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**A COMPREHENSIVE ASSESSMENT OF SUSTAINABILITY
REPORTING: EXAMPLES OF DECEPTION AND ABUSE**

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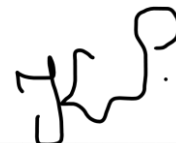


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LIST OF ABBREVIATIONS

AR – Application Requirement
BP – British Petroleum
CFP – Corporate Financial Performance
CH₄ – Methane
CO₂ – Carbon Dioxide
CO_{2e} – Carbon Dioxide Equivalent
COP – Climate Chance Conference
COSO – Committee of Sponsoring Organizations
CSR – Corporate Social Responsibility
CSRD – Corporate Sustainability Reporting Directive
DJGI – Dow Jones Global Index
DJSI – Dow Jones Sustainability Index
EFRAG – European Financial Reporting Advisory Group
ESG – Environmental, Social and Governance
ESRS – European Sustainability Reporting Standards
EU – European Union
FMCG – Fast-Moving Consumer Goods
GHG – Greenhouse Gas
GRI – Global Reporting Initiative
GSSB – Global Sustainability Standards Board
IFRS – International Financial Reporting Standards
IIRF – International Integrated Reporting Framework
ILO – International Labour Organization
ISSB – International Sustainability Standards Board
KPI – Key Performance Indicator
N₂O – Nitrous Oxide
NFR – Non-financial Reporting

NFRD – Non-Financial Reporting Directive
NGO – Non-Governmental Organization
NH₃ – Ammonia
OECD – Organization for Economic Cooperation and Development
PP – Perutnina Ptuj
R&D – Research and Development
SDG – Sustainable Development Goals
SFRD – Sustainable Finance Disclosure Regulation
SME – Small and Medium Sized Enterprises
UN – United Nations

1 INTRODUCTION

As companies increasingly focus on maintaining high levels of environmental, social, and governance (ESG) performance, there is also a growing incidence of sustainability reporting fraud. Deceptive practices in non-financial reports are often difficult to detect, making extensive research and analysis of real-life examples essential. This kind of research helps to understand both the rationale behind such practices and their impact on various stakeholders.

Tragedy of the horizon is a term which precisely embodies the climate change problem we are facing today. The phrase reflects how the environmental issue imposes cost on future generations, whilst the current population has no incentive to fix it (Carney, 2015). The problematic is also present in the corporate world, where despite the increasing importance of transparent sustainability reporting, many companies fail to take accountability for the negative effect they pose on the ESG factors (Heichl & Hirsch, 2023). Consequently, while there is a growing demand for and implementation of sustainable conduct of business, more problems with transparency and quality of ESG performance data occur (Zenkina, 2023, p. 1). This is because, to maintain their reputation, companies use deceptive communication in their non-financial reports, which is also known as greenwashing (Walker & Wan, 2012).

Increasing implementation of sustainability focus can be attributed both to shareholders and companies' own initiatives. The investors are starting to take higher notice of the concerning sustainability developments, due to them being correlated with the organization's financial performance, thus presenting both financial risk and opportunity (KPMG International, 2020, p. 3). Therefore, nowadays companies are increasingly focused on keeping high levels of ESG performance, due to it improving operating capacity and stimulating their market value (Zhou et al., 2022, p. 3372). The benefits companies gain from actively engaging in corporate social responsibility (CSR), on one hand, and the punishments they face on the other, align with the carrot-and-stick theory (Kotzian, 2023).

To reach the acceptable level of informative and analytical value of the non-financial disclosures, sustainability reporting standards and frameworks are in place (Zenkina, 2023, p. 3). ESG reporting standards currently implemented by the majority of the corporations are Global Reporting Initiative (GRI) (KPMG International, 2022, p. 9).

Despite the standards' aim to challenge companies to report both the positive and negative aspects of sustainability performance, they tend to withhold the latter. This is because the negative qualities can endanger corporate legitimacy if the stakeholders perceive it as not being in line with norms and values set by society (Hahn & Lülfs, 2014). This camouflaging of sustainability problems, projecting idealized views of the situation, and emphasizing the positive achievements made in terms of sustainability, reflect organizational narcissism (Boiral, 2013). Deception and misuse of sustainability information can manifest in different

ways. However, the primary motivation is often to secure higher ESG ratings, which result in increased reputation, higher share prices and more favorable conditions regarding capital accessibility (KPMG International, 2020, p. 4). To thoroughly analyze its initiatives, opportunities and rationalization for sustainability fraud, Cressey's fraud triangle can be utilized (Cressey, 1953).

The purpose of this thesis is to examine sustainability reporting practices of two specific companies, one being publicly traded and the other limited liability company and focus on identifying instances of deception and abuse. Research delves into the challenges of ESG data transparency and its impact on the company, its stakeholders, and wider environment. Main goal is to investigate the presence and characteristics of sustainability fraud in companies' non-financial reports.

Stated can be summed into the following research question:

- How prevalent is misleading sustainability reporting, and how do discrepancies usually manifest?

The research method utilized for reviewing examples of deception and abuse in sustainability reporting are study cases. This method employs triangulation, thus, multiple sources of evidence are used. Namely include sustainability reports, ESG scoring, ESG frameworks and standards applicable to the individual company, articles and research papers connected to the entity's sustainability practices, and public statements made by the company. Evidence sources are analyzed and compared, with a final check for discrepancies. Specifically, discrepancies between the information presented in the company's non-financial reports and other sources are examined. Each uncovered inconsistency is also examined in the context of European Sustainability Reporting Standards (ESRS), specifically how would the implementation of the standard help address fraudulent and deceptive sustainability disclosures. Additionally, Chat GPT was utilized to check grammar correctness, solely for few parts of the theoretical part of the thesis.

Each study case follows the same structure. In the first section, which is an overview of the company, its legal entity type and its financials are discussed. This is continued by a review of sustainability reporting practices and external perception of the company. Here, it is discussed which sustainability reporting standards are utilized, moreover, ESG factors of each entity are benchmarked against the industry. The third section examines discrepancies between reported data and actual performance, which are additionally placed within the framework of the ESRS. The fourth section analyzes these inconsistencies from the context of greenwashing terminology, focusing on the "sins of greenwashing", claim types, and the deceptiveness of those claims. Finally, conclusions are drawn as the case studies are compared to the stated research question.

Limitations connected to the research and analysis in this thesis apply to both theoretical and empirical sections. Firstly, the theoretical part demanded significant research, as the topic of

ESG is covered by a wide range of authors. Moreover, it required setting boundaries on which topics to include, meaning that some relevant aspects might not have been addressed. Secondly, there are limitations connected to the study case approach. Identifying suitable companies to analyze necessitated extensive research, which was particularly complicated because sustainability reporting is relatively new, and many organizations have not yet adopted it. On one hand, Nestlé had a wealth of secondary information available, while on the other hand, Perutnina Ptuj did not. As a result, the examples of deception in Nestlé's sustainability reports were manually limited, whereas for Perutnina Ptuj, all examples had to be identified and uncovered individually. Furthermore, both study cases required a critical assessment of how impactful examples of deception were, and whether they could even be classified as forms of sustainability reporting fraud. This critical analysis may introduce potential bias, thus the examples presented should be further evaluated for possible errors. Another issue is the lack of comparability between the different study cases, meaning that relevant conclusions can be drawn solely from each case individually, rather than through direct comparison of the two.

The thesis is divided into two main parts. Firstly, the theoretical part begins with an overview of sustainability reporting, covering its definition, evolution, and recent developments. Afterwards frameworks and standards are discussed, including key concepts like materiality, most significant guidelines, and their impact on Corporate Social Responsibility (CSR). Next, the role and importance of sustainability reporting is explored, followed by an analysis of challenges and criticisms, which delves into the topics of greenwashing, fraud triangle and presents three real-life examples of deception in sustainability reports. The risks of report misrepresentation, along with strategies for managing and mitigating these risks, are covered in the final section of the theoretical part. Secondly, the empirical part starts by describing the data and methodology used for analysis. It concludes with case studies of Nestlé and Perutnina Ptuj, from which the findings are drawn.

2 OVERVIEW OF SUSTAINABILITY REPORTING

2.1 Definition and evolution

The evolution of the concept of social responsibility has significantly impacted the transformation of corporate reporting, encompassing both financial and non-financial reporting. This development has prompted the introduction of new indicators aimed at assessing the financial position and performance of economic entities (Bychkova et al., 2021). Social responsibility is multifaced, thus it combines moral, legal, civil and corporate dimensions. Moreover, it can manifest in various forms, either individual, collective or group, and can relate to different subjects. Over the years, the concept shifted from foundational principles to more contemporary frameworks, which relate to organizations and their activities. The latter refers to CSR (Bychkova et al., 2021). Diversion of focus from

macro-societal to the organizational level led researchers to place greater emphasis on managerial and strategic issues of CSR, and explore its relationship with corporate financial performance (CFP), which became increasingly tighter over the years (Lee, 2007). And thus, companies' environmental stewardship is not only crucial for the future of our world, but it also contributes to their financial performance. Therefore, entities include sustainability criteria in their strategies to ensure long term value creation, which is nonetheless also the priority for their investors (Lopez et al., 2009).

CSR is broadly defined as a proactive, "responsible" attitude adopted by business entities toward its internal and external stakeholders (Blasi et al., 2018). It ought to be integrated into contributions and consequences of business activities. Therefore, it involves companies having to justify their existence and document their performance by disclosing both social and environmental information (Jenkins & Yakovleva, 2006). Consequently, firms derive benefits from such active engagements (Blasi et al., 2018). Most empirical literature discussing drivers for CSR engagement focuses on benefits resulting from it, however others argue that the main motivator is the fear of negative public reactions. And thus, a theory of carrot-and-stick introduces a raising question whether benefits or punishments are more relevant. Kotzian's (2023) study concludes that there is no clear predominant driver.

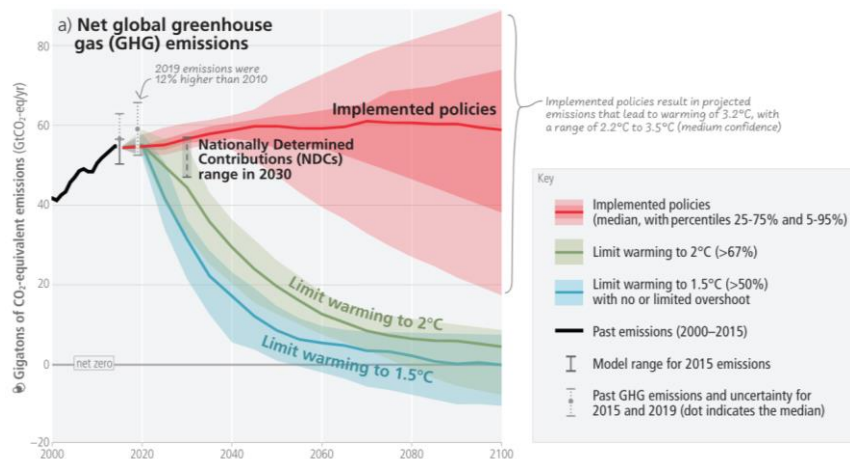
Additionally, CSR reflects the care companies have for broader environments within which they operate (Blasi et al., 2018) and are incorporated both legally and socially. That way corporations, which are becoming an indispensable member of our society, verify their institutional legitimacy. Thus, the conclusion is, entities legitimacy, amongst other factors, also stems from social and environmental sustainability (Hoffman, 2001).

In addition to CSR, sustainable development is another vital part of the evolution of sustainability reporting. With its exponential growth, non-financial reporting is becoming more and more relevant (Fleaca et al., 2023). The notion of increasing importance of sustainable development has been dependent on the balance, indivision, and integration of three dimensions, which are economic development, protection of the environment, and social cohesion. Namely are summed up in environmental policies on the international level, in 17 Sustainable Development Goals (SDG's) in Agenda 2030 (UN, 2015), and on the European level with European Green Deal (European Commission, 2024b). The latter aims to transform the European Union's (EU) economy, so that by 2050 there will not be any net greenhouse gas (GHG) emissions, and that economic growth is decoupled from resource use (European Commission, n.d.-g). The policies that the European Commission adopted are catered towards GHG reduction by at least 55% when comparing 2030 and 1990, which is also known as Fit for 55 (Council of the European Union, n.d.).

Another important document connected to sustainable development is 2016 Paris Agreement, adopted by 196 Parties at United Nations (UN) Climate Change Conference (COP21), which is a legally binding environmental treaty that seeks to reduce GHG emissions (UN Framework Convention on Climate Change, n.d.). The treaty set the goal to

hold “the increase in the average global temperature below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.” (UN Framework Convention on Climate Change, 2015, p. 5). However, in their review of energy transition progress towards Paris Agreement goals, UN Intergovernmental Panel on Climate Change (IPCC), found that we far from actually achieving both Paris Agreement and net-zero by 2050 goals, with the policies we have implemented. Namely is shown in Figure 1, which indicates that with current policies employed, emissions will lead to 3.2°C warming, so it will not be limited to 1.5°C or 2°C warming (IPCC, 2023, p. 22).

Figure 1: Net GHG emissions and policies effectiveness



Source: IPCC (2023, p. 22).

If companies wish to increase their sustainability performance, they must ensure progress towards SDG's. Namely include higher quantity and diversity of shared data and information, which are then used to identify, measure, analyze, verify and report on various aspect of sustainability. A downside of the process is its complexity, which can often lead to confusion about how to properly communicate such information. Nevertheless, it is crucial to engage in these disclosures because, only that way, companies can remain ready with a good plan for how they will finance sustainable growth and strengthen their accountability for actions towards more sustainable conduct of business. Particularly by minimizing carbon emissions, reducing biodiversity loss, and overcoming social inequalities (Fleaca et al., 2023, p. 283).

