence or third-party certification (TerraChoice, 2010, as cited in Dahl, 2010, p.249; Mustiko & Sutikno, 2015, p.437; Nedelea et al., 2017, p.4; Netto et al., 2020, p.8-9).

Examples are clothing brands that state that their shirts are made from “sustainable materials” but offer no third-party verification or information to back up the claims. Another example includes cleaning products advertised as “eco-friendly” without providing scientific data or testing to prove the environmental benefits.

The Sin of Vagueness: The sin of vagueness uses broad, poorly defined and unsubstantiated claims which are hard to verify. Moreover, these claims are often misunderstood by consumers (TerraChoice, 2010, as cited in Dahl, 2010, p.249; Mustiko & Sutikno, 2015, p.437; Nedelea et al., 2017, p.4; Netto et al., 2020, p.8-9). Examples of the sin of vagueness include cosmetic products that market as “natural” but do not specify what ingredients are natural, leaving consumers unaware of the actual composition. Also, energy drinks claiming to be “green” without clarifying what makes them environmentally friendly.

The Sin of Worshipping False Labels: This sin displays fake or misleading labels to imply environmental superiority. This suggests that the product has successfully been put through a green certification process (TerraChoice, 2010, as cited in Dahl, 2010, p.249; Mustiko & Sutikno, 2015, p.437; Nedelea et al., 2017, p.4; Netto et al., 2020, p.8-9). An example includes a beverage company which places a “BPA-Free” label onto their bottles when they never used BPA in the first place, intending to mislead consumers into believing they have made a difference.

The Sin of Irrelevance: The sin of irrelevance makes a claim that is deemed accurate but irrelevant to the product in promotion (TerraChoice, 2010, as cited in Dahl, 2010, p.249; Mustiko & Sutikno, 2015, p.437; Nedelea et al., 2017, p.4; Netto et al., 2020, p.8-9). An example is a company which claims to be “CFC-Free”, even though CFC has been banned for years.

The Sin of Lesser of Two Evils: This sin intends that the claim is aimed to distract from the significant issues. Hence, it might be valid to the product category but still distracts from greater environmental impacts that the product may cause (TerraChoice, 2010, as cited in Dahl, 2010, p.249; Mustiko & Sutikno, 2015, p.437; Nedelea et al., 2017, p.4; Netto et al., 2020, p.8-9). An example of the sin of lesser of two evils is a restaurant which markets a “veggie burger” as a sustainable option compared to the

beef burgers it offers, despite the environmental concern associated with the entire industry.

The Sin of Fibbing: The sin of fibbing makes misleading claims about environmental performance. Therefore, claims which are simply false (TerraChoice, 2010, as cited in Dahl, 2010, p.249; Mustiko & Sutikno, 2015, p.437; Nedelea et al., 2017, p.4; Netto et al., 2020, p.8-9). Examples for this sin include a company falsely claiming they are “100% organic” when they contain synthetic ingredients.

2.4 Consequences of Greenwashing

If companies act toward environmental preservation and corporate social responsibility (CSR), this poses many opportunities and consequences for those involved. If CSR is practised, consumers will have positive orientations and purchase intentions (Jamali & Karam, 2016). However, if greenwashing is pursued, this will have a negative effect not only on consumers but also on stakeholders and the corporation. In the following section, this part of the paper will discuss the consequences of greenwashing for corporations, stakeholders, consumers, and society (see Figure 4).

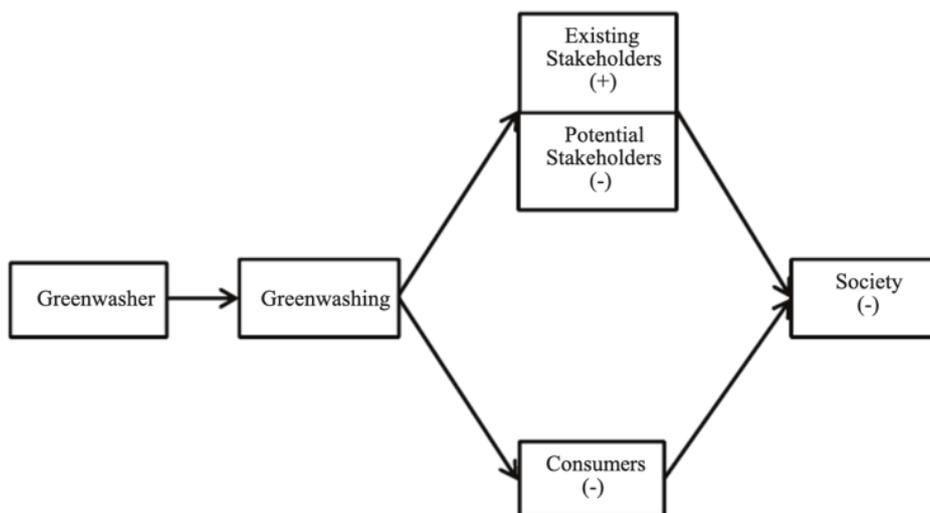


Figure 4. The consequences of greenwashing

Figure 4: “The Consequences of Greenwashing” (based on: Yang et al., 2020, p.1498))

2.4.1 Consequences on Consumers

Greenwashing has a strong negative effect on the consumers of green products (Delmas & Burbano, 2011, p.64). According to Wang et al. (2019), the practice of eco-washing also has an adverse impact on consumers' purchasing intention to buy environmentally friendly products from other brands in the industry. Some reasons for this include that consumers will see companies in a negative light if they realise the difference between green advertisement efforts and actual performance. Moreover, greenwashing often leads to an overload of information, which makes it especially hard for consumers to evaluate products and compare them to competitors' products (Nyilasy et al., 2014). This intends that consumers are growingly disbelieving companies which take advantage of environmental actions. Moreover, consumers who are aware of the deceptive practices of greenwashing have more negative brand attitudes, buying intent and green brand attitudes (Nguyen et al., 2019, p.1).

2.4.2 Consequences on Stakeholders

Greenwashing is considered a strategic method to provide false information about a company's genuine social performance, especially to its stakeholders (Husted & Allen, 2009, p.14). This means that stakeholders often do not have sufficient information to assess the environmental performance of companies. Investors rely on advertising but not on the deceptive practices of greenwashing, as this results in other companies losing confidence in greenwashing firms (Yang et al., 2020, p.1499). If a firm pursues greenwashing, it will be less likely to form partnerships with other companies; there will be less investor confidence and a lack of overall confidence from stakeholders (Yu et al., 2020, p.2).

2.4.3 Consequences on Corporations

In some cases, companies hope to benefit from greenwashing. With the pressure of the environmentalists and shareholders, they adopt greenwashing in order to increase their reputation and to gain an environmentally and sustainably friendly image. Nevertheless, if greenwashing is conducted, this could lead to workers losing confidence in their workplace, making them worried participants (Walker & Wan,

2012, p.12). Not only workers may lose confidence, but also non-governmental organisations, investors, and consumers (Lyon & Montgomery, 2015). This results in negatively associated brand equity, brand image, green brand equity and green satisfaction for corporations (Chen et al., 2016, p.1797).

2.4.4 Consequences on Society

Research indicates that the practice of greenwashing results in consumer mistrust (Nguyen et al., 2019, p.4). Figure 4 illustrates that greenwashing negatively affects consumer advantages while it predominantly enhances shareholder interests. Even when the gains for shareholders outweigh the losses for consumers, there is an overall reduction in societal benefits, viewed from the perspectives of resource allocation and social welfare (Ramesh and Rai, 2017). This underscored the need for regulators' intervention to mitigate the adverse effects of greenwashing (Yu et al., 2020, p.12).

2.5 Consumer Perception and Behaviour

This section of the literature review will emphasise the role of consumer perception and trust in the decision-making process. Additionally, consumers' attitudes toward environmental and sustainable claims and responses to greenwashing within the marketplace will be analysed.

2.5.1 Factors Influencing Consumer Perception

According to Jobber (2010, p.919), perception is defined as: "the process by which people select, organise and interpret sensory stimulation into a meaningful picture of the world". Therefore, perception is defined as observing, receiving and comprehending information. Perception comprises a series of interconnected processes that shape our perception of a stimulus originating from the environment. Perception is unique to all individuals, and many factors contribute to creating a mental image, which is deemed an image. The term image describes a stereotype, or mental image, of which every individual has their own unless a public image exists (Beloucit et al., 2017, p.39; Pearce, 1988). In accordance with Jenkins (1999), three approaches contribute to creating or improving an image; the psychological approach, behavioural geography and the marketing approach. With the psychological

approach, people tend to recognise and create images through the use of symbols and visual representations. Behavioural geography encompasses all linked impressions, information, emotions, values and beliefs. The last approach, the marketing approach, the image is related to consumer behaviour and personification (Jenkins, 1999). Furthermore, consumer perception can be defined as acting and reacting to what a person sees or comprehends (Kotler et al., 1988; Liligeto et al., 2014, p.64), as well as that advertising serves as an influential factor in shaping consumers' perceptions and prompting a behavioural reaction.

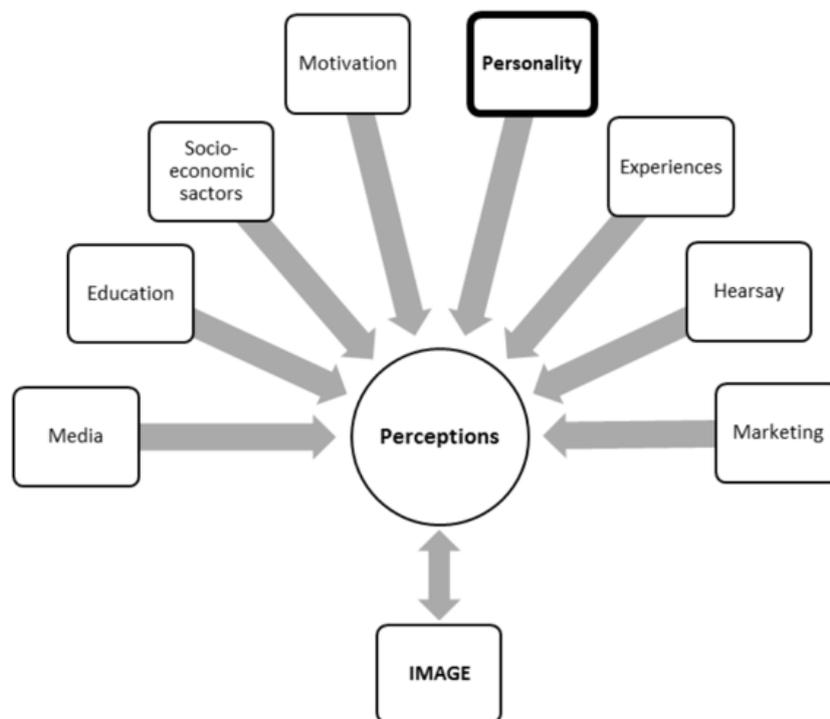


Figure 5: "Factors Influencing the Formation of Consumer Perception"
(based on: Beloucif et al., 2017, p.40))

Figure 5 illustrates the factors that play a role in forming perceptions. Moreover, it highlights that the words "perception" and "image" are closely related and that the sum of people's perceptions are, in fact, the image. Media, education, socio-economics, motivation, personality, experiences, hearsay, and marketing influence consumer perception. Hence, every individual forms their perception, or image, based on individual factors, so no generalisations of perceptions are accurate (Beloucif et al., 2017, p.40). Two theories that are associated with consumer perception are the

cognitive theory and the affective theory. Cognitive involvement suggests the reactions generated by the stimuli on a thought-related level, whereas affective involvement relates to feelings which are triggered by stimuli (Lee & Thorson, 2009; Liligeto et al., 2014, p.65).

2.5.2 The Role of Trust in Consumer Decision-Making

Trust plays a pivotal role in consumer behaviour and perception towards companies. This intends that the higher the trust in a company, the higher the possibility of a purchasing decision. Nevertheless, there are several factors which influence trust, and ultimately lead to a purchasing decision (*see Figure 6*).