3 FRAMEWORKS AND STANDARDS

3.1 Concept of frameworks and standards

For a considerable period, a common language between businesses and investors was provided by financial accounting standards. However, with tangible assets no longer dominating the market valuation of entities, new frameworks and standards have been

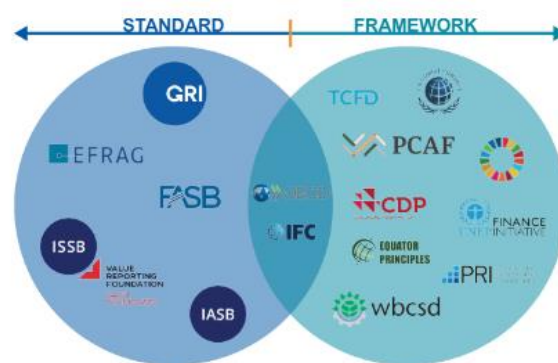
introduced. These are utilized because effectively addressing sustainability concerns can impact long-term financial performance, resilience to risks, and provide companies with a competitive advantage (SASB, n.d.).

Transparent sustainability reporting holds great value both for companies and their stakeholders. Hence, over the recent years, ESG topics are expanding volume per report on the international level (Heichl & Hirsch, 2023, p. 1). Demand for disclosures, and sustainability reports containing high-quality information is increasing due to government legislations, expectations of stakeholders, especially investors, and international initiative (Fleaca et al., 2023). Particularly in recent years, there have been significant developments in sustainability reporting and the prioritization of ESG issues. This trend has been triggered by events such as the COVID-19 pandemic, the Russian invasion of Ukraine, the IPCC's “Code Red for Humanity” report, and the Black Lives Matter movement. These events have elicited strong reactions from the public, which now expect corporations to respond accordingly (KPMG International, 2022, p. 6).

Due to this increasing demand for non-financial reports monitoring and reporting frameworks are in place to ensure their adequacy (Fleaca et al., 2023), moreover they are standardized, to ensure their informative and analytical value is appropriate (Zenkina, 2023, p. 3). According to KPMG International (2022), “GRI, TCFD and SDGs form the most commonly used anchors for sustainability reporting” (p. 9).

As illustrated in Figure 2, we distinguish between frameworks and standards when discussing guidelines for non-financial reporting.

Figure 2: Organizations that publish standards, issue frameworks or do both



Source: GRI (2022a, p. 2).

On the one hand, standards represent a certain agreed level of quality requirements that stakeholders deem satisfactory for reporting entities. It includes precise criteria or metrics detailing the content of reports on various subjects. Broadly speaking, corporate reporting standards share key attributes such as a focus on public interest, independence, due process, and engagement in public consultation (GRI, 2022a, p. 2).

On the other hand, frameworks give context to the information. They are usually put into practice and do not include well-defined standards. Furthermore, they allow for flexibility when it comes to defying direction, but not the method. In summary, the framework represents a set of principles that guides and shapes people's thoughts on certain topics. Contrary to standards they do not include a reporting obligation (GRI, 2022a, p. 2).

3.2 Concept of materiality and double materiality

Major standards, such as GRI, International Sustainability Standards Board (ISSB), European Sustainability Reporting Standards (ESRS), SASB, and Corporate Sustainability Reporting Directive (CSRD) are based on the concepts of materiality. Moreover, double materiality, a term first used in Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01) by the European Commission, is implemented by most influential global and European standards such as GRI, ESRS and CSRD (European Commission, 2019).

Materiality is a principle that identifies which environmental and social topics have the biggest impact on businesses and their stakeholders. Materiality assessments are crucial for addressing non-financial risks and opportunities (KPMG International, 2017, p. 4). Nevertheless, the materiality-based ESG data shared with investors generally focuses on factors that might financially affect the company, without considering the external impact an entity has on its society and natural environment (Delgado-Ceballos et al., 2023). This approach, known as financial materiality, addresses impacts on the value of the company, which is the primary concern of investors (European Commission, 2019). Therefore, to ensure that besides internal also external impacts are covered accordingly, principle of double materiality is introduced (Delgado-Ceballos et al., 2023).

Double materiality encompasses both environmental and social materiality. Contrary to financial materiality that mostly interests investors, double materiality is typically prioritized by other stakeholders, such as consumers, employees, citizens, business partners, communities, and civil society organizations (European Commission, 2019). It consists of two interconnected parts, financial materiality and impact materiality, thus linking finance to sustainability initiatives (Delgado-Ceballos et al., 2023).

On the one hand, financial materiality focuses the economic value creation for the benefit of shareholders (investors). On the other hand, impact materiality involves entity's impacts on the economy, environment, and people, benefiting multiple stakeholders (investors, employees, customers, suppliers, and local communities). Double materiality acknowledges the interconnectedness of both concepts and highlights the importance of addressing both perspectives (GRI, 2022b).

Furthermore, the concept of double materiality connects SDG's, ESG and sustainability performance. Firstly, SDG targets are becoming an indispensable part of investors' decision-

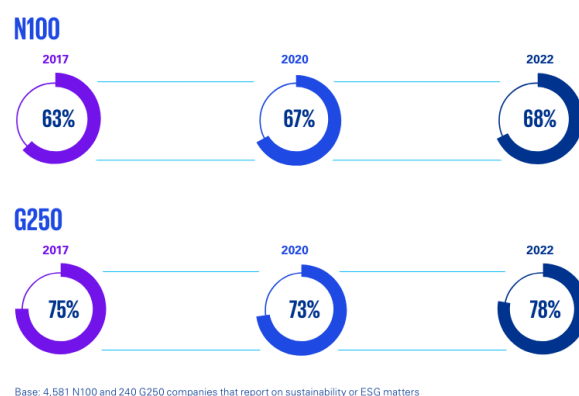
making process, which consequently makes them financially material for an individual business. Secondly, ESG factors are used as a tool for collecting information on companies' sustainability and are being utilized in investors due diligence process. Lastly, improvement of sustainability performance is increasingly more important to companies, which wish to bring benefits to shareholders and move toward target SDG's (Delgado-Ceballos et al., 2023).

3.3 Global Reporting Initiative

The GRI is regarded as a dominant, most widely used standard setter for sustainability reporting, which gives provision of information about the impact of reporting organizations on environment and society (de Villiers et al., 2022).

GRI, introduced in 1997, continues to be the well-established standard for non-financial reporting. Its global dominance as a sustainability reporting standard was confirmed in KPMG's 2022 Survey of Sustainability Reporting. Thus, in 2022, GRI standards were used by 78% of the largest 250 companies (G250) and 68% of the top 5,800 companies (N100) worldwide. Moreover, the standards are also the most used in all regions, and were expanded globally to enhance local engagement. Particularly in 2022, the standards were used in 75% in America, 68% in Asia-Pacific and Europe, 62% in Middle East and Africa. In 2022, the standards were downloaded 974,000 times, which is a 45% increase from 2022. The data on GRI utilization from 2017 to 2022 is presented in Figure 3 (KPMG International, 2022, p. 24).

Figure 3: Global GRI reporting rates for N100 and G250 from 2017 to 2022 (%)



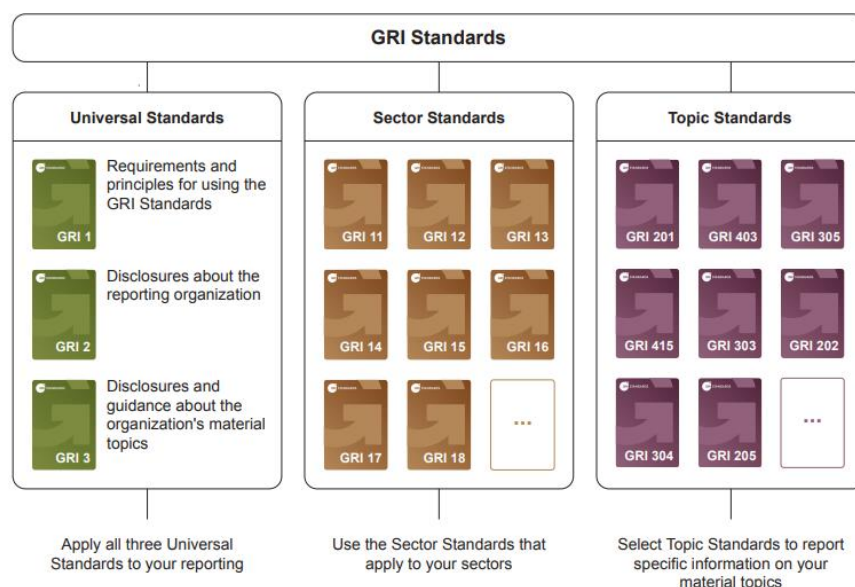
Source: KPMG International (2022, p. 24).

If companies wish to report according to the GRI, they must recognize, prioritize, and be transparent about their impact on the environment, society, and economy. After identifying and assessing these impacts, they must determine the material topics, in other words, those on which they will report (GRI, n.d.-a). Key characteristic of the standard is it shapes

reporting on double materiality, focusing on impact reporting for a multi-stakeholder audience (GRI, 2022b).

As described in Figure 4 GRI standards are structured in a way that comprises three series components. Namely are Universal Standards, Sector Standards, and Topic Standards. Universal Standards apply to all organizations' reports, Sector Standards are specific to 40 different industries, and Topic Standards cover material topics (GRI, n.d.-a, p. 3).

Figure 4: GRI Standards: Universal, Sector, and Topic Standards



Source: GRI, (n.d.-a, p. 3).

Standards contain disclosures that provide structured means for a company to report on itself and impacts made on ESG factors. Furthermore, disclosures include requirements and recommendations, which indicate that certain information or course of action is only encouraged, not mandatory (GRI, n.d.-a).

Universal standards, revised in 2021, and must be applied to all organizations no matter the sector, are further divided into three parts (GRI, n.d.-a). They are a starting point not only for all GRI reporting, but also for the use of Sector Standards (GRI, n.d.-b).

Firstly, Foundation (GRI 1) serves as a guideline for using the GRI Standards. It outlines the requirements organizations must comply with if they wish to report in accordance with GRI. Moreover, it emphasizes principles such as accuracy, balance, and verifiability for high-quality reporting (GRI, n.d.-a). Secondly, General Disclosures (GRI 2) provide details about an organization's structure and reporting practices, activities and workers, governance, strategy, and stakeholder engagement. This gives readers insight into the organization's profile and context of its impacts (GRI, n.d.-a). Thirdly, Material Topics (GRI 3) set out guidance for identifying organizations' most relevant impacts and material topics. It includes

disclosures for reporting on material topics, the process of determining them, along with how each topic is managed (GRI, n.d.-a).

Next, companies ought to use Sector Standards that apply to the specific industry they operate in (GRI, n.d.-a). The standards are a new addition to the GRI sustainability reporting as they were approved by the Global Sustainability Standards Board (GSSB) in 2019. Sectors are divided into four groups. The first group is basic materials and needs, within which are producers of oil and gas, coal, agriculture, aquaculture, and fishing, mining, food and beverages and others, second group is industrial, with construction materials, pharmaceuticals and electronics, third group is for transport, infrastructure and tourism, and fourth group is for other services and light manufacturing (GRI, 2022c). Sector standards list the topics that are likely to be material for organizations in a specific industry, along with relevant disclosures that should be reported on these topics. Thereby they help increase the quality, completeness, and consistency of reports. Organizations are required to use these standards if they wish to report in line with GRI (GRI, n.d.-a).

Lastly, there are Topic Standards, which must be selected to report specific information on the material topics (GRI, n.d.-a).

For each of 40 different industries, GRI Sector Program plans to develop individual Sector Standards. Here the priority is to develop the standards for those that have a greater, more significant ESG impact. As of now, the sectors which have available standards are Oil and Gas, covered in GRI 11, Coal, with GRI 12, Agriculture, Aquaculture and Fishing, with GRI 13, and Mining, with GRI 14. The sectors that have not yet got their own standards ought to use revised Universal Standards, and Topic Standards (GRI, n.d.-b).

3.3.1 Pros and cons of using GRI

GRI is often preferred, due to enabling flexibility when forming sustainability reports, meaning companies can choose the preparation either in accordance to core principles or expanded principles (comprehensive option). Furthermore, the advantage of the initiative are its frequent updates in comparison to other guidelines for non-financial reporting, such as International Integrated Reporting Framework (IIRF) (Zenkina, 2023, p. 3).

Even though GRI challenges companies to report both positive and negative aspects of sustainability performance, companies tend to withhold the latter. This is because the negative aspects can endanger corporate legitimacy if the stakeholders perceive it as not being in line with norms and values set by society (Hahn & Lülfs, 2014). This camouflaging of sustainability problems, projecting idealized views of the situation and emphasizing the positive achievements made in terms of sustainability, reflect organizational narcissism. Particularly, such actions are exemplified in the findings of study which reveal that a total of 90% of negative events were not reported transparently, in line with GRI guidelines (Boiral, 2013).

Thus, even though by some GRI is considered the best for sustainability reporting, it may require improvements, especially due to its drawback of neglecting negative aspects of sustainability disclosures. Consequently, a true and fair view of companies' non-financial performance is not provided, which in the long run jeopardizes their corporate legitimacy (Hahn & Lülfs, 2014).