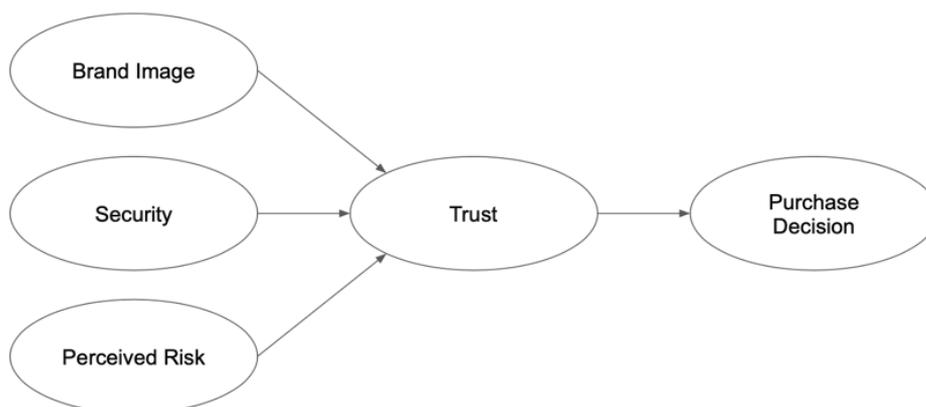


Figure 6: "Brand Image, Security and Perceived Risk on Trust and Purchase Decision"
(based on: Mahliza, 2020, p.144))

Brand image is a set of associations a consumer has toward a brand, encompassing values, identity, and overall image and can be organised into meaning (Mahliza, 2020, p.143). Not only does brand image relate to the company or seller's image, but also to the product's image. This can be measured through brand uniqueness, brand strength and brand excellence (Mahliza, 2020, p.143). As brand image has a positive influence on consumer trust, there is a strong positive relationship between brand image of a seller and trust from the consumer. Another factor which influences trust is consumers' perception of security (Mahliza, 2020, p.142). This becomes particularly crucial in the context of online purchasing decisions, where consumers seek to make transactions while safeguarding their personal information from being shared with

third parties. Hence, the consumer will trust the seller if they feel that their data is safe and secure. Moreover, there is also a strong positive relationship between security provided by the seller and trust from the consumer (Kim et al., 2003, p.166; Mahliza, 2020). The third pillar of trust is perceived risk, which is the consumers' perception of adverse consequences and uncertainty in decisions (Mahliza, 2020, p.143). This risk could vary from the risk of sustainability of the product or information to privacy. There is a strong negative relationship between low perceived risk and consumer trust. According to this framework, trust is essential for consumer decision-making and, ultimately, purchase decisions. In other words, the higher the trust in the seller, the higher the chance of a consumer purchase decision (Mahliza, 2020, p.143).

As supermarkets continue to evolve, offering a growing array of products, price ranges, additions, and options, consumer confusion and a sense of being overwhelmed become prevalent. The food retailing industry is affected by the increasing complexity and, in return, lacks consumers' trust (Wobker et al., 2015, p.754). It is essential to see the negative consequences this poses for the retailers, as consumers are losing trust in the industry. Turnbull et al. (2000, p.145) state that misunderstandings and misinterpretations of markets result from consumers being unable to develop and interpret facets of products and services in the information processing procedure. This confusion arises in return to products, information on products or marketing instruments (such as greenwashing, for instance). In addition, unclear presentation of information is also a cause for confusion and misunderstanding (Wobker et al., 2015, p.754).

2.5.3 Consumer Attitude Toward Environmental and Sustainable Claims

Society is living in a time in which environmental protection is a global concern, as the consumption of our resources is surpassing all previous historical records (Barbu et al., 2022, p.1). Therefore, consumers are becoming increasingly aware of the threats this poses and develop an interest in buying green products. In promoting environmentally sustainable products, companies tend to use green marketing methods as well as green claims. This ensures that buyers can make educated choices and be ecologically responsible. The United Nations Environment Programme

approximates that there is a double within the green market annually (Barbu et al., 2020, p.1; United Nations Environment Programme, 2011). Moreover, White et al. (2019, p.127) conducted a survey in which 65% of consumers had the intention to purchase eco-friendly products, of which only 26% of them actively purchase eco-friendly products, suggesting it may be an inconsistent desire (White et al., 2019, p.127). Consequently, it is important to discuss consumers' attitudes toward environmental or sustainable claims.

Researchers have explored consumer behaviour concerning green products, which presents multiple viewpoints on this topic. Generally, consumers of green products refuse to buy goods which harm the environment and aim to contribute to environmental protection (Kumar & Polonsky, 2017, p.85). Additionally, the consumers of green products are interested in all the production processes of the products, ranging from the consumption process to the post-use processes of the products in sale (Glogovetan et al., 2022; Zinkhan & Carlson, 1995, p.2). Accordingly, a green consumer is an individual who buys green products and adopts sustainable behaviours rather than purchasing standard goods. A review conducted by Barbu et al. (2022) identified factors which influence consumers' attitudes and behaviour toward green claims. The factors were grouped into main categorizations: institutional trust, green product characteristics, perceived risk, inconvenience of buying green products, perceived benefit of buying green products, a company's perceived green image, consumer confidence, social norms, natural environmental orientation and sociodemographic characteristics (Barbu et al., 2022, p.1).

Consumers responding to green claims can either be an affective response, which describes a consumer's feeling by being exposed to an advertisement, or a cognitive response, which is the judgement a consumer makes towards an advertisement (Zhu, 2012, p.74). The feelings and judgement of consumers are shaped when they encounter an advertisement, ultimately impacting their values concerning the brand or product and their attitude towards the advertisement (Batra & Ray, 1986). Consumers that are concerned about environmental sustainability tend to have a positive attitude toward green claims and advertising. Moreover, the affective responses consumers have in response to ads are not only formed by the

advertisement but also by the current circumstance and their emotions (Edell & Burke, 1987).

2.5.4 Consumer Behaviour in Response to Greenwashing

According to Engel et al. (1955, p.4), consumer behaviour is defined as: “activities directly involved in obtaining, consuming and disposing of products, including the decision processes that precede and follow these actions”. In the field of green behaviour research, environmental concern, in detail, consumer beliefs and knowledge, is deemed the primary cognitive measure in order to predict a person’s green conduct (Jaiswal & Kant, 2018, p.62). Consumer behaviour in regard to green purchasing is usually assessed by the willingness of a person to purchase green products. The subconscious behaviour then transforms into a buying decision for green products (Joshi & Rahman, 2015, p.129).

An empirical study conducted by Boncinelli et al. (2023) studied the effects of executional greenwashing on the market share of food products. Executional greenwashing uses nature-evoking elements to deceive consumers into associating environmentally friendly attributes with a brand or product. The study focused on visual cues and how these affect consumers’ behaviour and purchase intention. The findings concluded that the market share of greenwashed food products could potentially increase in contrast to non-greenwashed food products (Boncinelli et al., 2023, p.7). These findings are in line with studies conducted by Lim et al. (2020), who conducted research on executional greenwashing of cars and observed higher purchase intentions if the colour green was present, as consumers associated the colour green with environmental friendliness. The illicit element of green colour is a communication tool which generates added value onto a product (Marozzo et al., 2019). In contrast, Parguel et al. (2015) concluded that nature-evoking imagery had negative effects on improving brand image. This is due to the fact that the colours and imagery misled consumers by acting on their subconscious minds.

3 Methodology

This research paper will employ primary data collection to gain a deeper understanding of greenwashing in the food industry and how this marketing strategy influences consumer perception. The methodology section that follows is structured into the research design, sampling approach, survey development, and data collection and analysis.

3.1 Research Design

It is essential to select an appropriate research design when conducting research. The table below illustrates the three research designs which researchers can utilise in gathering primary or secondary data; quantitative, qualitative, and mixed methods (Creswell, 2014, p.12, *see Table 1*).

Quantitative	Qualitative	Mixed Methods
→ Experimental designs	→ Narrative research	→ Convergent
→ Nonexperimental designs, such as surveys	→ Phenomenology	→ Explanatory sequential
→ Longitudinal designs	→ Grounded theory	→ Exploratory sequential
	→ Ethnographies	→ Complex designs with embedded core designs
	→ Case study	

Table 1: "Alternative Research Designs" (based on: Creswell, 2014, p.12)

The quantitative research method is useful when relationships are tested between two groups, hypothesis testing is conducted, or to discover insights into significant relationships and correlations. This method involves gathering data through experiments or surveys, taking factors into consideration such as sample size and environmental influences that could introduce inaccuracies into the data. Quantitative research is characterised by its reliance on numerical data and is driven by statistical analysis and mathematical techniques in order to explore the boundaries of research inquiries (Creswell & Creswell, 2018, p.18).

The qualitative research method places a significant focus on gathering and analysing data in various forms, including visual data, audio or textual content. This research method encompasses a range of techniques such as expert interviews, direct observations, in-depth case studies, conducting interviews with consumers, or organising focus groups. These diverse methods provide the researcher with a multifaceted approach in order to understand the subject matter under investigation (Creswell & Creswell, 2018, p.13).

Furthermore, the mixed-method research approach represents a combination of both quantitative and qualitative research approaches. By adopting this merged approach, researchers can take advantage of the strengths of both methods, leading to a more thorough understanding of the research topic. This approach enhances the credibility of the research findings and offers more interpretations. Hence, a deeper comprehension of the research questions may be concluded (Creswell & Creswell, 2018, p.14).

The researcher decides upon utilising primary or secondary data. Primary data is collected by the researcher, for example, through interviews or surveys. This data is directly collected for the research problem. On the other hand, secondary data is not collected by the researcher but by someone else and is used for analysis (Hox & Boeijs, 2005).

A conventional method of collecting information from a sample of individuals by posing a series of questions to respondents is a survey (Tierney, 2000). A survey allows for uncovering opinions, behaviours, beliefs or personal characteristics of individuals. Furthermore, a survey serves as a tool for conducting evidence-based research and gathering data which is related to social phenomena (Navarro-Rivera & Kosmin, 2013, p.395). Some methods of collecting data for a survey are face-to-face interviews, telephone interviews or questionnaires. A questionnaire consists of questions that aim to answer the researchers' questions to explore the characteristics, beliefs and behaviours of the sample (Mathers et al., 2009, p.10).

The current thesis employs a qualitative research approach. The qualitative research approach has been chosen because it is more appropriate for exploratory research as

it focuses on individual opinions. The study focuses on greenwashing in the food industry and how the marketing strategies of greenwashing affect consumers' perception. Utilising the qualitative approach will extend the knowledge field and aid the understanding of the subject matter within a selected sample. The information yielded by the sample will be collected through gaining primary data in an online survey using open-ended questions. This will allow participants to portray their beliefs, opinions, and experiences in an elaborate way.

Additionally, the online survey received approval from the Institutional Review Board, which is an independent ethics committee that protects the rights of human subjects involved in any form of research conducted at Modul University.

3.2 Sampling Approach

In addition to selecting a research design, it is crucial to decide upon a suitable sampling approach. The sample size is a key feature in survey development, as an inadequate sample size might influence the accuracy and quality of research (Bartlett, 2001, p.2). Within this thesis, the researcher aims to understand greenwashing in the food industry and how the deceptive marketing strategies affect consumer perception. To gain the required primary data, a questionnaire in the form of an online survey will be used. Moreover, the thesis will use the non-probability convenience sampling method, which selects a sample from a population based on accessibility and convenience. This method is cost-effective and time-efficient, which will aid analysis. There are no set criteria for someone to participate in this survey; everyone could participate. This is because everyone purchases food products from the food industry, and everyone is exposed to greenwashing. The qualitative nature of this online survey will allow the researcher to get in-depth opinions and perceptions of participants on the topic of greenwashing in the food industry.

3.3 Survey Development

Performing this online survey allows the researcher to get insights into greenwashing in the food industry. In detail, the researcher's objectives encompass investigating consumers' awareness and understanding of greenwashing, how consumers'

perception of greenwashing influences their purchasing decisions and what certifications consumers seek and trust. The data collected will aid the researcher of this thesis to answer the following questions:

- 1) *To what extent are consumers aware of, and perceive, greenwashing in the food industry?*
- 2) *How does consumer perception of greenwashing in the food industry influence their purchasing decisions and behaviour?*
- 3) *What criteria do consumers use to evaluate and identify greenwashing in the food industry?*

The qualitative questionnaire will rely on open-ended questions to gather respondents' opinions, experiences and beliefs. Additionally, some closed-ended questions will be used to analyse the sample demographics. The researcher decided to divide the online survey questions into distinct constructs, which are targeted to specific research questions. Reasons for this are the simplification of the results and discussion of the data. The table below illustrates the different constructs, the associated research questions and example questions of the construct (see Table 2).

Construct	Research Question	Example Question
Sample Demographics		What age are you?
Awareness and Understanding of Greenwashing	Research Question 1	Are you aware of the term "Greenwashing" in the context of marketing and advertising?
Purchase Behaviour and Awareness of Greenwashing	Research Question 1	Have you ever encountered food products / food brands which you believe engage in greenwashing? If yes, please elaborate.

Consumer Reactions	Research Question 1 Research Question 2	How do you feel when you encounter greenwashing in food marketing?
Perceptions of Green Marketing	Research Question 2 Research Question 3	What claims by food brands make you consider their products as environmentally friendly?
The Impact of Greenwashing on Purchasing Decision	Research Question 2 Research Question 3	What types of environmental claims of food products do you consider when you make a purchasing decision?
Sources of Certification	Research Question 3	On which third-party certifications or labels do you rely on when choosing environmentally friendly products?

Table 2: "Structure of the Online Survey"

The first construct consists of questions that aim to explore the demographics of the sample and allow participants to consent to the participation in the survey. The age, gender and occupation of the participants will inform the researcher and the reader of the sample and could aid future analysis, for example, if a specific group was not included in the sample. The next construct is "awareness and understanding of greenwashing". This construct explores if the participants are aware of greenwashing and asks them to define greenwashing in their own words. After that, the researcher will provide a definition of greenwashing to ensure that participants are aware of the term before responding to the next questions. Furthermore, this construct will identify if the participants feel like greenwashing is a common practice in the food industry, which will portray the level of awareness and understanding they embody. The following construct is "purchase behaviour and awareness of greenwashing", which explores how often participants purchase food products. This will show the

researcher how much awareness they have of greenwashing cases and which brands are commonly associated with greenwashing.

The next construct evolves around the “consumer reactions”, which asks respondents for their opinions on greenwashing. In detail, if consumers believe that greenwashing is conducted intentionally, if they ever stopped buying from greenwashing brands, how they feel when they encounter greenwashing in food marketing, and if situations of greenwashing influence their trust in food brands. This section will explore the opinions and values of consumers and, ultimately, their reactions to greenwashing. After this construct, the construct of “perceptions of green marketing” explored how important environmentally friendly food products are to participants, what claims they consider environmentally friendly and if they would claim that food brands that utilise environmental claims influence their purchasing decisions. Towards the end, the construct “the impact of greenwashing on purchasing decisions” explores if consumers consider environmental claims when purchasing food products and if they take actions to verify the accuracy of claims made by food brands. Lastly, the construct “sources of certifications” asks the participants if they rely on third-party certifications or labels when they choose to buy environmentally friendly products.

Hence, the survey aims to answer to what extent consumers are aware of, and perceive, greenwashing in the food industry, what criteria consumers use to evaluate and identify greenwashing in the food industry, and how consumer perception of greenwashing in the food industry influences their purchasing decisions and behaviours.

3.4 Data Collection and Analysis

The online survey was available on the social media platform Instagram and the online panel platform Clickworker from the 01. December to the 03. December in 2023. The published survey can be found in the appendix (*see Appendix 1*).

The sample size of the online questionnaire consists of 57 respondents. All participants voluntarily participated in this survey, and their anonymity will be

maintained throughout this research. Furthermore, the data collection and the resulting conclusions will be treated with confidentiality.

The researcher decided upon a data analysis in the form of content analysis, as it is a method to analyse verbal, written, or visual communication messages. There are two distinct forms of content analysis, in detail the inductive and deductive approach (Elo & Kyngäs, 2008, p.107). The figure below illustrates the differences in the inductive and deductive approaches on content analysis (see Figure 7).

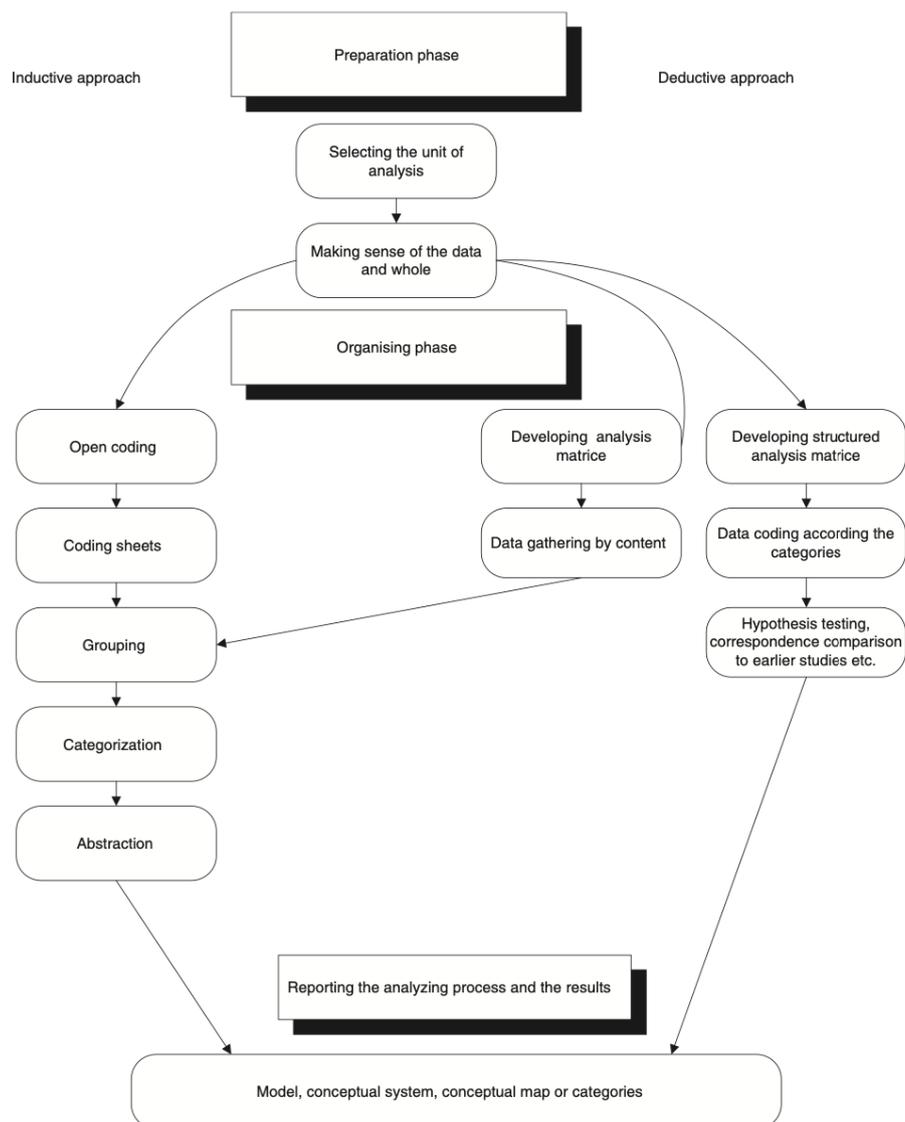


Figure 7: "Preparation, Organizing and Resulting Phases in the Content Analysis Process."
(based on: Elo and Kyngäs, 2008, p.110)

Both approaches, inductive and deductive content analysis, include three key phases; preparation, organisation, and reporting (see Figure 7). In the preparation phase, the researcher decides upon a unit of analysis, which could be a theme or a particular word (Polit & Beck, 2004). Moreover, the researcher must establish clarity regarding the specific elements for analysis and the sampling considerations encompassed within the specific category (Elo & Kyngäs, 2008, p.109). Subsequently, an in-depth comprehension of the data becomes significant, which is achieved through repeated readings to foster familiarity and understanding of the information (Polit & Beck, 2004).

The second phase, the organisation phase, is different for both approaches. The inductive content analysis approach moves from specific to general, thus intending that this method derives broader themes from specific observations or instances which are visible in the data (Elo & Kyngäs, 2008, p.111). Furthermore, this allows for broader themes to emerge naturally from the data, and the researcher does not need to start with a set of categories or a specific framework. As visible in Figure 7, the organisation phase of inductive content analysis starts with open coding. Open coding intends that the author reads the materials collected while adding notes and headings to written material (Elo & Kyngäs, 2008, p.109). The headings collected are then transferred to the coding sheets, and more categories may be added. Furthermore, the categories are then grouped under headings of higher order in order to reduce similar headings (Burnard, 1991, p.462). In addition, the categorisation phase allows to describe the studied phenomenon and to generate knowledge in the field (Cavanagh, 1997). Lastly, the organisation phase includes the abstraction process, which means that a general description of the research topic is formulated. This step can continue as long as it seems reasonable (Elo & Kyngäs, 2008, p.111).

The deductive content analysis approach moves from general to specific, as it relies on an already established theory or model, which is retested, such as hypotheses, models or concepts (Elo & Kyngäs, 2008, p.111). As visible in Figure 7, the deductive approach of content analysis differs in terms of its organisation phase. If this approach is chosen, a categorisation matrix is developed, and the data is coded in the categories, and either a structured or unstructured matrix is utilised (Elo & Kyngäs,

2008, p.111). Afterwards, the data is reviewed in order to identify the content, which is then coded to identify the categories. Now, the author could test categories, models, hypotheses or concepts (Polit & Beck, 2004).

The third and last step for both approaches is the reporting and analysing process. This allows the author to create models, conceptual maps, conceptual systems, or categories to interpret, visualise and discuss the findings.

For the thesis *Consumers' Perception of Greenwashing in the Food Industry*, the author will utilise the inductive approach to content analysis. This is because the researcher wishes to acquire new knowledge of the topic and answer the proposed research questions. Furthermore, this approach allows the researcher to better understand the phenomenon of greenwashing and how consumers perceive it.

3.5 Ethical Considerations

To ensure ethical conduct throughout this research, the researcher prioritises ethical considerations before, during, and after the online survey is conducted. Prior to the questionnaire, the participants will be informed about their rights and the study guidelines. The researcher will inform the participants that they have the option to stop the survey at any time and that their opinions and perceptions will solely serve research purposes. The study's objective will be clarified, and the survey's duration, as well as the number of questions will be stated. During the survey, participants can end the survey as mentioned. Additionally, there will be an option to contact the researcher via email for inquiries or discussions related to the study. Following the questionnaire, during detailed analysis, participants' data will be stored confidentially by the researcher and will not be handed to any third parties. The analysis will focus solely on the collective results, ensuring no names or confidential information are disclosed. To maintain participant anonymity and safeguard against potential negative associations, particularly concerning greenwashing accusations or opinions in the food industry, examples provided by participants will remain strictly confidential.

4 Results

The following section presents the results of the author's research study in form of inductive content analysis and explores consumers' perceptions of greenwashing in the food industry. The subsequent section, "5. Discussion," interprets and utilises the results to answer the following research questions:

- 1) *To what extent are consumers aware of, and perceive, greenwashing in the food industry?*
- 2) *How does consumer perception of greenwashing in the food industry influence their purchasing decisions and behaviour?*
- 3) *What criteria do consumers use to evaluate and identify greenwashing in the food industry?*

The results section is structured based on the focal constructs of this research, which will simplify the analysis of the research questions. Section 4.1 is dedicated to the sample demographics which will provide an overview of the participant's characteristics, encompassing details such as age, gender distribution and occupation. Research question one will be explored using the constructs: awareness and understanding of greenwashing (section 4.2), purchase behaviour and awareness of greenwashing (section 4.3) and consumer reactions (section 4.4). Research question two will be investigated using the constructs: consumer reactions (section 4.4), perceptions of green marketing (section 4.5) and the impact of greenwashing on purchasing decisions (section 4.6). Lastly, research question three will be examined using the constructs: perceptions of green marketing (section 4.5), the impact of greenwashing on purchasing decisions (section 4.6) and sources of certifications (section 4.7).

4.1 Sample Demographics

The empirical study accumulated responses from a total of 57 participants. Every participant consented that their participation was completely voluntary and that they were aware that they could stop the survey at any point.

The age of the participants ranged from 21 to 72, with a mean age of 36.2. Among the respondents, 28 identified as female, which corresponds to 49.1% of the total gender distribution. Similarly, 26 participants identified as male, representing 45.6%, while three individuals identified as diverse, constituting 5.3% of the entire gender distribution. Regarding the participant's occupation, 25 respondents were employed full-time, which corresponds to 43.8% of the total participants, 13 were self-employed, representing 22.8%, 7 were students, and three respondents were retired. This diverse set of participants benefits the exploration of the research questions in this thesis, as it facilitates a broader representation of opinions, varied experiences, and enriches the comprehension and knowledge regarding greenwashing in the food industry.