The literature defines this type of withholding as a symbolic approach to reputation building. We differentiate between two types of approaches to reputation building: symbolic and substantial (Kim et al., 2007). The gap between the two approaches or actions is reflecting deceptive communication, more specifically greenwashing (Walker & Wan, 2012).

The substantial approach emphasizes actual changes in operational processes, innovativeness, and proactive strategies to enhance both financial performance and the reputation of the company (Kim et al., 2007).

On the other hand, symbolic reputation is built by highlighting positive characteristics and, conversely, neutralizing negative news to establish a favorable perception from shareholders (Kim et al., 2007). It can provide short-term benefits for the company because it buys time and maintains organizational legitimacy. Nevertheless, it does not contribute to long-term financial performance of the firms and can also raise ethical concerns about the manipulation of shareholders' perceptions (Grunig, 2003).

Therefore, the latter is regarded as having a weaker effect on corporate legitimacy. While the symbolic approach can play a complementary role, companies should always use the substantial approach if they wish to achieve long-term success (Kim et al., 2007).

Companies might resort to symbolic approaches in reporting strategies, which would influence shareholders' perception rather than genuinely addressing the impact organizations' actions have. This lack of accountability and failure to legitimize the actions indicate a potential need for substantial approaches (Hahn & Lülfs, 2014). This bias towards usage of symbolic reporting strategies over substantive, was also proven by 2022 study on "Consequences of CSR reporting regulations worldwide: a review and research agenda" (Haji et al., 2022).

3.4 Other Sustainability Reporting Guidelines

3.4.1 Sustainability Accounting Board

Sustainability Accounting Standards Board (SASB) second most globally used standard, after GRI, from which it differentiates both in scope and audience (GRI, 2022a). On one hand GRI is based on a double materiality approach, while on the other hand SASB mostly focuses on financial materiality and is industry-based. Namely was founded in 2011 as a nonprofit organization, and its primary aim is to help both investors and companies to

develop a common language about the impact of sustainability practices on financials of the business entity. As of now, it is present in 77 industries, which differ both in risks and opportunities (SASB, n.d.).

SASB standards help guide entities through the procedure of putting out investor-focused disclosures (KPMG International, 2022, p. 29). They use evidence-based and market-informed processes like the ones that are utilized for developing financial accounting standards. SASB helps pinpoint sustainability-related risks and opportunities with the greatest probability of impacting financial aspects, such as a company's cash flow, access to finance, and cost of capital. Moreover, it also specifies which disclosure topics and metrics will most likely provide valuable insights to shareholders. Not only do standards provide information that helps investors make the right decisions, but they are also designed to be cost-effective for the companies to use (SASB, n.d.).

SASB guidelines are sometimes preferred by companies over GRI. Moreover, stock exchange guidelines are also an option lots of companies choose for their reporting standards. Nowadays the SASB standards are most used among entities in the United States, Brazil, and Canada (KPMG International, 2022, p. 23).

According to the most recent data, SASB is used in one-third, 33%, of N100, and 49% of G250 companies. Most of the utilization is located in Americas particularly in United States and Canada, where over a half of reporting based on SASB. Adaptation is also present in Europe, with 35% among Europe's N100. Nonetheless, N100 of Asia Pacific region reached 23%, and of Middle East and Africa only 18% of SASB standards adaptation (KPMG International, 2022, p. 29).

After August 2022, the ISSB, which is operating under the International Financial Reporting Standards (IFRS) Foundation, had taken over the SASB Standards (SASB, n.d.). The key purpose and aim of this consolidation were for SASB to become a global standard-setter for extra-financial disclosures (KPMG International, 2022, p. 29). The responsibility of ISSB is to maintain, improve, and further develop the SASB standards, thus encouraging both preparers and investors to persist in their utilization. In sum, the SASB put preparers of the report on the path towards full implementation of ISSB (SASB, n.d.).

3.4.2 EU sustainable finance framework

The EU created the ESRS, which are similarly to GRI based on double materiality, thus appropriate for multi stakeholder audience. GRI is also involved in leading its constitution together with the European Financial Reporting Advisory Group (EFRAG). The sustainable financial framework established in the EU is a relatively new development in the world of sustainability reporting, and has certain particularities (GRI, 2022a). This specific framework combines three different parts, which are: the Non-Financial Reporting Directive (NFRD), the EU Taxonomy, and the Sustainable Finance Disclosure Regulation (SFDR).

Firstly, NFRD's purpose is to serve as a clear to understand corporate reporting framework, that provides information which assesses entities' sustainability impacts and risks (European Parliament, 2021).

Additionally, the EU Taxonomy, which entered into force in 2020, functions as a classification system, listing environmentally sustainable economic activities. Consequently, investors can better identify qualified sustainable activities and make more informed investment decisions and consequently move toward net zero by 2050, Green Deal objectives (European Commission, n.d.-c). Taxonomy is centered around six environmental objectives, which are climate change mitigation, adaptation, sustainable use and protection of both water and marine resources, circular economy, preventing and controlling pollution, and protecting and restoring biodiversity and ecosystems. Moreover, EU taxonomy lays out four conditions economic activity must meet to qualify as environmentally sustainable. Conditions are firstly, substantially contribution to at least one out of six environmental objectives, secondly, not doing significant harm to the other five of the objectives, thirdly, complying with minimum safeguards, and lastly complying with set technical screening criteria (European Commission, n.d.-b). The novelty in the EU Taxonomy is that listed companies, started in 2023, must report against two objectives, climate change mitigation and climate change adaptation (European Commission, 2024a).

SFDR provides requirements for financial products with "sustainable investment" as their objective, as well as those exclusively promoting social or environmental characteristics, referred to as "light green" financial products (European Commission, 2021).

A vital part of the EU law in connection to sustainability reporting is CSRD, which entered into force on 5th January 2023, and intends to broaden the spectrum of companies that will be obliged to disclose ESG reports. ESRS are reporting standards that the companies will have to report according to (European Commission, n.d.-a) from 30th June 2026 on. However, the date of implementation for third country companies is the financial year 2028 (Council of the European Union, 2024). The regulation is directly applicable and binding in its entirety to all member states. It comprises General requirements (ESRS 1), General disclosures (ESRS 2), Climate change (ESRS E1), Pollution (ESRS E2), Water and marine resources (ESRS E3), Biodiversity and ecosystems (ESRS E4), Resource use and circular economy (ESRS E5), Own workforce (ESRS S1), Workers in the value chain (ESRS S2), Affected communities (ESRS S3), Consumers and end-users (ESRS S4), Business conduct (ESRS G1) (European Commission, 2023b, p. 3).

The measure of having to put out sustainability reports will concern entities which exceed two of the three thresholds. Namely are the following: having a balance sheet total of more than €20 million, net sales amounting to over €40 million, and having an average number of employees higher than 250 (500 previously) (European Commission, n.d.-a).

Additional companies that fall within the scope are, firstly, listed small and medium-sized enterprises (SMEs) which exclude the micro-enterprises with less than 10 employees, secondly, non-European companies that have a turnover higher than €150 million within the EU. The last group also includes the subsidiaries of the non-European companies, which will be obliged to share the CSR approach of their parent company (European Commission, n.d.-a). This way the EU targets around 10,300 of big non-European companies, primarily from United States, then Canada and United Kingdom, which have a substantial impact on the European ESG factors (Philipova, 2023).

3.5 Consequences of CSR reporting regulations

Overall following guidelines, such as GRI, has been confirmed to positively impact the quality of reported information (Ruiz et al., 2021). There are a handful of consequences caused by businesses' utilization of CSR reporting regulations. Namely were presented in a research study by Haji et al. (2022), where the impact of regulations was evaluated from the perspective of reporting quality, capital markets and firms' behavior. The findings of the study show that the objectives, type of regulations and reporting models vary vastly across different regions. The heterogeneity in CSR reporting regulations reflects a substantial difference in the levels of socio-economic development and national interests (Haji, et al., 2022).

Today, the majority of countries use the CSR reporting model known as “comply-or-explain”. This principle, developed by the Cadbury Committee in 1992 in response to multiple corporate scandals such as Polly Peck and Caparo, requires listed companies to report on whether they comply with the Cadbury Code. If they do not, they are obligated to provide a clear explanation for their non-compliance. The “comply-or-explain” principle has helped establish a more flexible approach to reporting, by avoiding the previous “one size fits all” governance approach (Seidl et al., 2009). In sum both assurance and being in line with reporting standards are voluntary (Haji, et al., 2022).

The effects of CSR regulations on reporting quality were inconclusive, as the comparability, consistency, and credibility of reports remained low even after implementation. This conclusion reflects the preference for symbolic reporting over substantive reporting of majority of the firms (Haji et al., 2022).

However, positive outcomes were observed when focusing on the capital market. This was primarily due to a reduction in asymmetrical information and improved firm valuation. These effects on the capital market could be either direct, thus manifesting in firms' value or profitability, or indirect, leading to changes in the information environment. Regardless of the positive consequences mentioned, the study found instances of negative capital market reactions to regulations, particularly in the United States. However, such results were only associated with specific firms, which indicates that market responses depend on pre-existing factors either at the firm or industry level.

Lastly, there were effects on firms' behavior, referred to in the study as the "real effect". Changes in behavior sometimes resulted in positive CSR outcomes, such as lower level of carbon emissions, or unintended negative effects, such as reduced productivity and later profitability. A second-order effect on behavior was also detected, as CSR regulations enabled external stakeholders to better monitor decision making processes and performance of entities. Moreover, mandated disclosures made firms assess their CSR performance relative to their peers, which lead to benchmarking and increasing their efforts to catch up with the market competition.

4 THE ROLE AND IMPORTANCE OF SUSTAINABILITY REPORTING

The role of sustainability reporting and companies practicing CSR are most notably transparency, being in line with investors' expectations and CFP.

The primary characteristic of extra-financial reports is providing transparency on companies' impact on environment and society. This way business entities take on responsibility, and accountability for their actions. Moreover, transparency on the ESG topic reduces investors' information asymmetry, thereby lowering agency costs, which consequently affects firms' value. Thus, in most cases, it benefits from remaining transparent outpower the costs of preparing disclosures. In sum transparency can boost firms' value and provides insights to investors (Yu et al., 2018). In general, the emphasis of reporting is on the future, followed by the present and the past coming in last (Heichl & Hirsch, 2023, p. 10).

Hand in hand with transparency goes fostering a good relationship with stakeholders. Taking stakeholders' expectations into consideration and addressing them is another benefit of reporting on ESG topics. It is responsibility of the businesses and one of the top priorities of every extra-financial reporting entity to consider stakeholders (Şahin & Çankaya, 2020, p. 27). Namely is particularly important, when taking into account that shareholders engagement positively impacts corporate sustainability performance (Strand et al., 2015), and also improves the quality of sustainability reports. Thus, companies should recognize investors' expectations and make sure to provide them with reports of the best quality. Direct correlation between investors pressure and quality of disclosed economic sustainability is in practice reflected in the example of United States companies, which due to ending higher pressures put out reports of higher quality, in comparison to countries such as Spain with lower demand. Nevertheless, pressures have a different impact on each ESG factor. Hence positive effects are somewhat lesser, but still present for environmental information, while completely insignificant when it comes to the quality of information on social dimension. The interests of investors are broadening as time passes by, which can impact financial markets and sustainable investments (Ruiz et al., 2021).

Moreover, ESG data is value-relevant, meaning its disclosures are beneficial for firms' overall valuation (Yu et al., 2018). Even though CSR is considered to be a common practice encouraged by governments, non-governmental organizations, and consumers (Lee, 2007, p. 53), its impact on economic performance has not always been deemed positive (Blasi et al., 2018).

A study conducted in 2007 explored whether business financial performance was affected by adoption of CSR practices. They analyzed the relation between accounting indicators and CSR, to see if the performance indicators of European firms were any different. Measurement for amount of CSR compliance was Dow Jones Sustainability Index (DJSI), while performance of firms was measured by particular accounting indicators. Two groups of 55 different firms, one belonged to DJSI and the other to Dow Jones Global index (DJGI), from 1998 to 2004, were compared. The result showed that there was a difference regarding the inclusion of CSR practices. Companies which were more focused on sustainability, thus belonging in the DJSI group, had lower performance in the short term, in comparison to the firms quoted on the DJGI. Therefore, implementing sustainability practices to business operations had a negative short-term effect. Furthermore, neither the decisions on investments and financing nor the cost of capital were affected (López et al., 2007).

A survey of financial executive conducted by Bancel et al. (2023) also analyzed the effect of ESG factor integration on companies' valuation. Its findings show that integration is crucial due to its long-term impact on the valuation. This is because most of the respondents use ESG data in their evaluation process, which is primarily driven by external stakeholders and not internal management. However, when the impact of data quality in relationship between integration and valuation was done it did not have a consistent outcome. The positive correlation between ESG factors integration and companies' valuation can benefit companies, because they can modify their discount rates and cash flow components with ESG data and better their overall valuation. This adjusting of parameters is, according to the research, most relevant for environmental and social aspects.

5 CHALLENGES AND CRITICISMS IN SUSTAINABILITY REPORTING

Even though the concept of sustainability reporting fundamentally aims to help companies meet and satisfy stakeholders' expectations (Yu et al., 2018) by remaining transparent and taking accountability for their actions' impact on various aspects of sustainability (Şahin & Çankaya, 2020), many of business entities do neither reach nor prioritize such objectives. Instead, they often embellish or even cover up the negative externalities of their business processes and deliberately divert public attention to positive aspects (Boiral, 2013). This behavior undermines the credibility of sustainability reports. Credibility is a critical issue in various non-financial reports, as stakeholders are aware that many companies are dishonest about the source and message they disclose in their sustainability reports (Xiao & Shailer,

2022). Low trust of consumers in environmental claims was confirmed by the results of 2020 public consultation carried out by the EU regulators and shows that on average general public does not agree with the statement that they trust green claims on products. Moreover, consumers are not aware of the environmental impact of products due to such information being unavailable (European Commission, 2023a).