4.2 Awareness and Understanding of Greenwashing

This section seeks to answer research question one: *“To what extent are consumers aware of, and perceive, greenwashing in the food industry?”*. In detail, it serves as a foundation to test if the sample knows what greenwashing is and how they would define the phenomenon.

The first question asked the participants if they know the term “greenwashing” in the context of marketing and advertising. Out of the online survey respondents, 50 individuals were aware of the term, accounting for 87.7% of the total respondents, while seven respondents indicated that they are unaware of the term.

The subsequent question asked the respondents to offer their personal definitions or understandings of the term greenwashing. The table below illustrates an overview of participants' interpretations (*see Table 3*).

Categories	Participants Answers
Definition and understanding includes participant mentioning "marketing strategies"	<ul style="list-style-type: none"> - "Greenwashing is when an organisation spends more time and money on marketing itself as environmentally friendly than on actually minimizing its environmental impact" - "Greenwashing is a deceptive marketing practice in which a company exaggerates or falsely claims to be environmentally friendly in order to attract environmentally conscious consumers" - "It is a marketing strategy which seeks to make consumers believe lies which are based on environmental friendliness of products"
Definition and understanding includes participant mentioning "deception"	<ul style="list-style-type: none"> - "Advertising to deceive consumers" - "Deceiving consumers into believing a product is environmentally friendly" - "Unfolded claims to deceive consumers or other parties into believing that a company's products are environmentally friendly"
Definition and understanding includes participant mentioning "exaggeration of products greenness"	<ul style="list-style-type: none"> - "Products are presented as more ecologically positive than they actually are" - "Describing a product greener and more responsible for the environment" - "Campaigns of companies, that let them appear in a better light"
Definition and understanding includes participant mentioning "creation of false images"	<ul style="list-style-type: none"> - "False image creates of a company being green" - "A false created image of green ecologic image" - "False presentation of environmental friendliness of enterprises"

Definition and understanding includes participant mentioning “pretending to be environmentally friendly”	<ul style="list-style-type: none"> - “Pretending to be environmentally friendly” - “A company pretending to be green” - “Greenwashing is pretending a product or service is eco-friendly” - “Greenwashing means the consumers of any product are made to believe that a certain product is environmental friendly”
Definition and understanding includes participant mentioning “sustainability”	<ul style="list-style-type: none"> - “Marketing strategy which aims to confuse consumers into thinking a product is sustainable even it is not” - “Companies which claim to be environmentally friendly or sustainable in order to attract environmentally conscious consumers”
Definition and understanding includes participant mentioning “public relations”	<ul style="list-style-type: none"> - “Companies using pseudo-environmentally friendly initiatives for PR purposes” - “Companies say they use climate friendly processes but do not really do that. They just want some good publicity”

Table 3: “Participants’ Definition and Understanding of Greenwashing.”

Among the 57 participants, 16 individuals, constituting 28% of the total participants, referenced the phrase “marketing strategy” while demonstrating their understanding. For instance, one respondent articulated greenwashing as “Marketing strategies which aim to confuse consumers into thinking a product is sustainable even though it is not.” Another respondent mentioned, “Marketing strategies which aim to make consumers buy something, based on false claims.” Additionally, ten respondents, which corresponds to 17.5% of the total participants, integrated the term “deception” into their definitions. One participant conveyed, “Unfolded claims to deceive consumers or other parties into believing that a company’s products are environmentally friendly.” Similarly, another stated, “Greenwashing is the deceptive practice of companies which claim to be environmentally friendly.”

Moreover, respondents frequently depicted an “exaggeration of a product’s greenness.” For instance, one participant described greenwashing as “Describing a product greener and more responsible for the environment,” while another added, “Greenwashing refers to the practice of making a brand or thing seem sustainable and green.” To add, the “creation of false images” was a common theme among respondents. This was reflected in various responses such as, “False image creates of a company being green,” “False presentation of environmental friendliness of enterprises,” “A false created image of green ecologic image,” and “Marketing which is targeted at consumers to make them feel that a product is environmentally friendly, but in reality, it is not really environmentally friendly.”

Five participants defined greenwashing as companies “pretending to be environmentally friendly.” One respondent mentioned, “Greenwashing means the consumers of any product are made to believe that a certain product is environmentally friendly”. Moreover, many associated greenwashing with “sustainability.” For instance, by describing their understanding of greenwashing as a “Marketing strategy which aims to confuse consumers into thinking a product is sustainable even it is not” or “Companies which claim to be environmentally friendly or sustainable in order to attract environmentally conscious consumers.”

Two respondents mentioned “public relations” in their definitions of greenwashing. One participant mentioned, “Companies using pseudo-environmentally friendly initiatives for PR purposes.” Another one wrote, “Companies say they use climate-friendly processes but do not really do that. They just want some good publicity.”

Some respondents offered unique perspectives which did not fall into the mentioned categories. One respondent defined greenwashing as “Attracting and preserving green resources”, another one claimed greenwashing is “Spending more money and time on marketing to show itself as eco-friendly.” Other interpretations of the phenomenon are “Actions of providing ecological arguments, although the company is not really ecologically engaged in its actions,” “False or misleading information about a company’s products about their environmental characteristics,” and “Behaviour or activities that make people believe that a company is doing more to

protect the environment that it really is". Notably, five participants were unable to define greenwashing based on their previous understanding of the term.

The next question asked participants if they believed that greenwashing is a common practice in the food industry. 53 respondents believe that greenwashing is a common practice in the food industry, which corresponds to 93% of the total participants. The data revealed that four respondents believe that this is not the case.

The collected data revealed that the identification and understanding of greenwashing by participants suggests a growing consumer perception and awareness regarding the deceptive marketing strategies employed by firms operating in the food industry. As previously mentioned, 91.2% of the participants were able to define greenwashing correctly and 93% believe it is common in the food industry. The increase in consumer awareness may lead to a shift in consumer behaviour, with consumers preferring brands that exhibit an actual commitment to environmental and sustainable efforts rather than utilising misleading greenwashing tactics. This shift in consumer awareness highlights the importance for firms operating in the food industry to adopt trustworthy and transparent communication of their environmental endeavours, in order to foster consumer trust within the industry.

4.3 Purchase Behaviour and Awareness of Greenwashing

The objective of this section is to answer research question 1: *"To what extent are consumers aware of, and perceive, greenwashing in the food industry?"*. The construct measured and analysed the purchase behaviour and awareness of the participants.

The first question relating to this construct asked the participants how often they purchase food products. According to the data, 28 respondents purchase food multiple times a week, which corresponds to 49% of the total participants. Additionally, 18 participants, making up 32% of the total participants, stated that they purchase food products on a daily basis. Moreover, 11 respondents indicated buying food products on a weekly basis.

The subsequent question asked participants if they had ever encountered food products or food brands that they believed engaged in greenwashing. Of the total

number of participants, 21 respondents (37%) indicated they had not encountered instances of greenwashing. In contrast, five participants mentioned encountering such brands without specifying examples. Conversely, six participants specifically mentioned Nestle as a company engaging in greenwashing practices, while an additional five participants similarly identified McDonald's as a company they believed practised greenwashing. One participant attributed this belief of McDonald's engaging in greenwashing to their plant-based burgers and nuggets, which are marked as vegetarian, despite being in close contact with meat products.

Respondents also provided specific references attributing greenwashing practices to various products and brands. Three individuals referenced meat products, while two respondents identified Coca-Cola for similar practices. Additionally, brands and products that participants considered as engaging in greenwashing encompassed Bio products, JBS Friboi, milk powders, noodles, biscuits, Orangina, iFruit, and Katjes. Furthermore, participants expressed concerns about beverage brands related to beer products, companies selling dairy products and animal-derived products, cereals, seasoning, Woolworth, items labelled Bio or Eco, and specifically highlighted Volvic water for alleged overuse of water wells leading to droughts despite environmental claims.

The participants provided additional insights into their perceptions. Some commented on brands that make ecological claims, green packaging which contradicts the environmental friendliness, profit-driven motives of larger brands which neglect environmental concerns, concerns about tetra packs of milk products, artificial flavours in products which claims to be natural, products with excessive positive attributes, and packages which are labelled as recycled.

The findings suggest a varied awareness among the participants regarding greenwashing in the food industry. While a significant percentage of the participants were not able to report instances of greenwashing (37%), those who did provide detailed examples (63%), mentioned prominent products and brands in the food industry. Notably, the range of products mentioned by respondents as potential instances of greenwashing span across various categories within the food industry,

from meat products and beverages to specific brand names such as McDonalds and Nestle, this demonstrates a wide-reaching concern regarding the deceptive practices of greenwashing in the food industry.

4.4 Consumer Reactions

This section is dedicated to answering research questions 1 and 2: *“To what extent are consumers aware of, and perceive, greenwashing in the food industry?”* and *“How does consumer perception of greenwashing in the food industry influence their purchasing decisions and behaviour?”*. The questions in this construct asked consumers if they believe that greenwashing is conducted intentionally by food brands to mislead consumers, if they have ever stopped buying from a particular brand because they felt like the brand might conduct greenwashing, how consumers feel when they encounter greenwashing, and if their trust has been influenced by greenwashing. Table 4 below summarises the respondents’ reactions to greenwashing in the food industry (see Table 4).

Categories	Participants Answers
Consumers opinion if greenwashing is conducted intentionally by food brands to mislead consumers	<ul style="list-style-type: none"> - “I agree with this statement, this must be the reason greenwashing is conducted” - “For some companies this may be true” - “I can’t imagine”
Consumers stopped buying food products from a particular brand because they felt like the brand might conduct greenwashing	<ul style="list-style-type: none"> - “No, that did not happen to me” - “Yes, in the grocery store I have stopped purchasing some items which are conducting greenwashing” - “I stopped buying from Nestle” - “Yes McDonald’s”

Consumers feeling when they encounter greenwashing in the food industry	<ul style="list-style-type: none"> - "I don't care that much, I would buy it anyway" - "I am upset" - "I feel angry" - "I feel deceived"
Situation in which the presence of greenwashing influenced consumers' trust in food brands	<ul style="list-style-type: none"> - "I can't remember such situation" - "McDonald's advertisement" - "Ferrero using palm oil" - "KFC" - "I thought my water bottle was plastic free, but the lid was made of plastic, this made me not trust the 100% plastic free label"

Table 4: "Consumer Reactions to Greenwashing in the Food Industry"

The first question of this construct presented consumers with the statement: "Greenwashing is conducted intentionally by food brands to mislead consumers." Participants then expressed their viewpoints on this statement. 33 participants, constituting to 57.9% of the total participants, agreed with the statement. Their responses varied from "I definitely agree with this statement" to "Yes, it is misleading and misleading, it shows something which is not eco-friendly as eco-friendly." 12 participants were somewhat confident about the statement's accuracy, expressing statements like, "I believe this is correct sometimes," or "I think yes in some cases." One participant disagreed with the statement, expressing his disbelief with, "I can't imagine." Furthermore, several respondents elaborated on their opinions and stated, "The food industry is one of the biggest industries in the world, and people can easily get tricked," another respondent mentioned, "I think that in some cases it is not with the intention to mislead, the aim lies more in highlighting good characteristics and hiding the bad ones." Another respondent wrote, "It is completely unethical not to provide correct information to the consumer."

The second question of this construct asked participants to elaborate on instances in which they stopped buying food products from a particular brand because they had the feeling that the brand might conduct greenwashing. Out of the total participants, 29 individuals (50.9%) stated that they never discontinued buying food products from a brand due to perceived greenwashing. Five respondents mentioned that they stopped buying products from brands which engage in greenwashing but did not specify examples. Notably, seven respondents explicitly mentioned Nestle, with one stating, "I stopped buying from Nestle." Four participants mentioned discontinuing purchases from McDonald's. Additionally, individual participants said that they stopped buying from Lipton Ice Tea, Bio Water, JBS Friboi, Bio fruits and vegetables, and iFruit due to perceived greenwashing practices.

The third question of this construct explored participants' emotional responses when confronted with greenwashing. 18 participants, representing 31.6% of the total, expressed feeling upset. 11 individuals articulated that they feel angry, and an equal number mentioned feeling deceived. Seven participants stated that they do not pay much attention to their emotions regarding greenwashing, as one participant stated, "I don't care that much, I would maybe buy it anyway." Some participants elaborated further and said, "I feel really sorry for our world. I feel ashamed as well for not being able to do something about it," another respondent wrote, "I feel sad. We need to overcome greenwashing as a society. We need to take care of the environment."