Deception and abuse of sustainability information, or sustainability fraud, can take on many forms. It ranges from undue variable compensation to inaccurate reporting. The aim of such fraudulent acts is for the company to receive higher ESG ratings, thus increasing reputation and share price. Moreover, distorted performance data can also result in easier accessibility to capital, which further supports fraud (KPMG International, 2020, p. 4). In recent years deceptive communication has not only increased but emerged as a trend. Factors such as increased pressure from stakeholders, perceived benefits in terms of financial performance and reputational capital, encourage companies to portray themselves as sustainable, even though in reality, they are not regarded as green (Siano et al., 2017). Furthermore, they can have such poor environmental performance that they are considered being “brown firms” (Delmas & Burbano, 2011, p. 4).

Misleading environmental claims are not only present in the sustainability reports of the companies, but they are also on the rise in advertisements and labels on the products in certain EU countries (European Commission, n.d.-f). Study conducted in 2020 by the European commission shows that in the sample of 150 environmental claims of different products across EU, 53.3% of them provided misleading and vague information, additionally 40% of them were unsubstantiated, meaning not backed up with evidence that would verify the statements (European Commission, 2023a). Similarly, in 2020 the Consumer Protection Cooperation authorities found that 198 out of 344 claims with environmental characteristics or 57.7%, failed to provide adequate information that allows for assessment of their accuracy (European Commission, n.d.-f).

5.1 Greenwashing

Greenwashing or “corporate camouflage” (Michelon et al., 2016) is recognized as the most prevalent form of deception in terms of a company’s sustainability efforts. It represents a disparity between entity’s substantive actions and symbolic gestures, therefore potentially serving as a strategic communication tool that disguises company’s lack of efforts to actually commit to environmental practices (Walker & Wan, 2012). It is solely a “green talk” to satisfy shareholders, whilst concrete, substantial actions are neglected (Siano et al., 2017). Besides decoupling, literature also mentions other types of greenwashing, such as attention deflection of stakeholders, and hiding unethical business practices (Brown & Dacin, 1997). Greenwashing does not hold a general definition, due to its multidisciplinary characteristics, thus can be perceived by the observer in several different ways (de Freitas Netto et al., 2020, p. 10).

Different types or forms of greenwashing are coherently summarized by TerraChoice's (2007) concept of "Seven sins of greenwashing". Identified sins are hidden trade-off, no proof, vagueness, false labels, irrelevance, lesser of two evils, and fibbing. The sin of hidden trade-off is present when a company claims their product is "green" solely based on a narrow set of attributes, however they do not give attention to other crucial environmental issues. A practical example is the production of paper, which is not deemed environmentally friendly just because it is produced from sustainably harvested forest, but we must also consider GHG emissions, and chlorine use. The sin of no proof is when a certain claim is not backed up either by supporting information or reliable neutral party certification. For example, products can claim to be made from recycled materials, however no evidence is presented. The sin of vagueness means a claim is not clearly defined, thus its broad meaning can be misinterpreted by consumers. For example, cosmetic products can claim to be "all natural" when made from naturally occurring ingredients, even if they are poisonous. The sin of worshiping false labels means that a product gives the impression of being endorsed by a third-party, even if such endorsement does not exist. The sin of irrelevance is despite a claim being true, it is also unimportant, moreover, unhelpful to those seeking sustainable products. For example, being CFC-free is a frequent irrelevant claim, because chlorofluorocarbons were banned by Montreal Protocol. The sin of lesser of two evils occurs when a possibly true claim in a particular product category serves as a distraction and shifts consumers' focus away from a greater environmental impact of the whole category. Such examples are organic cigarettes or fuel-efficient sport-utility vehicles. Lastly, the sin of fibbing means environmental claims are completely false (UL Solutions, n.d.). Additional six sins of greenwashing were added after Scanlan conducted a research in the oil gas industry (de Freitas Netto et al., 2020, p. 9). The sin of false hopes reflects when a claim reinforces false hope. For example, ecological modernizations such as hydraulic fracking method might not be possible, and thus can be harmful to the environment. The sin of fearmongering is present when claims fabricate uncertainty associated with not "buying into" certain organizational practices. The sin of broken promises means a claim is made that something is done to, for example, help rural communities, but in reality, it leaves them with irreversible negative impacts, consequently exploiting their trust. The sin of injustice appears when a claim does not directly address the communities that are affected, and suffer the negative consequences of company's doing, but rather focuses on the ones that reap the benefits. The sin of hazardous consequences reflects claims that distract the public to hide inequality. The last addition is the sin of profits over people and the environment, which is also considered as being the most significant sin of them all (Scanlan, 2017).

Misleading consumers about the environmental performance or benefits an entity has can have negative effects not only on consumers, but also investors' confidence in environmentally friendly firms (Delmas & Burbano, 2011). Research shows that substantive and symbolic actions have different impacts on corporate financial performance. Substantive actions of environmental concerns, often termed as "green walk", have been shown to neither positively nor negatively affect a company's financials. Conversely, symbolic

actions, known as “green talk”, have a detrimental impact on firms financially. Inconsistencies between the two types of actions, or greenwashing, results in a negative financial effect, whereas green highlighting has been demonstrated to have no impact on financial performance (Walker & Wan, 2012).

5.1.1 Recognizing greenwashing

Greenwashing can be spotted by being attentive to words companies are using in their sustainability reports and advertising. EU regulators have identified a handful of such phrases (Rudgard, 2023), which are defined in the Green Claims Directive by the European parliament and council. For example, statements like “carbon neutral”, “climate neutral”, “100% carbon dioxide (CO₂) compensated”, or will be “net-zero” by a given year, can indicate that a company is relying on their carbon offsets rather than on lessening the emissions. Offsetting GHG emissions through “carbon credits”, which are generated outside firms own value chain, can be achieved through projects such as planting trees or investing in renewable energy (European Commission, 2023a). Thus, a company can maintain carbon neutrality as long as they pay to remove an equal amount of carbon somewhere else (Rudgard, 2023). An appropriate way to operate towards climate change mitigation would be if companies reduced emissions across their own value chain, or, if offsets are nonetheless used, address them in a transparent way. Moreover, the EU regulators state that companies ought to disclose information on the share of total emissions addressed through offsetting and what methodology they used. Only then are climate related claims correctly accounted for (European Commission, 2023a).

Furthermore, it is considered deceptive if the company omits indirect GHG emissions, by only disclosing direct ones. It should disclose Scope 1 emissions, which arise directly from production, Scope 2 emissions, which are indirect from purchased energy, and Scope 3, which are other indirect emissions that are either generated upstream or downstream. Upstream emissions are created within the supply chain during the production process, while downstream emissions are formed from the usage of the produced product. It is crucial for companies to disclose quantities of other indirect emissions, as those are usually the greatest, and can represent up to 90% of total emissions. Moreover, a company is expected to disclose information about carbon dioxide equivalents (CO₂e), such as methane (CH₄) and other GHGs, and not solely CO₂. Otherwise, it is not possible to compare the quantities of different types of emissions, consequently leading to lack of transparency in disclosures (Zero Carbon Analytics, 2024).

Using the phrase “greenest you can buy”, is another example of deceptive and vague communication of company’s sustainability. It is unclear about what the product is being compared to, how its environmental impact was measured, and whether the one responsible for its “greenness” are customers’ consumption habits or the product itself (Rudgard, 2023). Comparative environmental claims, whether asserting better or worse environmental performance, must be backed up with information that enables consumers to make an

adequate comparison. It is misleading if a company uses different formulas to calculate indicators for the same environmental aspects as others in the field. For example, if two separate entities make a claim on climate change, they should both include either solely direct impacts or a sum of direct and indirect impacts. Similarly, most significant parts of a product's life cycle, even if it entails different raw materials and processes, should be considered (European Commission, 2023a).

Commonly misused labels by corporations are “bio-based”, “biodegradable” or “compostable”, as they give a false impression that a certain type of plastic does not contribute to the pollution problem. Companies do not correctly define biodegradable plastics as those that break down simultaneously, and compostable as plastics that only break down under specific conditions in industrial compost facilities. Not only are the two phrases often confused for one another, but they are also not a guarantee that plastics will successfully degrade. On the other hand, bioplastic, which is made of organic materials, is not necessarily biodegradable, and is not inherently made without fossil fuels as a product can only be partially bio-based. To lessen the amount of deception in this area, EU regulators set up three rules. Firstly, labeling compostable plastic is only appropriate for confirmed industrially compostable products. Secondly, biodegradables must specify the environmental characteristics and timeframe of their breakdown. Thirdly, bioplastics ought to specify the exact share amount of bio-based materials (Rudgard, 2023). Moreover, if a product's components are bio-based plastics, agriculture and forestry must be examined, while fossil-based plastics oil extraction is the key focus point. Additionally, if plastics are biodegradable, the amount of trash left in a landfill is relevant, whilst it is not for non-biodegradable (European Commission, 2023a).

Furthermore, companies also should not claim credit for sustainability improvements, if they were achieved over a long period of time or are solely marginal. This is because most of the products today have improved their energy efficiency when compared to a few decades ago, due to tightened regulations (Rudgard, 2023). Thus, it is irrelevant to point out improvements over a product that is no longer on the market, unless significant advancement was achieved in the last five years (European Commission, 2023a).

Another example claims that potentially indicate greenwashing, are promises of improvements, such as GHG reductions by 2030. Moreover, it is crucial to distinguish if the company is disclosing relevant yearly comparison. It makes a big difference whether they are claiming a drop of a certain percentage from 2018, which is more appropriate, or from 1995. Thus, entities should specify what time period their claims are addressing, which enables consumers to sufficiently determine the improvement of their sustainability practices. Moreover, companies should ensure that reductions in one field are not going to cause using more resources in another (Rudgard, 2023).

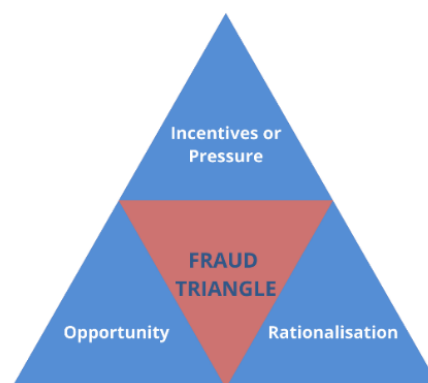
In the systematic review of concepts of greenwashing, de Freitas Netto et al. (2020), cite study conducted by Carlson et al., which explains two typologies of green claims. Namely

are claim type and claim deceptiveness. There are five different claim types. They can have product orientation and focus on a particular ecological attribute of a product, process orientation as they center on high ecological performance of production process or its disposal methods, image orientation if they are concerned with activities that improve eco-friendly image and public support, environmental fact if the claim about the overall condition of the environment is made by an organization, or a combination of different categories. Claim deceptiveness can either be acceptable, false/outright lie if it is fabricated or inaccurate, omission if it is missing information to validate it, vague/ambiguous if they lack clarity and definition, or a combination of different features (Carlson et al., 1993).

5.2 Fraud triangle

Tendencies to commit fraud are best described with Cressey's fraud triangle. Under its logic an individual who is considered to be fraudulent does not automatically perceive themselves as dishonest but rather as a victim of a combination of circumstances. Those circumstances are summed up as three pillars of the fraud triangle, which are pressure, opportunities and rationalization (Cressey, 1953). Incentives and pressures represent a motive for committing fraud, perceived opportunity is what initiates for the fraud to be perpetrated, and rationalism is internal corporate attitude that triggers fraud (Free, 2012). Fraud triangle, and its three pillars are illustrated in Figure 5.

Figure 5: Fraud triangle



Source: Adapted from Cressey (1953).

Because greenwashing is a form of fraud, and they are both reflections of information asymmetry among corporate stakeholders, its severity and frequency can also be reduced with a help of “fraud triangle”, in some sources also annotated as “greenwashing triangle” (Kurpierz & Smith, 2020). The triangle assists researchers and practitioners (Kurpierz & Smith, 2020) in exploring key motivational factors for committing fraud and helps them assess the intensity of fraud risk (KPMG International, 2020, p. 5). Moreover, it is used to combat the problem of greenwashing and strengthen CSR. Fraud triangle is a graphical

representation of information asymmetry coming from multiple actors (Kurpierz & Smith, 2020) and the three components it consists of are the conditions present when fraud occurs (Free, 2012). The presence of each factor is increasing as sustainability becomes more mainstream (KPMG International, 2020, p. 5). Sustainability fraud or greenwashing is increasing particularly in companies that are more aggressive with their environmental claims, which are demanded from consumers, competitors, and government (Lockard & Becker, 2009).

5.2.1 Incentives

One of the three components that shape the greenwashing triangle are incentives for sustainability fraud (Kurpierz & Smith, 2020). Overall companies are motivated to commit deceitful acts due to potential positive financial consequences (KPMG International, 2020) and to obey increasingly stringent environmental standards, which are often times hard to achieve (Kurpierz & Smith, 2020). But even if greenwashing occurs due to variable different reasons, most important are those of economic nature, which are led by market pressures originating from consumers and investors (Vos, 2009).

Incentives that encourage greenwashing behavior stem from the same roots as those that motivate companies to put out sustainability reports (Testa et al., 2018). These pressures lead companies to consider concealing the sustainability of their business activities by providing inaccurate or incomplete information (KPMG International, 2020, p. 6). Pressures, an element of white-collar fraud (Cressey, 1953) are drivers which come from an external environment (Delmas & Burano, 2011).

The first group of external drivers are regulations, particularly pressures from governance and policy makers. They monitor greenwashing and have a substantial effect on all other drivers (Delmas & Burano, 2011).

Following and complying with regulatory requirements is crucial for companies to avoid fines or in extreme cases loss of business. The trend of increasing number of stricter sustainability standards, frameworks and classification systems, such as EU Taxonomy, pressures companies to provide incorrect information and thus, partake in fraudulent reporting (KPMG International, 2020, p. 7).

Not only do companies greenwash to avoid non-compliance with the requirements, but also to attract favorable financial conditions from banks. In practice, banks, which loan deposits represent an important financing source to businesses, are more likely to give attention to sustainable, green businesses. Thus, entities commit sustainability reporting fraud to get better access and favorable conditions for raising capital. Examples of such fraud involve adjusting the data and incorrectly categorizing projects and investments as “green” to reach thresholds set by financial institutions (KPMG International, 2020, p. 6).

The second type of external determinants are pressures from investors, consumers, and competition for the firms to participate in green corporate behavior (Delmas, & Burbano, 2011). In contrast to policies and regulations, these are connected to the notion of the market, because companies gain an advantage and increase companies value if they successfully present themselves as earth-conscious (Vos, 2009, p. 680).

Investors are increasingly integrating ESG scores into their investment decisions and company valuation. The key motivational factor behind their mindfulness of sustainability originates either from a societal standpoint or from a financial risk perspective. On the one hand, investors are raising the criteria they expect businesses to meet, and on the other hand, companies are pressured into making deceptive reports to meet these criteria and gain access to capital investments, consequently reaching higher share price. Examples of fraudulent acts aimed at forming shareholders' perceptions include manipulating the information shared with ESG rating agencies, by providing them with inaccurate, incomplete, or unbalanced information (KPMG International, 2020, p. 6).

Similarly, consumers are also paying more attention to sustainability, thus increasing companies' incentives to greenwash to strengthen their reputation and meet client expectations. Thus, paradox is revealed, that "corporations can be ethically led to greenwash their reputations" (Vos, 2009, p. 680).

The next important external market pressure originates from the competitive forces. If companies wish to maintain their market share and competitive advantage, they must, among other things, also keep their sustainability at expected levels by adopting green practices, which involve greenwashing. This comparison is typically catered towards rivals within the same industry, particularly those which are perceived as being more successful and legitimate (Delmas & Toffel, 2008).

Furthermore, companies have incentives to report wrong data, because by reaching the green criteria they are able to bring their products to the market and reap benefits such as additional sales or continuation of contractual relationships, with locations as EU, which introduced new regulations as a part of Green Deal. Besides collecting revenues, companies are also motivated, because by successfully posing as "green", they can avoid costs such as taxes for carbon emissions (KPMG International, 2020, p. 7).

Renumeration is another pressure factor, and it can be assessed from two perspectives. Firstly, executives have a goal to meet set sustainability targets within variable compensation schemes, which can lead to reporting favorable data for financial benefits. Secondly, because board compensation schemes include stock options, companies have an incentive to enhance their sustainability reputation and performance. This way they not only boost their market value but also stock prices (KPMG International, 2020, p. 7).

The factors listed above are all connected to gaining financial advantages of committing sustainability fraud. Additionally, there are several "soft benefits" to fraudulent reporting,

which originate both from external pressures and perpetrator's own incentives. External incentives are most notably career opportunities or reputational advantages. Regarding the first type, some jobs and roles catered towards sustainability are part of career development within an organization. This means that disclosures reflecting stronger sustainability focus can advance individuals' career, thus giving them initiative to fraudulently report on sustainability performance. Reputational advantages, on the other hand, motivate the whole company to greenwash due to the external pressures and expectations from non-governmental organizations (NGOs), for example in the form of SDG's. Furthermore, a company might have a personal initiative to appear to have a higher sustainability performance, as it is motivated to be a part of prestigious forums, such as World Economic Forum in Davos (KPMG International, 2020, p. 7).

5.2.2 Opportunity

The next component of the fraud triangle is the opportunity. Its characteristics or "opportunities structure" vary vastly depending on the type of fraud (Benson et al., 2009), companies structure, and the type of information. This component is easiest to be controlled by the company itself by strengthening the procedures and policies, and by segregation of duties within internal management. For clearer understanding, the concept is divided into three subcategories, which are general ethical climate and control environment, internal control and lastly, reporting policies (KPMG International, 2020, p. 9).

Term general ethical climate also known as the "tone at the top" is a part of control environment of the specific organization which is one of the key components of internal control by Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Through the control environment an organization shows its ethical values and commitment to integrity, which are then propagated by a board of directors and senior management. Thus, the primary role of these two bodies is to establish the general ethical climate within the company, meaning the intensity of importance of internal control (COSO, 2013). With a general ethical climate, companies establish their behavior towards sustainability and its positioning within the company regarding whether it is a vital part of the company's strategy, risk or if it is rather seen only as having a role of marketing and compliance. This attitude is directly connected to the opportunity to commit fraud, thus if there is little to no focus on sustainability, the opportunity to be deceptive in reports increases. Control environment, which is directly connected to general ethical climate, is a process that ensures the reported data is accurate. This kind of data provision is often a procedure which is not centralized in one department, consequently not harmonized, which leads to an insufficient internal control environment for problems with sustainability. Examples of inefficiencies in unclear duty and responsibility segregation, undefined documentation processes, and unclear governance structure (KPMG International, 2020, p. 10).

The second factor, representing an opportunity to commit fraud, is internal controls. This is due to no automatic checks and balances in place for reports on non-financial information, and to lacking principles for verifying the accuracy of ESG reports. Lack of external assurance increases detection risk. Furthermore, another opportunity for fraud is lack of standardization, and stakeholders not possessing the right knowledge or tools to verify the accuracy of the claims (KPMG International, 2020, p. 10).

Lastly, reporting policies are factors that can trigger deceptive sustainability reports, thus an opportunity for fraudulent acts. They refer to various aspects of sustainability reporting, such as how to prepare and present the disclosures (Zenkina, 2023) and who to address them to (KPMG International, 2020). Even if the sole intent of standards and frameworks is to help companies maintain an adequate level of informative and analytical value of reports (Zenkina, 2023), them not being fully harmonized across all sectors can pose a threat on companies' transparency. Examples of manipulation of data due to insufficient reporting policies are creating false narrative disclosures, vaguely interpreting set standards both in definition and overall narrative of disclosures and being discrete in defining the scope and methodology used (KPMG International, 2020, p. 10).

5.2.3 Rationalization

Rationalization reflects how companies “rationalize” or “neutralize” their fraudulent acts by providing an explanation for their offense which is satisfactory both to the entity itself and its accusers (Cressey, 1968). In other words, the offender can convince themselves that the circumstances in which they operated justify their deceptive behavior. Thus, the rationalization behind the deception is that the progress towards ESG promises should be rewarded rather than punished, even if they fail to deliver. Because companies' stance on the problem is that “some progress is better than none” and that “ends justify the means”. Moreover, incentives to rationalize arise, because the option to have seemingly good ESG performance by not being transparent is comparably better than to be completely honest and risk layoffs and market loss (Association of Certified Fraud Examiners, Inc., 2022, p. 11).

5.3 Real life examples of Deception

Sustainability reporting rates are steadily increasing over time, as 79% of N100, and 96% of G250 companies have reported on sustainability in 2022 (KPMG International, 2022, p. 13). However, the lack of mandates, auditing, and third-party validation of the claims, leads to deceptive and incomplete disclosures (Kenneth, 2021). Consequently, companies are recognized by sustainability benchmarks such as DJSI, even though they have been involved in sustainability scandals. Notable examples of sustainability fraud are Volkswagen and H&M, both of which participated in greenwashing behavior, thereby jeopardizing their CSR principles (Siano et al., 2017). Furthermore, the controversy of British Petroleum (BP) is also included to help illustrate examples of greenwashing in sustainability reports.

5.3.1 Volkswagen

In September of 2015 it was discovered by the United States Environmental Protection Agency that some of Volkswagens manufactured diesel cars were equipped with software capable of detecting when they were being tested for emissions. The company intentionally programed its engines to turn on their emissions controls solely during regulatory testing. As a result, they were able to meet nitrogen oxides (NO) output standards, despite emitting up to 40 times more in reality. Not only did the scandal harm the air quality and the environment, but it also had a significant impact on Volkswagen's finances. Prior to the revelation of fraud, the marketing campaign praised the cars for their low emission output, leading to the sale of nearly 600,000 cars with illegal software in the US. However, after the company confessed to deceiving authorities, its market value plummeted by a quarter. Furthermore, they were fined over € 30 billion in fines and settlements, a process that continued until 2021 (KPMG International, 2020, p. 8). Therefore, the automobile producer's unethical practices damaged its global reputation and brand image (Blackwelder et al., 2016). The scandal, also referred to as "Dieselgate" (Siciliano, 2015), is a prime example of greenwashing behavior, that challenged the key CSR principles. Unethical behavior of the automobile producer is categorized as deceptive manipulation, which is another form of greenwashing besides attention deflection and decoupling. (Siano et al., 2017, p. 17). After the emissions scandal, the automaker was dropped from DJSI, which it was a part of for 13 years. Critics argued that the Volkswagen debacle risked credibility loss of sustainability rankings (Makortoff, 2015).

5.3.2 H&M

H&M is another example of sustainability fraud. Even though the deception is connected to their marketing, the example is still considered as the part of nonfinancial reporting fraud similarly to other false labeling and advertising instances (Association of Certified Fraud Examiners, Inc., 2022). In April 2019, H&M launched its Conscious collection, where they claimed every clothing piece was made from sustainably sourced materials. Later, the Norwegian Consumer Authority discovered, that their marketing was misleading, and that the percentage of sustainable garnets used was not sustainable. Such deceitful actions misled the customers to buy clothing they would otherwise not purchase, which consequently financially benefited the company (KPMG International, 2020, p. 8). This is a straightforward example of how a company participated in symbolic reputation building, without actually incorporating substantive actions (Kim et al., 2007). Despite problems with sustainability, H&M has been recognized by benchmarks such as DJSI, Dow Jones European Index, S&P Global Sustainability Yearbook and more. Furthermore, they were ranked 6th out of 250 fashion brands by the fashion Revolution's 2023 Fashion Transparency Index, and 1st in the Fossil Free Fashion Scorecard 2023 (H&M Group, 2024, p. 15).

5.3.3 British Petroleum

BP is one of the key players in the upstream oil and gas industry, which was shown to have a potential bias for sustainability reporting, due to failing to implement the triple bottom line concept. Namely is considered being fraud in CSR (Kwarto et al., 2024). In April 2010 there was an environmental disaster, where the explosion caused by BP tore through the Deepwater Horizon. Not only did the crisis impact the environment, but there were also eleven crew members that were victims. Thus, both environmental and social components of CSR were questioned. It was later found that the explosive loss could have been prevented, and that systematic failures and risk management were the reasons the key drivers to the disastrous outcomes. Thus, to ensure both environmental protection and human safety, reforms of regulatory oversight and internal decision-making process had to be done (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011, p. 7). In their 2021 Annual Sustainability report BP clearly states that documenta inherent limitation is a selective enquiry of the examined information, which can lead to occurrence or non-detection of fraud, error, or non-compliance. Thus, non-financial information is subjected to more limitations, when compared to the companies' financial disclosures. The shortcoming can be attributed to the sole nature and methods used to determine, recalculate, sample, and estimate such information. Moreover, errors can occur due to lack of physical inspection of companies operating assets. Nevertheless, sustainability reports are still important to be shared with stakeholders to keep them informed about ESG matters of the company (BP, 2022). Despite the adverse impact on the environment, BP won Australian Aviation's 2023 Sustainability Initiative of the Year Award, which recognized the company for its sustainable practices of products, services, and overall culture (BP, 2023).

6 RISKS ASSOCIATED WITH MISREPRESENTATION OF REPORTS

6.1 Risks

The risk associated with misrepresentation of sustainability reports is labeled as fraud risk (Power, 2013). It is the responsibility of every company's executive to be proactive, aware of the risks of deceptive sustainable reporting, and not simply ignore the sustainability problems they potentially have. Thus, to be able to take action and mitigate the risks, companies should never simply overlook supply chain problems and internal programs for fear of finding undesirable outcomes (Association of Certified Fraud Examiners, Inc., 2022).