The final question in this construct asked participants to describe a situation in which greenwashing influenced their trust in food brands. 16 participants, accounting to 28% of the total participants, indicated that they had not encountered any instances where greenwashing affected their trust in food brands. However, seven participants mentioned McDonald's advertising practices. Additionally, four participants highlighted Nestle, referring to Nestle's fracking methods and their actions towards Africa. Moreover, Ferrero and KFC were each mentioned twice, with comments such as, "Ferrero still uses palm oil and destroys rain forests" and "Ferrero using palm oil." Two participants mentioned hidden plastics in their products packaging, and another respondent stated, "I don't have trust in food brands anymore; there have been way

too many instances and scandals of all big brands in the past without any real consequences for them.”

When consumers experience instances of greenwashing and subsequently develop negative emotions such as anger, sadness or the feeling of being betrayed, this can significantly impact their purchasing behaviour, ultimately resulting in a disruption of their brand loyalty and a discontinuation of their patronage. This behavioural shift will eventually pose threats to brand managers in the food industry, as consumer trust and brand loyalty are lost. This underscores the significance for brand managers to prioritise transparency and authenticity in their marketing communication strategies. The information provided to consumers must be verifiable, accurate and genuinely aligned with environmental stewardship. In an age of increased consumer awareness, it is important for brand managers to align their practices with genuine environmental commitment in order to maintain consumer trust and brand viability.

4.5 Perceptions of Green Marketing

The purpose of this section is to answer research questions 2 and 3: *“How does consumer perception of greenwashing in the food industry influence their purchasing decisions and behaviour?”* and *“What criteria do consumers use to evaluate and identify greenwashing in the food industry?”*. This construct explored factors which weigh into consumers’ consideration when selecting food products, claims that consumers consider as environmentally friendly, and the influence of environmentally friendly claims on consumers’ purchasing decisions. The table below summarises consumers’ perceptions of green marketing (*see Table 5*).

Categories	Participants Answers
Factors weighing into consumers’ consideration when selecting food products	<ul style="list-style-type: none"> - “The origin of the product, if it is not local it will be hard to be really green” - I buy food products which have less impact on the environment” - “The materials of the packaging”

	<ul style="list-style-type: none"> - "I aim to buy meat where animals have space" - "Look for vegan foods" - "Of course the number one health factor" - "I don't care so much about that in general" - "Make sure the price is okay" - "I look that they have been produced fairtrade" - "Bio"
<p>Claims by food brands which consumers consider as environmentally friendly</p>	<ul style="list-style-type: none"> - "Bio label" - "Environmentally friendly production" - "Vegan labels, vegetarian labels" - "Telling that they are locally sourced and produced" - "100% plastic free" - "Environmentally friendly packaging" - "Fairtrade" - "Official approvals of independent authorities" - "None, I don't trust food brands"
<p>Influence of environmental claims by food brands on purchasing choices and decision-making process of consumers</p>	<ul style="list-style-type: none"> - "They influence me, feels better to buy them" - "Environmental claims influence my decisions to some extent" - "They don't influence my choices" - "If the claims are specific and trustworthy, I might prefer that product"

Table 5: "Consumers' Perceptions of Green Marketing"

The first question of this construct asked participants which factors weigh into their consideration when selecting food products, particularly regarding their environmental impact. 22 respondents, accounting for 38.6% of the total respondents, mentioned the significance of local and regional products. For instance, responses included, “I am always trying to buy local products, seasonal fruit and vegetables and whole foods,” and “I try to buy locally and from smaller vendors.” 11 participants emphasised minimising environmental harm when selecting food products. For example, one respondent stated, “I buy food products which have less impact on the environment.” Moreover, ten respondents mentioned their avoidance of plastic packaging, considering the sustainability of packaging before making a purchase. Additionally, six respondents consider the treatment of animals when selecting meat products. For instance, one participant stated, “I aim to buy meat where animals have space,” while another added, “I consider the treatment of animals.” Five respondents consider vegan labels as a criterion for environmentally friendly products, and a similar number, four participants, factor in their health when selecting products. Examples include responses such as, “Whether the food is healthy for me,” and “Mostly how good the food will be for my body.” Three respondents consider the price, while two rely on Bio labels when choosing food products based on their environmental impact. Additionally, four respondents mentioned that they didn’t consider any factors when selecting food products based on their environmental friendliness.

The subsequent question of this construct prompted respondents to elaborate on the claims made by food brands that lead them to perceive a product as environmentally friendly. 13 participants, 22.8% of the total participants, mentioned the Bio label as a significant indicator of environmental friendliness in a product. An equal number of respondents highlighted the production methods of the products as a crucial indicator. In detail, respondents stated, “Claims which indicate no limited natural resources used in the product,” “Natural production,” and another participant mentioned, “Carbon reduced production.” Similarly, 12 participants mentioned vegan labels and 11 respondents claimed that a locally produced product is considered as environmentally friendly. One participant stated, “Products made locally.” Four

respondents mentioned the significance of claims related to plastic-free products, while an equal number focused on packaging claims such as “Environmentally friendly packaging and biodegradable materials.” Moreover, three participants mentioned fairtrade claims, and an equal number did not mention any claims by food brands which makes them consider a product as environmentally sustainable.

The final question in this section asked respondents about the impact of environmental claims made by food brands on their purchasing decisions and how these claims influence their decision-making process. 26 respondents, accounting for 45.6% of the total, indicated that these claims significantly influence their purchasing decisions. Meanwhile, 12 participants (21% of the total) mentioned that environmental claims had only a moderate influence on their choices. For instance, one participant stated, “Environmental claims influence my decisions to some extent.” On the other hand, 14 respondents (24.6% of the total) claimed that environmental claims do not influence their purchasing decisions. One participant explicitly stated, “They don’t influence my choices.” Additionally, five respondents suggested that it only influences their decisions to purchase if the claims are proven. One respondent elaborated, “I always look at the packaging to check if the ingredients are organic and if the packaging itself is recycled and CO2 neutral. I reject a lot of items that have baseless slogans on them.”

The collected data revealed a diverse spectrum of factors which influence consumers’ selection of food products based on the perceived environmental impact. A notable number of respondents, accounting for 38.6%, emphasised the importance of local and regional sourcing, while others highlighted reducing environmental harm and avoiding plastic packaging. Notably, many respondents shared the belief that labels such as “Bio” or “Vegan” assure them that their product is environmentally friendly. However, it is essential to note that while these labels are often believed to be an indicator of eco-friendly products, this assumption is not always true due to the varying standards and inconsistencies. This highlights the need for consumers to critically evaluate claims by food brands and for brands to offer transparent information in line with the growing consumer demand for authenticity and transparency.

4.6 The Impact of Greenwashing on Purchasing Decisions

The primary aim of this section is to answer research questions 2 and 3: “How does consumer perception of greenwashing in the food industry influence their purchasing decisions and behaviour?” and “What criteria do consumers use to evaluate and identify greenwashing in the food industry?”. In detail, participants were asked to provide their opinions on what types of environmental claims they consider when making a purchasing decision and which actions they take to verify the accuracy of these claims. The table below summarises the data gathered by the participants (see Table 6).

Categories	Participants Answers
Types of environmental claims of food products that consumers consider when making a purchasing decision	<ul style="list-style-type: none"> - “Produced locally” - “Bio label” - That the packaging is recyclable or made from recycled materials” - “Ethical and fair” - “Not any intentionally” - “Vegan claims” - “Fairtrade” - “Eco-labels” - “Animal welfare practices”
Actions consumers take to verify the accuracy of environmental claims made by food brands	<ul style="list-style-type: none"> - “Look up on internet” - “I take no actions” - “Websites which inform about greenwashing cases” - “Certificates”

Table 6: “Impact of Environmental Claims on Purchasing Decisions”

The first question of this construct asked respondents to mention which types of environmental claims of food products they consider when making a purchasing decision. Among the respondents 19 individuals, which corresponds to 33% of the

total participants, expressed a preference for regional and local products when making purchases. Additionally, nine respondents actively seek Bio claims when making a purchasing decision, while six participants consider organic product claims. Five respondents prioritise plastic-free claims, with an equal number prioritizing ethical claims in their purchasing decisions. Notably, five participants disregard any specific claims, while another five respondents specifically consider vegan product claims. Four participants factor in fair trade claims, and two respondents weigh the significance of eco-friendly claims. Additionally, two individuals prioritise purchasing decisions based on animal welfare claims.

Moreover, various unique considerations were highlighted by individual participants. One respondent seeks for claims that indicate companies' efforts to preserve natural resources, such as avoiding tree-cutting. Another seeks products free from artificial flavours. Furthermore, one participant values companies that contribute to ocean cleanup efforts and are mindful of fishing methods and fish sources. Other considerations include claims that are related to reducing carbon emissions, single-source products, ingredient labels, and a preference for minimally processed foods.

The last question of this construct asked participants to mention actions they undertake to verify the accuracy of environmental claims made by food brands. Nearly half of the respondents, 24 individuals, corresponding to 42% of the participants, rely on online platforms, primarily Google, to validate the accuracy of environmental claims made by food brands. Conversely, 19 respondents, accounting for 33% of the participants, admitted to not verifying the accuracy of environmental claims. Seven respondents conduct extensive research to verify environmental claims. This includes visiting websites, reaching out to authorities, staying updated with environmental news, reading articles that expose deceptive practices in the food industry, consulting resources which uncover greenwashing cases, and reading scientific literature. Moreover, four participants explicitly mentioned that they place trust in Bio labels and certificates, while one participant highlighted placing trust in packaging stickers that endorse these labels. Two participants adopt alternative verification methods; one seeks information from supermarket staff, while another considers visiting local production sites to observe environmentally friendly practices firsthand. One

respondent expressed skepticism, suggesting that verifying environmental claims might necessitate scientific research conducted within a research laboratory, which is beyond the capacity of an average individual.

As visible in the responses by the participants, the majority considers locally produced products, Bio and Organic labels, and plastic-free claims when making a purchasing decision. 70.2% of the participants stated that they verify the accuracy of the environmental claims made by food brands. The fact that 70.2% of the respondents actively verify environmental claims made by firms operating in the food industry reflects a profound shift in consumer behaviour towards consciousness consumption and consumer perception of greenwashing. Moreover, this highlights an increasingly discerned consumer base, that is unwilling to accept false claims by food firms and that are willing to ensure environmental accountability. This poses challenges and opportunities for firms operating in the food industry. Brands must deliver their promises and align their practices with their proclaimed eco-friendly attributes to earn and hold consumer trust. Moreover, this presents opportunities for brands in the food industry to increase their credibility by providing accessible, credible and verifiable information regarding their environmental and sustainable initiatives.

4.7 Sources of Certification

This final section of the results seeks to answer research question 3: *“What criteria do consumers use to evaluate and identify greenwashing in the food industry?”*. In detail, the participants were asked if they rely on any third-party certifications or labels when choosing environmentally friendly products.

Among the respondents, 24 consumers, corresponding to 42% of the participants, indicated reliance on Bio labels such as Bio land, German Bio Siegel, and the European Bio Siegel. Furthermore, ten respondents mentioned their trust in Fairtrade labels, while five participants indicated a preference for labels which suggest that a product is vegan. This suggests that participants believe that vegan products are automatically environmentally friendly. Notably, five participants do not base their choices on any labels or certificates, while four respondents remained uncertain about their reliance on labels or third-party certificates. Moreover, three individuals mentioned that they

trust the FSC (Forest Stewardship Council) certifications, and an equal number leaned towards Demeter labels. Two participants actively seek animal welfare and plastic-free labels as indicators of environmental friendliness, while an equivalent number rely on halal labels for such considerations.

Other labels and certifications which participants rely on when choosing environmentally friendly products include Blue Engle, FSSAI, AWW, various European labels, AMA Gütesiegel, non-pollutants, local labels, EU Organic, government-issues tag stickers, serious eco-labels, Rainforest Alliance, eco-labels, USDA organics, Energy Star, and ISO certified products. Additionally, other respondents specifically seek third-party certifications that validate and ensure environmental, sustainable, and food safety. Another individual inspects the product's packaging, while another trusts all types of third-party certifications without specifying any in particular.

The findings imply that respondents rely on various third-party certifications for identifying environmentally friendly products. Notably, 84.2% of the participants trust and base their purchasing choices on third-party certifications. This reflects consumers' desire for a reliable assurance of genuine sustainability, and ultimately shaping their perceptions of credibility and trustworthiness. This reliance also demonstrates a consumer demand for transparency and accountability within the food industry, suggesting that brands operating in the food industry should invest in credible certifications to establish consumer trust.