ESG fraud most notably results in financial risk, but its impact carries on also to other aspects such as reputational and compliance risk. An example of financial loss is if a carbon-offset provider charges a company for the services they fail to provide. Furthermore, uncovered misstatements in sustainability reporting also have a huge financial impact on the organization. Reputational risk is considered to pose an even bigger threat, and damage the

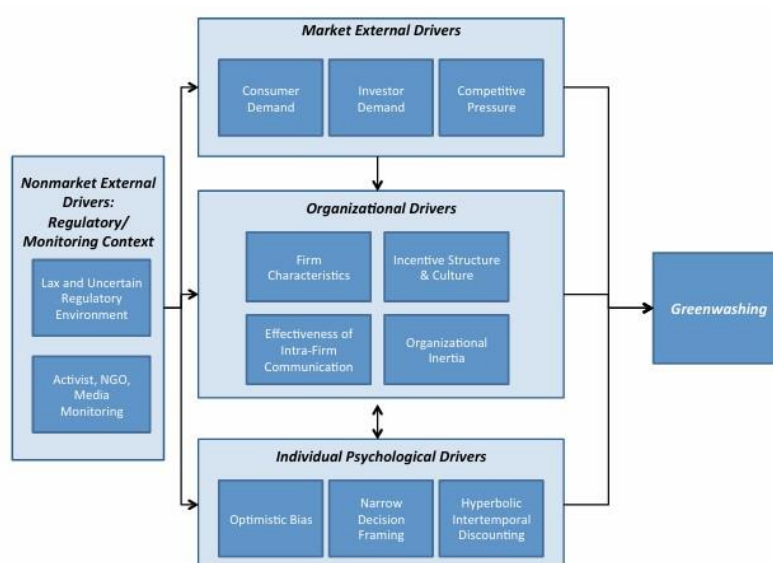
company to a greater extent, in comparison to financial risk. A company's misleading behavior and ignoring sustainability issues can cause the investors to lose trust, customers to boycott, and employees to leave the company that does not align with their values. Consequently, reputational risk leads to financial losses. Lastly, compliance risk is a result of evolving sustainability regulations. For example, fraud and bribery lead to law violations, which result in regulatory actions, financial penalties and reputational damage (Association of Certified Fraud Examiners, Inc., 2022).

6.2 Risk management and mitigation

Fraud risk is mitigated with risk management and control, which are both managerial and regulatory responsibilities of every organization (Power, 2013). Although the intensity of fraud risk varies depending on the scale of organizations, all can combat it in a similar manner, by implementing fraud triangle model. Thus, we analyze incentives, opportunities, and rationalization, and ways to effectively mitigate the risk (Schuchter & Levi, 2016). Regarding the incentives for deception, companies face a dilemma, whether to risk being severely punished for fraudulent acts or reap large awards if they succeed (Kurpierz & Smith, 2020). To minimize these pressures, it is important to recognize incentives' structure is based on cost-benefit analysis. Thus, it is necessary to change and restructure the system, which is currently organized in a way that makes the rewards for successful greenwashing outweigh the costs of being caught. Key to lessening intensity of incentives is strengthening the punishments by implementing high penalties for cheating, consequently making greenwashing less attractive (Kurpierz & Smith, 2020). As of now, the EU is set to implement new regulations for preventing greenwashing. Current penalties are a fine of 4% of annual turnover, exclusion from procurements, and losing revenues. Under new rules, companies would be required to verify their environmental claims before marketing them. These new rules are supported by Internal Market and Environment committees and would be set as a complement to the current EU greenwashing ban (European Parliament, 2024).

Because greenwashing and fraudulent reporting inherently arise due to the same causes, they share common treatment patterns. Delmas and Burbano (2011) developed a framework which, through examining different drivers for misbehavior, produces recommendations on how to decrease the phenomena of fraud, consequently, mitigate greenwashing. Drivers are categorized into external, organizational, and individual. External are demand and pressures stemming from consumers and investors for the firms to participate in green corporate behavior. Furthermore, regulations are also considered external drivers, however non-market. They monitor greenwashing and have a substantial effect on all other drivers. The organizational driver is the firm's own incentive structure and level of ethical orientation of its corporate climate. Lastly, individual drivers are cognitive tendencies of each individual, and their effect on decision making. These decisions are based on imperfect and limited information that increases uncertainty. Categories greenwashing drivers are presented in Figure 6 (Delmas & Burbano, 2011, p. 32).

Figure 6: Drivers for greenwashing



Source: Delmas & Burano (2011, p. 32).

To mitigate greenwashing, actions should be taken to increase transparency, improve knowledge about greenwashing and align firm's internal structures, incentives and processes (Delmas & Burbano, 2011).

Firstly, openness about environmental performance can be improved by mandating disclosures and by promoting the inclusion of voluntary disclosures by policymakers, managers and NGO's. For mandated disclosures policy makers order firms to put out an annual disclosure of environmental performance metrics and environmental characteristics of their product. Moreover, policy makers can collaborate with NGO's in verification of reports. On the other hand, voluntary disclosures can be encouraged by policy makers and NGO's by creating new ecolabels for a wider range of products and characteristics, while at the same time ensuring standardization to provide clarity. Voluntary disclosures on environmental performance can also be promoted by managers, whose role is to share best practices and collaborate with other firms, NGO's and the government. Secondly, if we seek to improve and facilitate knowledge about greenwashing, we can either ensure sharing of information about greenwashing incidents by NGO's, or by reducing regulatory uncertainty by implementing uniformed, international standards for environmental disclosures. Thirdly a more effective alignment of internal corporate structures can be reached by managers' actions which can be either improving information, which is related to environmental communication decisions, providing training on ethical leadership, or aligning employee incentives. Information on environmental communication can be improved by more centralized decision making, sharing information on environmental performance indicators with public relations or communications divisions of the company, sharing best practices within the firm, assessing flexibility and speed of possible implementation of incremental changes, and staying attentive about companies' tendency to overestimate the likelihood of

positive events and to be impatient in the short-term. Moreover, the managers that wish to be ethical leaders ought to constantly emphasize the importance of ethical behavior and open communication, additionally they can also provide courses and training to inform employees of risks and repercussions for greenwashing. Lastly, to align incentives of employees, managers can reward employees that identify greenwashing and punish those that are involved in such actions (Delmas & Burbano, 2011).

The availability of information can be improved by actions taken by regulators and monitors, such NGO's. This way they can increase certainty about punishment for greenwashing behavior and help moderate negative cognitive tendencies. Action can also be taken by managers, which can help control both individual internal tendencies and organizational level greenwashing drivers. Thus, the best approach to decrease positive environmental performance communication by "brown" firms, is for all three stakeholders (regulators, NGO's and managers) to work together (Delmas & Burbano, 2011).

7 DATA AND METHODOLOGY

7.1 Sample companies' data sources

The selection process of companies which are appropriate candidates to analyze for fraudulent sustainability reporting included choosing European companies, which have published a considerable sum of sustainability reports and claim to be progressive in sustainability. Selection of appropriate companies was further refined through consultation with Dr. Andreja Kodrin, who provided other relevant examples of companies which were accused of not being sustainable. Research was conducted using secondary data sources, particularly financial statements, sustainability reports, media publications, and sustainability reporting standards. Firstly, financial statements, specifically Nestlé's, were retrieved from the financial database S&P Capital IQ. Secondly, sustainability reports were retrieved directly from each company's websites. Thirdly, media publications were collected from different credible news sources, moreover articles were also retrieved from specialized sustainability reporting platforms. Lastly, both ESRS and GRI standards, were retrieved from official websites of the sustainability reporting standards. To ensure conducted case studies are robust, they rely on multiple sources of evidence, thus the data is converged in a triangulating fashion (Yin, 2003, p. 14). In sum, utilized sources are entity's sustainability reports, applicable ESG frameworks and standards, articles about entity's sustainability practices, and its notable ESG impacts, and ESG scoring.

7.2 Explanation of empirical methodology: Study case

The approach employed to explore sustainability reporting fraud are case studies. Namely are most applicable to the research as the mix of both qualitative and quantitative evidence

are used (Yin, 2003, p. 15). Variant of case study design applied is a single-case study approach (Yin, 2003, p. 14). Particularly two single study cases were conducted, where each company was analyzed for its involvement in fraudulent reporting practices in their sustainability reports. Two cases were selected as they enable us to compare contrasting situations (Yin, 2003, p. 54), particularly between a publicly traded multinational corporation, and limited liability Slovenian company, which operates on a comparably smaller scale. Study cases are explanatory, thus causality behind sustainability reporting fraud is covered (Yin, 2003, p. 17).

Research design is catered around study's question, which is defined as: "How prevalent is misleading sustainability reporting, and how do discrepancies usually manifest?".

Each study case has multiple units of analysis and is therefore referred to as an embedded case study (Yin, 2003). On the one hand both cases include an analysis of overall corporate structure of each organization, sustainability reporting practices and external perception. On the other hand, intermediate units somewhat differ among the two study cases, due to particularities in material topics of each entity. Firstly, the Environmental impact section for Nestlé's study case includes analysis of units: Recycling claims, Emissions, Deforestation-free claims, and Offsets and Net-Zero targets, while for PP the units are: Fuel consumption, Emissions and Use of renewable materials and Sustainability goals. Secondly, the Social responsibility section for Nestlé study includes analysis of units: Social impact of pesticides usage, and Child labor, while no units of analysis are present for PP, because no discreteness connected to social spectrum were detected. Thirdly, the Corporate governance section analysis of units are only present for PP, and are: Alignment with ESG reporting standards, and presence of Third-party assurance. A summary of the units of analysis can be found in Table 6, located in Appendix 2.

Described units of analysis define overall construction of the study cases, both of which followed an identical structure, allowing for a comprehensive comparison between deceptive practices of the two entities. Moreover, due to both Nestlé, and PP's acquirer MHP falling within the scope of companies that will be obliged to put out ESRS reports in 2026, each deceptive practice was additionally analyzed through these European disclosure requirements.

7.3 Limitation of data collection

There are limitations to the approach of writing complete case studies that focus on the detailed information in companies' sustainability reports. First, the case study method requires extensive research, which is not only time-consuming to gather but also to analyze, as each potential example of sustainability fraud must be thoroughly examined with critical thinking in place. This is particularly challenging because poor sustainability practices by a company do not necessarily indicate fraudulent reporting practices. Therefore, it is crucial to be aware of potential bias when writing case studies.

Additionally, examining different perspectives on sustainability, reporting problems issues and violations requires significant effort and patience, as the problems are often ambiguous. This means that initial conclusions are formed, but when revisiting the case with new information, interpretation could change entirely. A key challenge is constantly staying aware of new, relevant information that needs to be incorporated into the examples of sustainability fraud.

Another issue with the study case approach is that the cases must be structured in a way that other researchers can apply the methods developed for detecting sustainability fraud to their own cases. Even though some similarities between examples of sustainability reporting fraud exist, they are only present to a certain extent, making case studies only partially applicable to other entities. This complicates the process of comparing different cases and forming conclusions, as insights drawn from one company may not predict the outcomes for another.

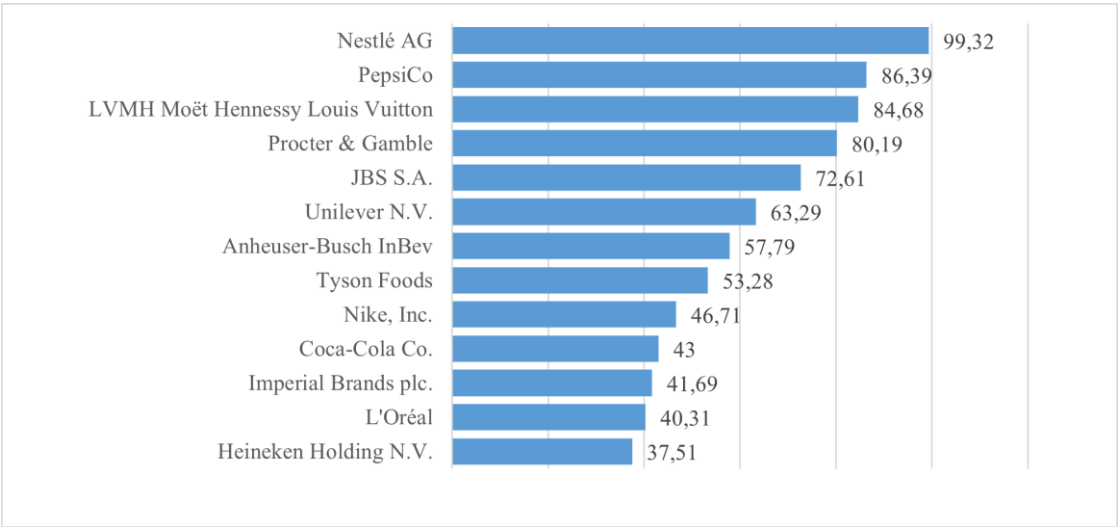
8 STUDY CASES

8.1 Nestlé

8.1.1 Overview of the company

Nestlé S. A., founded in 1866 in Vevey Switzerland (Nestlé, 2024a), is considered world’s largest food and beverage company (Nestlé, n.d.-a). As showcased in Figure 7 in 2023 it was the leading Fast-Moving Consumer Goods (FMCG) company based on net sales (Consumer Goods Technology, 2024).

Figure 7:Leading FMCG companies worldwide in 2023, based on net sales (billion U.S. dollars)

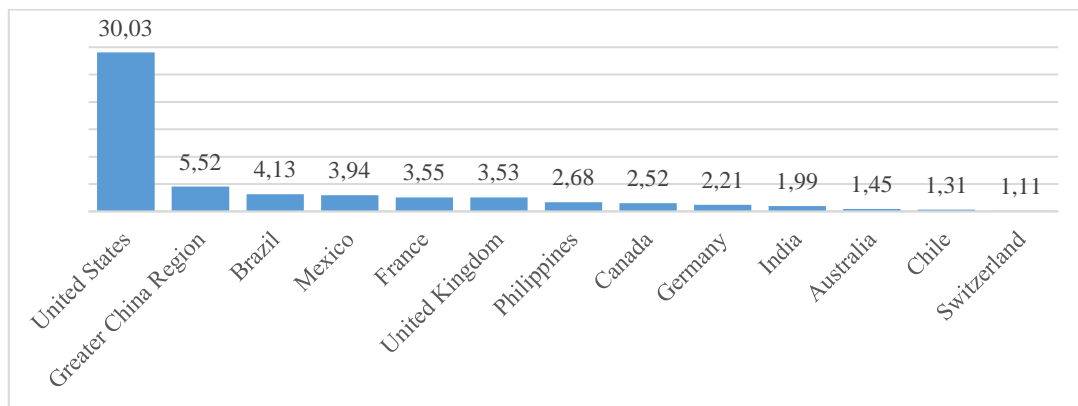


Source: Adapted from Consumer Goods Technology, (2024).

Nestlé manufactures and distributes products from various categories. Most sales come from powdered and liquid beverages, then in descending order pet care, nutrition and health science (through Nestlé Health Science and Nestlé Skin Health), prepared dishes and cooking aids, dairy products, confectionary, and lastly water (Nestlé, 2024a).

As of now they have 270,000 employees, 2,000 brands (Nestlé, n.d.-a) and are present in 191 countries, in 86 of which they have factories (S&P Capital IQ, n.d.-a). Multinational company operates in five different geographical zones (Nestlé, 2021a). According to Nestlé's 2023 Annual Review their sales reached the highest number in North America zone, with CHF 32.55 billion, in the second place was Europe with CHF 22.29 billion, then 19.87 in Asia, Oceania and Africa zone, CHF 12.76 in Latin America and lastly CHF 5.52 billion in Greater China (Nestlé, 2024a, p. 32). The amount of sales in CHF in different geographic areas is shown in Figure 8.

Figure 8: Nestlé Annual 2023 Sales by geographic areas (billion CHF)



Source: Adapted from Nestlé (2024a, p. 35).

The company has two joint ventures which operate in the same industry, namely are Cereal Partners Worldwide and Froneri. Recent alteration to Nestlé's business structure occurred in 2019, when they agreed to sell 60% stake in Herta to Casa Tarradellas, which led to formation of a joint venture where Nestlé retained 40% stake, while Casa Tarradellas holds 60% (S&P Capital IQ, n.d.-a). The shipping activity of the company is structured in a way that most of imports are from United States, then Peru, after come Mexico's imports and exports, and lastly Columbias imports (S&P Capital IQ, n.d.-c).

8.1.2 Sustainability Reporting Practices and External Perception

Striving to satisfy consumer needs in a responsible and sustainable manner through innovation is Nestlé's main form of addressing the everchanging times (Nestlé, n.d.-a). In their annual business report the company explicitly states they are focused on nutrition, health and enhancing quality of life of its consumers (Nestlé, 2023), in other words "Creating Shared Value" (CSV). Their sustainability approach is summarized into seven

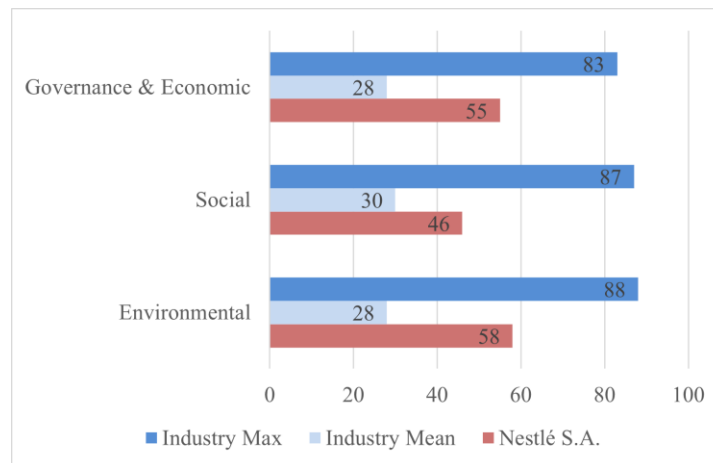
aims: commitment to net zero emissions, supply chains without deforestation, advanced agriculture, improved water stewardship, packaging of a better quality with longest end of life options, creating opportunities for the young, and having a diverse and inclusive workforce (Nestlé, n.d.-b). Moreover, the company's ESG and sustainability council shares a strategy that both addresses and reports on the following topics: 2050 net zero, sustainable packaging, water, responsible sourcing, upstream human rights, communications, advocacy, systems and reporting (Nestlé, 2024b).

For their CSV reports the company utilizes GRI consolidated standards, moreover SASB standards are applied for Processed Foods sector and World Economic Forum Stakeholder Capitalism metrics (Nestlé, 2024b, p. 71).

Nestlé's sustainability focused agenda was recognized by RobecoSAM's DJSI which is a result of the analysis of financially material ESG factors (Nestlé, 2017). They scored 89 out of 100 in 2015 (Nestlé, 2015), 92 out of 100 in 2016 (Burrows, 2016), and 89 out of 100 in 2017. When comparing the index to the industry we come to the following conclusions. Their 2016 score was twice as much as the sector average, which stood at 39. Moreover, they scored 100 points for the environmental assessment (Burrows, 2016), which is a higher rating in comparison to 2015's 99 points (Nestlé, 2015). Secondly, in 2017 Nestlé was rated as the number one in the food products category of DJSI. In addition, they received the best industry scores in the economic and environmental spectrum. On one hand, the economic dimension score was a result of companies leading in innovation, health and nutrition of their products. On the other hand, environmental achievements were attributed to their operations, where the company opened a new manufacturing unit with neutral impact on water, waste and emissions (Nestlé, 2017). However, in 2021 the company was dropped off the list after reporting review of their sustainability practices was done (Jenkins, 2021).

Regarding its ESG ratings the total risk score of Nestlé is 27.3, which is the 58th percentile, reflecting the medium ESG Risk Score. When we look at the specific factors within ESG risk score, the environmental risk score was 10.7, social 11.7 and lastly governance 4.9 (Yahoo Finance, n.d.). Similarly, Sustainalytics put the company's 22.7 rating in the medium ESG risk range. It reflects medium exposure to industry-specific material ESG risks. Compared to the industry that puts Nestlé in 56th spot out of 646, and on 6,639 out of all companies in the system, 16,215 in total (Sustainalytics, 2023). Furthermore S&P Global gave the company ESG score 60 out of a 100, where environmental aspects got a score of 65, social aspect score 58, and governance and economic category score 56. As shown in Figure 9 Nestlé's ESG score is higher than the industry means in all three ESG spectrums (S&P Global, 2024).

Figure 9: Nestlé's 2023 S&P Global ESG Score compared to industry max and mean



Source: Adapted from S&P Global, (2024).

Regarding the environmental spectrum of ESG, on January 2024 Nestlé put out its Agriculture Framework. It defines corporate vision for regenerative agriculture, which is according to the document: “... an outcome-based farming approach that protects and improves soil health, biodiversity, climate, and water resources while supporting farming business development, according to the Sustainable Agriculture Initiative Platform.” Sustainable Agriculture Initiative (SAI), which Nestlé is a member of, provides financial and technical support to farmers who adopt sustainable practices. Examples of initiatives that help reduce environmental impact and benefit local farming communities include more than 300 projects and programs of a larger scale such as Nespresso AAA, Nescafe Plan and, Nestlé Cocoa Plan (Nestlé, 2023b, p. 3). Nestlé’s prioritization of biodiversity and land use puts the company in the minority of 19.55% of industry respondents which either published policy or expressed commitment to biodiversity in other way. Likewise, in regard to energy, transition, resource efficiency and circulation assessment, Nestlé was ahead of the industry in GHG Scope 1 intensity (S&P Capital IQ, n.d.-b). Scope 1 GHG emissions are those, which come directly from a source that is either owned or controlled by a company, such as emissions from vehicles and organizations facilities (U.S. Environmental Protection Agency, n.d.). However, they are behind in Climate Transition and Physical risk categories. Firstly, they have a rating of more than 5°C long term warming, which is limited to 1.5°C by Paris Alignment. Nonetheless, only 1.52% of the industry aligns within the 1.5-2°C range. Secondly Nestlé’s composite score for the 2030 medium risk scenario is 53/100, slightly better than 3.11% of the industry average (S&P Capital IQ, n.d.-b).

In the social measures, company is better than the industry in terms of female employees in management with 45.30%, which is by 104.15% better than the industry average. Their employee turnover, lost-time injury frequency rate is not reported on. In publishing human rights policy, Nestlé is part of the 68.84% majority of the industry (S&P Capital IQ, n.d.-b).

Lastly in governance, their corruption and bribery code of conduct is similar to the majority (78.19%) in its industry, they have above average number of female directors (5 in comparison to the average 2), they did not report the CEO to employee pay ratio and they are among the majority (94.67%) that have not performed a sensitivity analysis on non-financial risks (S&P Capital IQ, n.d.-b).

8.1.3 Identification of Discrepancies

There are several issues with the claims Nestlé disclosed in its sustainability reports over the years. Namely include their ineffective approach to climate change with unattainable recycling and emissions targets, ambiguous deforestation-free claims, cooperation with suppliers that spread pesticides and being vague about child labor instances.

Nestlé falls within the scope of companies which will be obliged to put out ESRS reports, as it reaches the balance sheet, net sales and average number of employees thresholds. Therefore, each discovered discrepancy is additionally observed from a perspective of the standard. Attaining the reporting requirements of ESRS will help the company address some of the sustainability reports' shortcomings including the examples of fraudulent and deceptive claims.

8.1.3.1 *Environmental impact*

8.1.3.1.1 *Recycling claims*

In sustainability reports Nestlé states that they strive to design plastic packaging that is going to be above 95% recyclable by 2025. Moreover, their aim is for their packaging to be 100% recyclable, reusable or compostable (Nestlé, 2024b, p. 41). Such statements are misleading because they give a false impression to the customers, who might start viewing single-use packaging as sustainable. Moreover, it is argued that no kind of recycling can compensate for the scale of plastic pollution (ClientEarth, 2023). Furthermore, vagueness of the claim can lead to misunderstanding of what is the difference between recyclable, reusable or compostable.

Nestlé's false labeling is also concerning when their global plastic pollution contribution is considered. Research done with data from 2018 to 2022 from 84 different countries worldwide shows that 50% of plastic waste was unbranded, while the top five brands globally accounted for 24% pollution. Nestlé shared third place with Danone, and they were each responsible for 3% of total global plastic pollution. Coca-Cola took the first place with 11% and PepsiCo the second place with the total of 5% (Cowger, et al., 2024). To conclude, Nestlé's recycling claims, fall into false labeling, specifically it is an example of affirmative declaration or assertion according to nonfinancial reporting fraud taxonomy by Grant Thornton (Association of Certified Fraud Examiners, Inc., 2022).

Furthermore, two major inconsistencies regarding recycling are detected when comparing Nestlé's sustainability reports from 2021 to 2023. Firstly, both in their 2020 and 2021 CSV report, the conglomerate failed to provide the information about the total weight of plastic packaging. Thus, they withheld the information and only shared data on the amount of packaging pieces placed on the market (Nestlé, 2021b; Nestlé, 2022). This, however, started to be disclosed in later sustainability reports, meaning in 2022 and 2023. Secondly, the way they are reporting on recycled plastic is deceptive due to unsustainable goals they set for the percentage of plastic packaging that would be designed for recycling. In their 2021 sustainability report they state the goal for 2025 is to have 100% of packaging for recycling, which they later changed to 95% in 2022's report. This indicates Nestlé's tendency to overstate the goals they ought to reach, to appear more sustainable and build their reputation with symbolic actions rather than substantive.

The company's shortcomings of disclosures about recycling would be addressed with ESRS. Section Resource use and circular economy (ESRS E5), specifies the disclosure requirements about resource inflows, outflows, and waste (European Commission, 2023b, p. 31). Furthermore, ESRS will help Nestlé with defining metrics and Targets related to resource use and circular economy with the section E5-3 of disclosure requirements (European Commission, 2023b, p. 176). The disclosure requirement states that any kind of set targets must refer to guidance with scientifically acknowledged methodology, such as the Science-Based Targets Initiative for Nature (SBTN). Furthermore, the goals prioritized by a company should be of absolute value (European Commission, 2023b, p. 188).

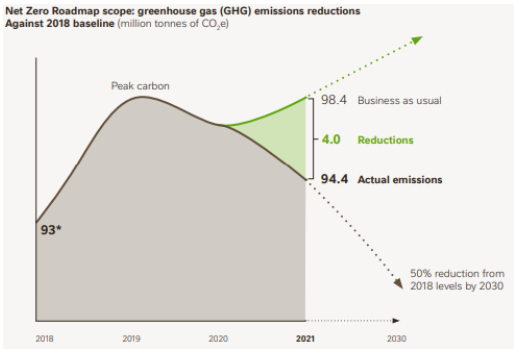
8.1.3.1.2 Emissions

Another concerning fraudulent reporting practice of Nestlé is, their failure to provide information on CO₂ in 2020 and all the years prior. In their 2020 sustainability report emissions were only mentioned in the context of commitments to achieve net zero GHG emissions by 2050, with the help of their Net Zero Roadmap (Nestlé, 2021b). Such statements, without actual disclosures on amounts and reduction calculations indicate an intangible nature of set objectives. The only numerical data they provided was GHG emissions reduction as a % variation since 2010. Thus, in their sustainability report it is stated that they achieved “37% decrease in direct and indirect emissions per ton of product since 2010.” (Nestlé, 2021b, p. 6). All of the data about different types of emissions was provided in the CSV Appendix, which is a separate document from an actual sustainability report (Nestlé, 2021c), while the year prior they have included the data in non-financial report (Nestlé, 2020). Three different scopes of emissions (Scope 1, 2, and 3) were first mentioned in the 2021 sustainability report. Although quantified GHG emissions are reported in million tons of CO₂e, it's important not to overlook, that Scope 3 emissions are not considered in company's net zero roadmap (which targets a 50% reduction from 2018 levels by 2030). Not including Scope 3 emissions, which are all other indirect emissions, in the scope for net zero calculations is problematic (Nestlé, 2022, p. 21), considering that they currently represent 94.8% of total amount of emissions (Nestlé, 2024c, p. 6). Furthermore,

in their most recent sustainability report, even though they have begun addressing the importance of minimizing Scope 3 emissions in their Net-Zero Roadmap, these indirect emissions are not disclosed in sufficient detail. Specifically, they are not categorized as required by the GHG Protocol (Ethos Foundation, 2024).