5 Discussion

This section of the thesis will interpret and analyse the findings from the online survey. Furthermore, this part of the thesis aims to investigate consumers' perceptions of greenwashing in the food industry, exploring both similarities and disparities between the collected data and the literature review. Ultimately, this section seeks to address and answer the research questions posed in this study:

- 1) *To what extent are consumers aware of, and perceive, greenwashing in the food industry?*
- 2) *How does consumer perception of greenwashing in the food industry influence their purchasing decisions and behaviour?*
- 3) *What criteria do consumers use to evaluate and identify greenwashing in the food industry?*

The demographics of the respondents portrayed a predominantly youthful representation, with a spectrum of ages spanning from young adults in their early twenties to individuals in their seventies, averaging at 36.2 years of age. There was a balanced gender distribution, accommodating both male and female perspectives and two diverse individuals. Moreover, the occupational diversity among the participants was notable, encompassing full-time employees, part-time workers, self-employed individuals, students, and retirees. This diverse set of occupations contributed to a comprehensive and varied perspective within the participant pool.

All the participants purchase food products at least once a week, demonstrating that each respondent is exposed to greenwashing. The online questionnaire revealed comprehensive insights in response to consumers' understanding of greenwashing in the food industry. Among the participants surveyed, 91.2% were able to define greenwashing and demonstrated an understanding of the phenomenon, which closely resonated with the findings outlined in the authors' literature review. If the collective understanding of the participants were to be unified, the overarching definition of greenwashing would be: "Greenwashing is a deceptive marketing and public relations strategy which exaggerates a product's greenness among a falsely created image of a

company which pretends to be environmentally friendly and sustainable.” The understandings of the participants are in line with the definitions presented by Karliner (1977), Lyon and Maxwell (2011), Lyon and Montgomery (2015), Martinez et al. (2020), Netto et al. (2020), and Wang et al. (2023). Therefore, these findings imply that consumers are aware of greenwashing in the food industry and to perceive the deceptive practices of food brands. In detail, from the 57 respondents, 91.2% were able to define greenwashing correctly, and 93% believe that greenwashing is a common practice in the food industry. As a result, consumers are aware of, and perceive greenwashing to a large extent in the food industry.

The data also revealed that 93% of the respondents believe that greenwashing is a common practice in the food industry, but only 63% have encountered food products and brand which they believe engage in greenwashing. Participants explicitly mentioned food products and food brands which they believe engage in greenwashing. The results built on existing greenwashing cases which have been explored in this thesis such as Lipton Ice Tea. The results provided new insights into possible companies which engage in greenwashing, such as Nestle, McDonald’s, Coca-Cola, Orangina, and Katjes. It is important to note that the examples which participants provided are speculative instances of companies engaging in greenwashing and should not be accepted as definitive before conducting further research. It must be noted that only 63% of participants were able to mention food brands which they believe have engaged in greenwashing, even though 93% believe that greenwashing is common in the food industry. This suggests that even though consumers are certain that greenwashing is conducted, it is hard for them to identify it by themselves.

The online survey demonstrates that 49% of the participants stopped buying products from particular food brands which they believe engage in greenwashing. This finding aligns with Wang et al.’s (2019) study, which emphasises how greenwashing influences consumers’ buying behaviour, leading them to favour products from other environmentally friendly brands within the industry. Moreover, consumers which are aware of the greenwashing practices of food brands have more negative brand attitudes and buying intents (Nguyen et al., 2019). The data also contributed a clearer

understanding of which brands consumers stopped purchasing from, such as McDonald's and Nestle. Hence, the findings imply that an increased perception of greenwashing results in consumers purchasing decision and behaviours being negatively influenced. In other words, nearly half of the respondents stated that if they believe that a brand is engaging in greenwashing, they will stop buying products from that particular brand. Therefore, the second research question, which explores how consumer perception of greenwashing in the food industry influences consumers purchasing decisions and behaviours, can be partially answered. For nearly half of the respondents, the more they perceive greenwashing, the less likely they will pursue a purchase. The other half of the respondents have not yet experienced an instance in which they discontinued purchasing from a brand because of greenwashing.

Participants also elaborated on situations where their trust in food brands was influenced by greenwashing. 72% of the respondents were able to mention such a situation, and most commonly, McDonald's and Nestle were described. One respondent mentioned that their trust was influenced by plastic bottles, which claim to be 100% plastic-free, but the lid is excluded from this claim. The same instance has been explored by Bray (2022) in a Lipton Ice Tea with an advertisement in August of 2021.

When considering the survey question, which aimed to explore consumers' opinions of the statement "Greenwashing is conducted intentionally by food brands to mislead consumers," this reveals a significant trend: the majority of the participants (98.2%) either agreed or somewhat agreed with this statement, with only one participant in disagreement. This information holds crucial implications as it indicates an awareness among participants regarding greenwashing practices by food brands. While past research primarily aimed to define greenwashing, this study goes further by demonstrating that consumers not only comprehend the concept, but also believe that companies conduct greenwashing to deliberately mislead them. Consequently, this insight underscores the existing awareness among consumers regarding these intentional tactics employed by companies, shedding light on the necessity for heightened transparency and ethical practices within the industry. The data also revealed that consumers indeed feel upset (31.6%), angry (19.3%), and cheated on

(19.3%) by greenwashing tactics. The collected data indicates that 12.3% of the participants pay no attention to how they feel when being exposed to greenwashing.

The online survey delved into the claims by food brands that lead consumers to perceive a product as environmentally friendly. The gathered data enriches the comprehension of the specific attributes and claims that consumers seek when assessing a product's environmental sustainability. A majority of the participants highlighted the significance of local and regional brands, products and production sites. Additionally, there was a notable attention given to vegan products and those carrying a Bio label.

The data suggests that participants consider explicit sets of claims by food brands when making a purchasing decision. Examples of these claims are local and regional claims, the Bio label, recycled packaging claims, fairtrade labels and animal welfare claims. Moreover, the respondents delivered their opinions on how these environmental claims affect their choices when purchasing food products, and in detail how it influences their decision-making process. 45.6% of the respondents stated that environmental claims by food brands significantly influence their purchasing decisions. 21% of the participants stated that these claims only have a moderate influence in their purchasing decisions.

There are many ways in which the participants verify the accuracy of environmental claims by food brands. 33% of the participants do not verify the accuracy of environmental claims, this suggest that they trust any claim which suggests that a product is somewhat environmentally friendly. Only 7 respondents out of the 57 conduct extensive research to verify environmental claims, such as visiting local production sites, and reaching out to authorities. Interestingly, one respondent mentioned that it is impossible for a layperson to verify the accuracy of environmental claims as this requires scientific research which is only able to be conducted in a research laboratory. Moreover, the results of the online survey demonstrate that nearly half of the respondents, 42% of the sample, rely on online platforms such as Google and the food brands' websites, for validating environmental claims. This highlights the importance for brands to supply information in form of digital resources

as an avenue for consumers which seek information to verify the claims which brands make. Therefore, brands should make sure to ensure availability and trustworthiness of online information, which allows consumers to make informed purchasing decisions.

The data revealed that a significant majority of the participants, 84.5% of the total respondents, rely on third-party certifications. Four participants remained undecided, while five do not rely on any third-party certifications. Examples of such certifications are the Bio label, Fairtrade label, and the Vegan label. Participants indicated that in their opinion a product is automatically environmentally friendly if such a certification is utilised. Moreover, animal welfare labels, the Demeter label and the Halal labels suggest the same. Interestingly, one participant mentioned relying on the FSC (Forest Stewardship Council). As mentioned in the researcher's literature review, FSC is a leading green certifier for timber and has faced credibility issues in the past. Due to the instance of greenwashing in the company IKEA, the investigation concluded that the FSC certified a particular type of wood, which was then illegally felled by IKEA (Peel-Yates, 2021). Therefore, it is clear that some respondents rely on third-party certifications which have been involved in greenwashing practices.

The data derived from the online survey provided valuable insights which allow the researcher to explore and answer the research questions. In terms of consumers' awareness and perception of greenwashing in the food industry, a significant proportion of the respondents (91.2%) were able to define greenwashing and demonstrated understanding of the phenomenon. Moreover, a majority of the sample (93%), indicated that greenwashing is a common practice in the food industry which suggests a high level of awareness and perception of greenwashing among consumers. Furthermore, the data outlines how consumers' perception of greenwashing influences their purchasing decisions and purchasing behaviours. Nearly half of the respondents (49%), stated that they discontinued purchasing products from brand which they believe engage in greenwashing, indicating a negative impact on their buying behaviour. In addition, emotions like anger, feeling deceived and consumers feeling cheated on have been expressed in result to greenwashing tactics, which again illustrates the emotional response to greenwashing

on consumer behaviour. The discussion also elaborated on criteria which consumers utilise to evaluate and identify greenwashing in the food industry. Attributes such as local and regional products, Bio labels, vegan certifications, fairtrade labels, and animal welfare claims were mentioned by participants that are prioritised when assessing the environmental friendliness of products.

6 Implications

By exploring the nuances of greenwashing and marketing strategies on consumers' perceptions in the food industry, this thesis has several implications for science, society and firms operating in the food industry, as well as for managers. In the following, these implications will be identified and discussed.

The existing literature has primarily focused on defining greenwashing and its forms, as evidenced by research conducted by Boncinelli et al. (2023), Dahl (2010), Delmas and Burbano (2011), Furlow (2010), Netto et al. (2020), and Shahrin et al. (2017). Furthermore, additional literature has explored the effects of greenwashing, including its impact on consumer attitudes, trust, brand equity and skepticism. Notable contributions in this regard include works by Chen and Chai (2010), Chen and Chang (2013), Chen et al. (2016), Mustiko and Sutinko (2015), Nguyen et al. (2019), Nyilasy et al. (2015), and Wobker et al. (2015).

According to Wang et al. (2023, p.2), the number of publications that address the issue of greenwashing are increasing, but they remain relatively scarce. The author of this thesis noticed that there is a lack of academic papers which focus on consumers' perception of greenwashing, especially in the food industry. Therefore, the findings from this thesis explore consumers' perceptions of greenwashing in the food industry and, in detail, the extent to which consumers are aware of and understand greenwashing in the food industry, how consumers' perception of greenwashing influences their purchasing decisions, and what criteria consumers use to evaluate and identify greenwashing in the food industry. The findings have several implications for science, consumer welfare and the food industry.

From an academic and scientific viewpoint, this thesis contributes to the existing knowledge base on greenwashing and the resulting consumer behaviour. The online survey was tailored to identify consumers' perceptions of greenwashing in the food industry and, therefore, contributed to filling a literature gap. The collected data revealed that 91.2% of the consumers can define greenwashing, and 93% believe that greenwashing is common in the food industry. Moreover, the definitions provided by the respondents are very similar to the definitions provided by Karliner (1977), Lyon and Maxwell (2011), Lyon and Montgomery (2015), Martinez et al. (2020), Netto et al. (2020), and Wang et al. (2023). Moreover, there were unique findings which contributed to new research in the field of greenwashing in the food industry, such as how consumers feel when being exposed to greenwashing. Participants mentioned feelings such as feeling upset (31.6%), angry (19.3%), or deceived (19.3%). New findings for the academic literature include factors which consumers consider when selecting food products, of which 38.6% of the respondents' value local and regional products, and 19.3% mentioned minimised harm to the environment. Therefore, the findings from this thesis are consistent with existing knowledge and can be utilised for future research.

Apart from academic and scientific implications, this thesis has implications for society. As in any industry there is importance in consumer awareness in making informed choices. Furthermore, consumer empowerment and consumer welfare needs to be maintained. This thesis aims to empower consumers to understand and identify greenwashing in the food industry. The data suggested a high percentage of consumers who can accurately define greenwashing (91.2%), with 67% utilising criteria to identify greenwashing accurately. The increased awareness will lead to a more educated consumer base, with hopefully a result in a more transparent industry with consumers that have a questioning mindset and discern the authenticity of greenwashing claims, allowing them to support legitimate, sustainable businesses and protect themselves from falling victim to greenwashing. The increased consumer welfare that comes with consumer awareness and empowerment would create long-term effects, such as a transparent industry that fosters ethical and environmentally friendly benefits.

This thesis also provides implications for firms operating in the food industry, as the findings may shed light on the impact of their marketing strategies on consumer perception and the resulting consequences. Moreover, the findings can also help firms identify and rectify greenwashing practices, implement transparent strategies, and ultimately rebuild consumers' trust and reduce consumers' skepticism. Existing literature identified the influence of consumers skepticism such as in the research by Mustiko and Sutinko (2015). Furthermore, this thesis has managerial implications. Managers should be aware of the increased awareness of greenwashing and the resulting consequences of this practice. The online survey suggested that 49% of the respondents stopped purchasing products from firms that engage in greenwashing and that negative emotions and consumer skepticism result from the deceptive marketing practices. Managers should aim to provide transparency within the industry and to rely on accurate and verifiable environmental claims in their marketing strategies. Furthermore, they should contribute to consumer education and provide consumers with avenues to research and verify environmental claims.

To conclude, this thesis has explored consumers' perceptions of greenwashing in the food industry and identified several implications for science, consumer welfare, the food industry and managers. The findings have contributed to the knowledge creation in the field of greenwashing and contributed to research in a literature gap while also proving existing research in the field.

7 Limitations and Future Research

When exploring consumers' perception of greenwashing in the food industry through a qualitative online survey, the researcher faced several limitations which need to be addressed. Firstly, the sample size of 57 respondents limits the diversity of consumers' perceptions, and hence, the generalisability of the results. Furthermore, the average age of the respondents was 36.2, which could also lead to a skewed representation of consumers' awareness and understanding of greenwashing.

Another limitation was that not all respondents were able to speak English fluently, and therefore, some responses were hard to understand for the researcher and had

to be translated into proper sentences. By reformulating some responses into grammatically correct sentences, the original message of the respondents could have been altered slightly. Moreover, a significant limitation arises from respondents' tendency to provide insufficiently detailed responses to open questions. For instance, some participants replied with only a brief "Yes", which did not allow the researcher to understand what exactly the respondent's understanding was. For example, one survey question asked respondents, "Can you explain a situation where the presence of greenwashing influenced your trust in food brands?" and some respondents simply answered with "Yes." This failed to provide the necessary context and insights sought by the researcher.

To advance the understanding of consumers' perceptions of greenwashing in the food industry, several recommendations can be made for future researchers, which the author would like to mention. Within the online survey, 57 respondents offered valuable insights. However, expanding the participant pool could provide a more comprehensive perspective and contribute to enriched findings. The findings could also be validated by a quantitative study utilising a representative sample. Additionally, the respondents' ages ranged from 21 to 72, with an average age of 36.2; future research might benefit from including an even broader age spectrum and a higher mean age for a more diverse analysis. Moreover, exploring variations and differences between demographic groups such as gender, occupation, and age groups could clarify disparities in exposure and knowledge regarding greenwashing in the food industry. This comparative approach could help to reveal which groups experience increased exposure, have greater awareness, and exhibit a more significant concern regarding the practices of greenwashing.

Offering the online questionnaire in multiple languages could facilitate broader participation and mitigate language barriers. Furthermore, cross-demographic and cross-country comparisons could be conducted to gain insights into regional differences and the prevalence of greenwashing across markets. Another avenue for future research involves cross-industry comparisons, such as comparing greenwashing practices in the food industry against other sectors like the cosmetics industry or the automobile industry. This comparative analysis could identify

industries which are more prone to greenwashing, fostering increased consumer awareness and attention. Understanding the prevalence of greenwashing beyond the food industry is essential for consumer protection and awareness. Additionally, repeating the survey in subsequent years would offer a long-term perspective, capturing potential shifts in consumer perceptions and the industry's practices. Monitoring and identifying changes over time would also provide valuable insights into the effectiveness of regulatory interventions.

By implementing these suggestions, future research could deepen the knowledge field of greenwashing's complexity and provide additional valuable contributions to the understanding of greenwashing in the food industry. In the subsequent section, the researcher will present their conclusion regarding consumers' perception of greenwashing in the food industry.

8 Conclusion

The primary objective of this thesis is to explore and strengthen existing research in the field of greenwashing in the food industry, aiming to deepen the understanding of consumers' perceptions regarding this deceptive marketing strategy.

Through considering both the primary data collected by the author in the form of an online questionnaire and the secondary data discussed in the literature review, it becomes evident that consumers perceive greenwashing in the food industry and that this not only poses consequences for consumers but also for firms engaging in these deceptive marketing strategies. Empirical data revealed that consumers are aware that they are exposed to greenwashing and that this marketing strategy influences their trust in food brands. Notably, 49% of the respondents indicated that they stopped purchasing from a particular brand after identifying it engages in greenwashing.

Based on the findings that had been presented in the discussion part of this thesis, it can be concluded that the research questions "To what extent are consumers aware of, and perceive, greenwashing in the food industry?", "How does consumer

perception of greenwashing in the food industry influence their purchasing decisions and behaviour?" and "What criteria do consumers use to evaluate and identify greenwashing in the food industry?" can be answered.

The data revealed that consumers are aware of, and perceive, greenwashing in the food industry to a large extent. In detail, 91.2% of the respondents accurately defined greenwashing, showcasing a comprehensive understanding of this deceptive marketing practice. Additionally, 93% of the participants indicated that they believe greenwashing is a common practice in the food industry, which again demonstrates a high level of consumer awareness and perception of greenwashing in the food industry.

Furthermore, the research question regarding consumers' perception of greenwashing and its influence on their purchasing decisions and behaviours in the food industry can be answered with the conclusion that nearly half of the participants stated that they discontinued purchasing products from brands they believe might engage in greenwashing. Moreover, a negative emotional response was visible in consumers when being exposed to greenwashing, such as anger, feeling deceived and feeling lied to, which suggests a negative impact of greenwashing on purchasing decisions and behaviour.

Furthermore, participants outlined specific criteria for evaluating and identifying greenwashing in the food industry. The majority seek Bio labels, vegan certifications, fairtrade labels, local and regional products and animal welfare claims to prove the accuracy of environmental claims. In total, 67% of the respondents utilise criteria to identify greenwashing.

Beyond the research questions, the online questionnaire gathered participants' thoughts on the topic of greenwashing and highlighted the need for education, regulatory bodies and more evident claims in the food industry. In conclusion, the findings indicate that greenwashing is an urgent problem in the food industry, and consumers perceive the phenomenon and seek increased transparency and criteria to identify greenwashing.

9 Bibliography

- Antunes, D., Santos, A., & Hurtado, A. (2015). The communication of the LCA: the need for guidelines to avoid greenwashing. *Espacois*, 36(5), 1.
- Ashton. (2016). *66% of consumers willing to pay more for sustainable goods, Nielsen report reveals*. Ashton Manufacturing.
<https://ashtonmanufacturing.com.au/66-of-consumers-willing-to-pay-more-for-sustainable-goods-nielsen-report-reveals/>
- Barbu, A., Catana, S.-A., Deselnicu, D. C., Cioca, L.-I., & Ioanid, A. (2022). Factors Influencing Consumer Behavior toward Green Products: A Systematic Literature Review. *International Journal of Environmental Research and Public Health*, 19(24), 16568.
- Barlett, J., Kotrlik, J., & Higgins, C. (2001). Organizational Research: Determining Organizational Research: Determining Appropriate Sample Size in Survey Research Appropriate Sample Size in Survey Research. *Information Technology, Learning, and Performance Journal*, 19(1), 43.
- Batra, R., & Ray, M. L. (1986). Affective Responses Mediating Acceptance of Advertising. *Journal of Consumer Research*, 13(2), 234-249.
- Baum, L. M. (2012). It's Not Easy Being Green... Or Is It? A Content Analysis of Environmental Claims in Magazine Advertisements from the United States and United Kingdom. *Environmental Communication*, 6(4), 423-440.
- Beloucif, A., Boukhobza, T., & Lawrenz, L. B. (2017). A study of German consumers' perception of Islamic banking. *International Journal of Islamic Marketing and Branding*, 2(1), 37-64.
- Boncinelli, F., Gerini, F., Piracci, G., Bellia, R., & Casini, L. (2023). Effect of executional greenwashing on market share of food products: An empirical study on green-coloured packaging. *Journal of Cleaner Production*, 391(391), 136258.

- Bray, R.-O. (2022, April 12). *ASA upholds complaints against Lipton's green packaging claims*. Lexology.
<https://lexology.com/library/detail.aspx?g=bcde510d-e208-489f-86e9-ec255bcafedd>
- Burnard, P. (1991). A method of analysing interview transcripts in qualitative research. *Nurse Education Today*, 11(6), 461-466.
- Carlson, L., Grove, S. J., & Kangun, N. (1993). A Content Analysis of Environmental Advertising Claims: A Matrix Method Approach. *Journal of Advertising*, 22(3), 27-39.
- Cavanagh, S. (1997). Content analysis: concepts, methods and applications. *Nurse Researcher*, 4(3), 5-16.
- Chen, A., & Peng, M. (2012). Green hotel knowledge and tourists' staying behavior. *Annals of Tourism Research*, 39(4), 2211-2216.
- Chen, T. B., & Chai, L. T. (2010). Attitude towards the environment and green products: consumers' perspective. *Management Science and Engineering*, 4(2), 27.
- Chen, Y.-S., Chang, C.-H. (2013). Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *Journal of Business Ethics*, 114(3), 489-500.
- Chen, Y.-S., Tien, W.-P., Lee, Y.-I., & Tsai, M.-L. (2016). Greenwash and green brand equity. *Portland International Conference on Management of Engineering and Technology*, 1797-1803.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative & Mixed Methods Approaches* (5th ed.). Sage Publications, Inc.
- Dahl, R. (2010). Greenwashing: Do You Know What You're Buying? *Environmental Health Perspectives*, 118(6), 246-252.

- Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64-87.
- Edell, J. A., & Burke, M. C. (1987). The Power of Feelings in Understanding Advertising Effects. *Journal of Consumer Research*, 14(3), 421-433.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115.
- Engel, J. F., & Blackwell, R. D., Miniard, R. W. (1995). *Consumer Behavior* (8th ed.). Dryden Press, Fort Worth.
- Furlow, N. (2010). Greenwashing in the new millennium. *The Journal of Applied Business and Economics*, 10(6), 22.
- Glogovetan, A.-I., Dabija, D.-C., Fiore, M., & Pocol, C. B. (2022). Consumer Perception and Understanding of European Union Quality Schemes: A Systematic Literature Review. *Sustainability*, 14(3), 1667.
- Guides for the Use of Environmental Marketing Claims. (2012). Federal Register; Federal Trade Commission. <https://www.federalregister.gov/d/2012-24713>
- Hartmann, P., & Apaolaza-Ibáñez, V. (2009). Green advertising revisited. *International Journal of Advertising*, 28(4), 715-739.
- Hox, J. J., & Boeijs, H. R. (2005). Data collection, primary versus secondary. *Encyclopedia of Social Measurement*, 1(1), 593-599.
- Husted, B. W., & Allen, D. B. (2009). Strategic Corporate Social Responsibility and Value Creation. *Management International Review*, 49(6), 781-799.
- Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 41, 60-69.

- Jamali, D., & Karam, C. (2016). Corporate Social Responsibility in Developing Countries as an Emerging Field of Study. *International Journal of Management Reviews*, 20(1), 32-61.
- Jenkins, O. H. (1999). Understanding and measuring tourist destination images. *International Journal of Tourism Research*, 1(1), 1-15.
- Jobber, D. (2010). *Principles and Practice of Marketing* (6th ed.). McGraw-Hill Education, Maidenhead.
- Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review*, 3(1-2), 128-143.
- Karliner, J. (1997). *The Corporate Planet: Ecology and Politics in the Age of Globalization*. University of California Press.
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2003). Antecedents of Consumer Trust in B-to-C Electronic Commerce. *Proceedings of the Americas' Conference on Information Systems 2013*. 157-167.
- Kirilova, E. G., & Vaklieva-Bancheva, N. G. (2017). Environmentally friendly management of dairy supply chain for designing a green products' portfolio. *Journal of Cleaner Production*, 167(67), 493-504.
- Ko, E., Hwang, Y. K., & Kim, E. Y. (2013). Green marketing' functions in building corporate image in the retail setting. *Journal of Business Research*, 66(10), 1709-1715.
- Kotler, P., Armstrong, G., Brown, L., & Adam, S. (1998). *Marketing* (4th ed.). Sydney: Prentice-Hall.
- Kumar, P., & Polonsky, M. J. (2017). An analysis of the green consumer domain within sustainability research: 1975 to 2014. *Australasian Marketing Journal*, 25(2), 85-96.

- Labrecque, L. I., Patrick, V. M., Milne, G., R. (2013). The marketers' prismatic palette: a review of color research and future directions. *Psychol. Market.*, 30, 187-202.
- Lane, E. L. (2013). Greenwashing 2.0. *Columbia Journal of Environmental Law*, 38(2), 279-331.
- Lavuri, R., Jabbour, C. J. C., Grebinevych, O., & Roubaud, D. (2022). Green factors stimulating the purchase intention of innovative luxury organic beauty products: implications for sustainable development. *Journal of Environmental Management*, 301(1), 113899.
- Lee, J.-G., & Thorson, E. (2009). Cognitive and Emotional Processes in Individuals and Commercial Websites. *Journal of Business and Psychology*, 24(1), 105-115.
- Lewandowska, A., Witczak, J., & Kurczewski, P. (2017). Green marketing today – a mix of trust, consumer participation and life cycle thinking. *Management*, 21(2), 28-48).
- Liligeto, R., Singh, G., & Naz, R. (2014). Factors influencing Consumer Perception (CP) towards TV and newspaper advertising. *Journal of Pacific Studies*, 34(2), 63-86.
- Lim, D., Baek, T. H., Yoon, S., & Kim, Y. (2020). Colour effects in green advertising. *International Journal of Consumer Studies*, 44(6), 552-562.
- Lyon, T. P., & Maxwell, J. W. (2011). Greenwash: Corporate Environmental Disclosure under Threat of Audit. *Journal of Economics & Management Strategy*, 20(1), 3-41.
- Lyon, T. P., & Montgomery, A. W. (2015). The Means and End of Greenwash. *Organization & Environment*, 28(2), 223-249.
- Mahliza, F. (2020). Consumer Trust in Online Purchase Decision. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 6(2), 142-149.

- Marozzo, V., Raimondo, M. A., Miceli, G., & Scopelliti, I. (2019). Effects of au naturel packaging colors on willingness to pay for healthy food. *Psychology & Marketing, 37*(7), 913-927.
- Martínez, M. P., Cremasco, C. P., Gabriel Filho, L. R. A., Braga Junior, S. S., Bednaski, A. V., Quevedo-Silva, F., Correa, C. M., da Silva, D., & Moura-Leite Padgett, R. C. (2020). Fuzzy inference system to study the behavior of the green consumer facing the perception of greenwashing. *Journal of Cleaner Production, 242*, 116064.
- Mathers, N., Fox, N., & Hunn, A. (2009). Surveys and Questionnaires. *The NIHR RDS for the East Midlands/Yorkshire & the Humber*.
- Moravcikova, D., Krizanove, A., Kliestikova, J., & Rypakova, M. (2017). Green Marketing as the Source of the Competitive Advantage of the Business. *Sustainability, 9*(12), 2218.
- Mustiko, H., & Sutinko, B. (2015). The Extended Consequence of Greenwashing: Perceived Consumer Skepticism. *International Journal of Business and Information, 10*, 433-468.
- Navarro-Rivera, J., & Kosmin, B. A. (2013). *Surveys and Questionnaires*. The Routledge Handbook of Research Methods in the Study of Religion.
- Nedelea, A.-M., Ali, I., & Rahman, B. (2017). Greenwashing in Canadian Firms: An Assessment of Environmental Claims. *Ecoforum Journal, 6*(2).
- Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. da L. (2020). Concepts and Forms of Greenwashing: A Systematic Review. *Environmental Sciences Europe, 32*(1), 1-12.
- Nguyen, T. T. H., Yang, Z., Nguyen, N., Johnson, L. W., & Cao, T. K. (2019). Greenwash and Green Purchase Intention: The Mediating Role of Green Skepticism. *Sustainability, 11*(9), 2653.

- Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2014). Perceived Greenwashing: The Interactive Effects of Green Advertising and Corporate Environmental Performance on Consumer Reactions. *Journal of Business Ethics, 125*(4), 693-707).
- Oatly ads banned over “misleading” environmental claims. (2022, January 26). *BBC News*. <https://www.bbc.com/news/business-60128075>
- Orange, E., & Cohen, A. (2010). From eco-friendly to eco-intelligent. *The Futurist, 44*(5), 28.
- Parguel, B., Benoît-Moreau, F., & Larceneux, F. (2011). How Sustainability Ratings Might Deter “Greenwashing”: A Closer Look at Ethical Corporate Communication. *Journal of Business Ethics, 102*(1), 15-28.
- Parguel, B., Benoît-Moreau, F., & Russell, C. A. (2015). Can evoking nature in advertising mislead consumers? The power of “executional greenwashing.” *International Journal of Advertising, 34*(1), 107-134.
- Pearce, P. L. (1988). *The Ulysses Factor*, Springer-Verlag, New York.
- Peel-Yates, V. (2021, July 23). *Greenwashing: 13 recent stand-out examples*. The Sustainable Agency. <https://www.thesustainableagency.com/blog/greenwashing-examples/>
- Polit, D. F., & Beck, C. T. (2004). *Nursing Research: Principles and Methods*. Lippincott Williams & Wilkins.
- Polonsky, M. J. (2011). Transformative green marketing: Impediments and opportunities. *Journal of Business Research, 64*(12), 1311-1319.
- Ramesh, M., & Rai, N. D. (2017). Trading on conservation: A marine protected area as an ecological fix. *Marine Policy, 82*, 25-31.

Schmuck, D., Naderer, B., & Matthes, J. (2018). Misleading consumers with green advertising? An effect-reason-involvement account of greenwashing effects in environmental advertising. *Journal of Advertising*, 47(1), 127-145.

Shahrin, R., Jamil, R., Mahadi, N., & Quoquab, F. (2017). Green “Eco-Label” or “Greenwashing”? Building awareness about environmental claims of marketers. *Advanced Science Letters*, 23(4), 3205-3208.

Tateishi, E. (2017). Craving gains and claiming “green” by cutting greens? An exploratory analysis of greenfield housing developments in Iskandar Malaysia. *Journal of Urban Affairs*, 40(3), 370-393.

TerraChoice. (2010). *The sins of greenwashing: home and family education*.
<http://sinsofgreenwashing.org/findings/the-seven-sins/>

Tierney, P. (2000). Internet-based evaluation of tourism web site effectiveness: Methodological issues and survey results. *Journal of Travel Research*, 39(2), 212-219.

Turnbull, P. W., Leek, S., & Ying, G. (2000). Customer confusion: The mobile phone market. *Journal of Marketing Management*, 16(1-3), 143-163.

United Nations Environment Programme. International Resource Panel. (2011). *Decoupling Natural Resource Use and Environmental Impacts from Economic Growth*. UNEP/Earthprint.

Walker, K., & Wan, F. (2012). The Harm of Symbolic Actions and Green-Washing: Corporate Actions and Communications on Environmental Performance and Their Financial Implications. *Journal of Business Ethics*, 109(2), 227-242.

Wang, H., Ma, B., & Bai, R. (2019). The spillover effect of greenwashing behaviours: An experimental approach. *Marketing Intelligence & Planning*, 38(3), 283-295.

Wang, W., Ma, D., Wu, F., Sun, M., Xu, S., Hua, Q., & Sun, Z. (2023). Exploring the Knowledge Structure and Hotspot Evolution of Greenwashing: A Visual Analysis Based on Biometrics. *Sustainability* 15(3), 2290.

- Watson, B. (2017). The troubling evolution of corporate greenwashing. *Chain Reaction, (129)*, 38-40.
- White, K., Hardisty, D., & Habib, R. (2019). The Elusive Green Consumer. *Harvard Business Review, 11(1)*, 124-133.
- Wobker, I., Eberhardt, T., & Kenning, P. (2015). Consumer confusion in German food retailing: the moderating role of trust. *International Journal of Retail & Distribution Management, 43(8)*, 752-774.
- Wyrostkiewicz, M. (2014). Manipulation and Communication – Manipulation as an Anti-Communicative Act. *Biuletyn Edukacji Medialnej, 11(2)*, 21-32.
- Yang, Z., Nguyen, T. T. H., Nguyen, H. N., Nguyen, T. T. N., & Cao, T. T. (2020). Greenwashing Behaviours: Causes, Taxonomy and Consequences Based on a Systematic Literature Review. *Journal of Business Economics and Management, 21(5)*, 1486-1507.
- Yavad, R., Pathak, G. S. (2017). Determinants of Consumers' Green Purchase Behavior in a Developing Nation: Applying and Extending the Theory of Planned Behavior. *Ecological Economics, 134(1)*, 114-122.
- Yu, E. P., Luu, B. V., & Chen, C. H. (2020). Greenwashing in environmental, social and governance disclosures. *Research in International Business and Finance, 52*, 101192.
- Zhu, B. (2012, October). *The impact of green advertising on consumer purchase intention of green products*. In Proceedings of World Business and Economics Research Conference.
- Zhu, Q., & Sarkis, J. (2016). Green marketing and consumerism as social change in China: Analyzing the literature, *International Journal of Production Economics, 181*, 289-302.
- Zinkhan, G. M., & Carlson, L. (1995). Green Advertising and the Reluctant Consumer. *Journal of Advertising, 24(2)*, 1-6.

Appendices

Appendix 1

Bachelor Thesis Questionnaire

Research: Consumers' Perception of Greenwashing in the Food Industry

Dear Participants,

My name is Anna Maria Erhardt and I am currently pursuing my studies in International Management at MODUL University Vienna. My bachelor thesis revolves around exploring the phenomenon of greenwashing in the food industry and its influence on consumer perception. In the following, questions will be asked on your opinions, beliefs, and experiences regarding greenwashing. Your participation in this research would be immensely valuable.

The survey consists of 5 general questions and 15 subject-specific inquiries, requiring approximately 7-9 minutes of your time.

The data collected will be used solely for research purposes and treated with utmost confidentiality. Your responses, thoughts and attitudes will remain anonymous throughout the study. You are free to end the questionnaire at any time.

If any questions arise or you are interested in additional information please contact me via the following email: 62003663@modul.ac.at

Thank you in advance for your participation and help in this research!

Best regards,
Anna Maria Erhardt

I consent that my participation is completely voluntary to this research questionnaire and I am aware that I may stop at any point. *

Yes

Are you aware of the term "Greenwashing" in the context of marketing and advertising? *

Yes

No

If yes, could you please provide your own definition or understanding of what greenwashing means to you? *

Your answer

Definition of Greenwashing:

Greenwashing is a deceptive strategy employed by companies or organizations to deceive consumers through the use of misleading information and unsubstantiated claims about their products' or services' environmental benefits. This practice involves a form of advertisement or marketing spin that exaggerates or fabricates eco-friendly attributes without genuine evidence or efforts to support these assertions. Terms like "natural", "green", or "eco-friendly" are often used without adequate substantiation, creating an illusion of environmental commitment to attract environmentally conscious consumers. Ultimately, greenwashing undermines trust by misleading consumers and diverting attention from authentic environmental efforts.

*

I understand the definition of greenwashing above

Do you believe that greenwashing is a common practice in the food industry? *

- Yes
- No

How often do you purchase food products? *

- Daily
- Multiple times a week
- Weekly
- Monthly

Have you ever encountered food products/food brands which you believe engage in greenwashing? If yes, please elaborate. *

Your answer

"Greenwashing is conducted intentionally by food brands to mislead consumers". What is your opinion on this statement? *

Your answer

Has there ever been an instance in which you stopped buying food products from a particular brand because you had the feeling it might conduct greenwashing? Please elaborate. *

Your answer

How do you feel when you encounter greenwashing in food marketing? *

Your answer

Can you explain a situation where the presence of greenwashing influenced your trust in food brands? *

Your answer

What factors weigh into your consideration when selecting food products, particularly in terms of their environmental impact? *

Your answer

What claims by food brands make you consider their products as environmentally friendly? *

Your answer

How do environmental claims made by food brands affect your choices when purchasing their products? Would you say these claims influence your decision-making process? *

Your answer

What types of environmental claims of food products do you consider when you make a purchasing decision? *

Your answer

Which actions, if any, do you take to verify the accuracy of environmental claims made by food brands? *

Your answer

On which third-party certifications or labels do you rely on when choosing environmentally friendly products? *

Your answer

What age are you? *

Your answer

What gender do you identify as? *

- Female
 - Male
 - Diverse
 - Prefer not to say
 - Other
-

What is your current occupation? *

- Employed (Full-Time)
- Employed (Part-Time)
- Self-Employed
- Student
- Retired