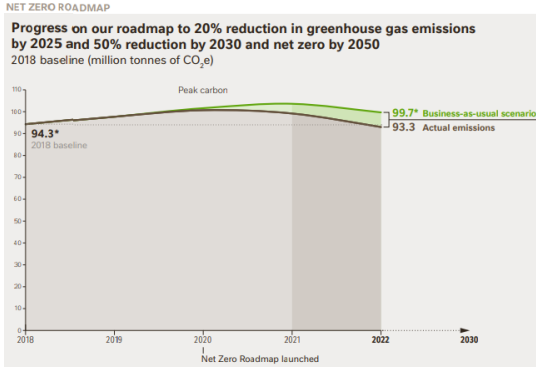
An additional problem with Nestlé’s emissions disclosures in the CSV reports is their depiction of when was the peak of emissions. In their 2021 report, Nestlé provided information shown in Figure 10, where the graphical representation of the GHG data it appears that peak of their emissions was recorded two years prior, in 2019 (Nestlé, 2022). But when we compare this non-financial report with 2022’s disclosures, presented in Figure 11, the peak record is presented to take place in 2020. Thus, in a year, where in their 2021’s report they explicitly showed that their GHG emissions lessened in comparison to the year prior (Nestlé, 2023a). Nestlé’s small print explains that annual restatements of amounts of emissions are made due to “acquisitions, divestitures, emissions factor restatements and adjusted scope” (Nestlé, 2022, 2023a, 2024b) however it is still unclear how the peak of GHG emissions varied between 2021 statements, and all of the ones that came afterwards.

Figure 10: Nestlé’s 2021 GHG emissions reductions against 2018 baseline (million tons of CO₂)



Source: Nestlé (2022, p. 21).

Figure 11: Nestlé’s 2022 GHG emissions reductions Against 2018 baseline (million tons of CO₂)



Source: Nestlé (2023a, p. 10).

Nestlé’s explanation that annual adjustments and restatements make GHG emissions incomparable across different years makes it difficult for shareholders to get a comprehensive understanding of the company’s relative progress in emission reduction over time. However, this is not necessarily misleading, as updating the methodology for calculating emissions is beneficial, particularly when shifting from a business-as-usual comparison to a more transparent base year comparison. In the years 2021 and 2022 they disclosed exact quantities of million tons of CO₂e reduction, compared to business-as-usual. Nonetheless Nestlé states, that due to changes in their calculation methodology in 2022 “data for 2021 and 2022 are not comparable” (Nestlé, 2023a, p. 3). Later, in the most recent, 2023, sustainability report they stopped disclosing emissions net reductions compared to business-as-usual scenario and introduced a new indicator. It includes a comparison of net reduction of GHG emissions to 2018 baseline (Nestlé, 2024b). It changes from one year to another, thus again allowing neither comparability with prior nor between the years that are to follow.

Changes of the indicators are illustrated in the comparison of Figure 12 and Figure 13, which present incomparability between disclosed data on Nestlé’s GHG emissions reduction.

Figure 12: Nestlé’s disclosed CO₂ emissions reductions from 2020 to 2022 compared to business-as-usual (million tons of CO₂)

KEY PERFORMANCE INDICATOR	2020	2021	2022
Million tonnes of CO ₂ e reductions compared with business-as-usual scenario ¹	N/A	-4.0	-6.4 ²

Source: Nestlé (2023a, p. 10).

Figure 13: Nestlé’s disclosed GHG emissions reductions from 2020 to 2023 compared to 2018 baseline (%)

KEY PERFORMANCE INDICATOR	2021	2022	2023
Net reduction of GHG emissions vs. 2018 baseline ¹ (%)	-	-	13.58%

Source: Nestlé (2024a, p. 3).

Similarly to their recycling claims, following ESRS would enable Nestlé to provide transparent disclosures about their emissions. They are covered in dedicated to Climate change (ESRS E1) (European Commission, 2023b, p. 3), particularly in disclosure requirement gross Scopes 1, 2, 3 and total GHG emissions (E1-6) (European Commission, 2023b, p. 88).

8.1.3.1.3 Deforestation-free claims

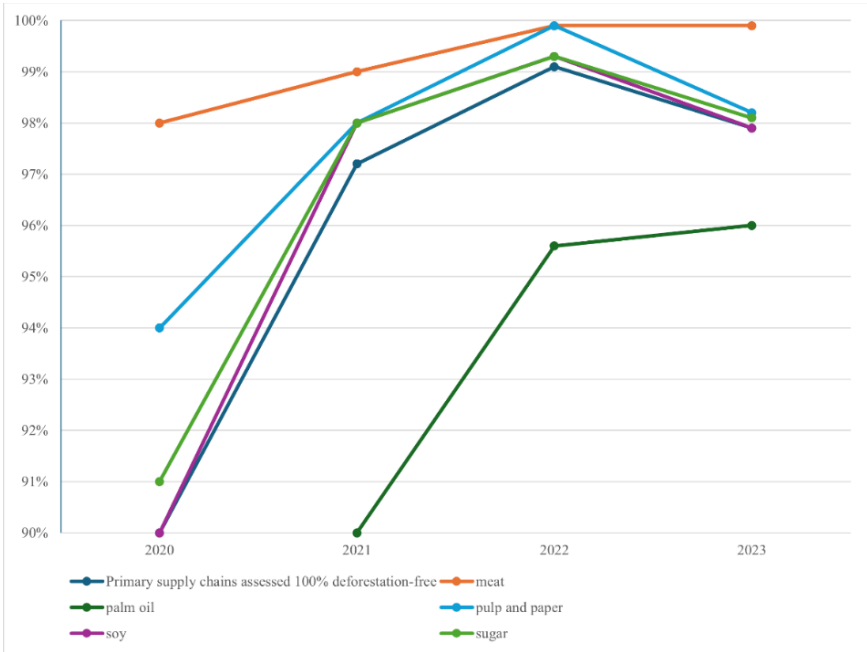
One of the top priorities of Nestlé is to produce its products without deforestation. Therefore, a decade ago they pledged to end deforestation by 2020. The company did not reach 100%, but rather 90% by 2020 (Nestlé, 2021d, p. 3). Moreover, instead of using extensive tracking,

Nestlé’s determination was primarily based on sourcing from lower-risk regions such as Europe and the United States (Tompkins, 2021).

In their sustainability reports from 2019 to 2022, the company included the amount of deforestation-free production in their primary supply chain for meat, palm oil, pulp and paper, soy and sugar. For these raw materials they set a goal to be 100% free by the end of 2022. However, in their most recent non-financial report in 2023, they additionally included cocoa and coffee, for which they have the objective of being deforestation free by the end of 2025. The inclusion of a wider range of raw materials used is appropriate as cocoa and coffee are also commodities which have the highest impact on deforestation.

Nonetheless their aim to have the primary supply chain 100% deforestation free by 2022 fell short. Even though over the years assessed percentage amounts of deforestation-free increased, in 2023, there were drawbacks, as pulp and paper, soy, sugar had lower share amounts assessed as deforestation free. Namely is illustrated in Figure 14, which shows Nestlé’s commitments to have deforestation-free supply chain were not met.

Figure 14: Nestlé’s deforestation-free supply chains for raw materials meat, palm oil, pulp and paper, soy and sugar from 2020 to 2023 (%)



Source: Own work.

Nestlé’s failure to hold their suppliers accountable for deforestation was also a finding of Rainforest Action Network. Namely state that Nestlé’s policy of deforestation is not strict enough as it lacks deadlines for when they are ending deforestation and human rights violations in their supply chains (Rainforest Action Network, 2024a). Furthermore, the company weakened its definition of deforestation by exempting small farms or smallholder farmers in their 2023 Responsible Sourcing Core Requirements (Société des Produits Nestlé

S.A., 2024a, p. 14). This exemption is particularly problematic because, as stated by Daniel Carrillo, Forest Campaign Director for Rainforest Action Network, “deforestation for palm oil is increasingly driven by land speculators operating under the guise of “smallholder farmers”. Additionally, the company has become increasingly connected to suppliers, such as Royal Golden Eagle, that are linked to deforestation (Rainforest Action Network, 2024a), and were exposed for purchasing illegal palm oil from a protected wildlife reserve (Rainforest Action Network, 2022). Participating in illegal palm oil purchases and participating with suppliers which were consistently proven to be involved with deforestation, while at the same time pledging to adopt forest positive promises (Rainforest Action Network, 2022, p. 10) is, to say the least, deceptive.

Furthermore, another problem that was uncovered by Rainforest Action Network, is that Nestlé is among companies that claim to have deforestation-free supply chains, but they fail to consider that deforestation is potentially linked to suppliers’ use of palm oil-based animal feed. If they accounted for the embedded palm oil in supply chain, the company’s share amount of deforestation free primary supply chain palm oil could drop from 96% to 72%, which is crude palm oil equivalent (Rainforest Action Network, 2024b, p. 11).

What is more, Nestlé’s claims of deforestation free supply chains at 99.1% in 2022 did not include a published third-party verification, which is detrimental to consumers trust (Rainforest Action Network, 2023, p. 18). Furthermore, nor was verification present in their most recent deforestation disclosures. The spokesperson of the company stated that the company’s progress in deforestation risk management was nonetheless recognized by 2023’s Forest 500 report, where the company ranked as the top FMCG company (Nuttall, 2023; Nestlé, 2024b, p. 16). Namely however does not explain why no third-party verification is present.

ESRS’s disclosure requirement on Policies related to biodiversity and ecosystems (E4-2) also includes a paragraph devoted to policies addressing deforestation (European Commission, 2023b, p. 158). Requirements for disclosures are in reference to SFRD (European Commission, 2023b, p. 74). ESRS’s general requirements would ensure that Nestlé remains transparent about direct and indirect business relationships in the upstream or downstream value chains, and their risks, impacts and opportunities (European Commission, 2023b, p. 15).

8.1.3.1.4 Offsets and Net-Zero targets

Nestlé explicitly emphasizes that their net-zero commitment does not rely on offsetting or voluntary market credits but on removals within their own value chain and landscapes (Nestlé, 2023a, p. 12). They name these nature-based solutions, which enable removing carbon from the atmosphere with the help of agroforestry, soil management, and restoration of peatlands and forests (Nestlé, 2024c, p. 9). This way the company is committed to remove Scope 3 emissions (Nestlé, 2024c, p. 40). Even though the company claims that its nature-based solutions are not offsets, they share similar characteristics, as they involve payments

to compensate for carbon being absorbed back into the ground. Therefore, using the term “nature-based solution” might be a subtle form of greenwashing and can delay real climate action. Nestlé’s involvement in offsets both harms the climate and creates social issues in developing regions (particularly in the global South). This is because natural climate solutions projects lead to land grabs and the displacement of communities by enabling locals’ access to land used for offsetting purposes (GRAIN, 2021). Better communication of company’s carbon offsets approach was also a recommendation for improvement from Bureau Veritas which provided Independent Assurance Statement for Nestlé’s 2023 CSV report (Bureau Veritas, 2024, p. 7).

On the one hand, nature-based solutions used to reach net-zero can be harmful. On the other, the sole idea of net-zero commitments is also questionable. These pledges are often made to align with the Paris Agreement’s 2050 target and are in majority of cases designed to meet public expectations, thus maintaining financial support, making them a form of corporate greenwashing (GRAIN, 2021). Net zero targets are not real zero targets which would work on phasing out fossil fuels (Friends of the Earth International, 2021), which would involve a reduction in sales of highly emitting agricultural commodities, such as dairy, and meat. GRAIN’s findings are contrary and point out that Nestlé actually projected 68% growth in the listed commodities between 2020 and 2030 (GRAIN, 2021). Nestlé’s lack of efforts to influence consumer behavior towards GHG reduction by promoting more sustainable choices, was also highlighted by the Swiss foundation Ethos. Thus, Nestlé’s focus is catered towards demand adaptation, rather than client engagement (Ethos Foundation, 2024, p.1).

What is more, Nestlé does not provide either information about their low carbon CAPEX, or about the amount of research and development (R&D) investments. Not being transparent about material and intangible investments towards sustainability was also recognized by the Ethos foundation, which gave the company the lowest score in these categories (Ethos Foundation, 2024, p.1).

Regarding the offsets, adoption of ESRS would mean the company will be required to disclose Actions and resources related to biodiversity and ecosystems (E4-3), which would additionally entail if they used biodiversity offsets in their action plans. In the case of Nestlé, such offsets were used, thus the undertaking also needs to include information about the aim of offsets, their thorough description, key performance indicators (KPI) used, and financing effects. Moreover, they would also need to describe how they incorporated nature-based solutions into ecosystem and biodiversity-related actions (European Commission, 2023b, p. 158). ESRS would also contribute to solving the problem of lacking net-zero commitments that would be catered towards promoting more sustainable choices and lessening sales of highly emitting agricultural commodities. In Climate change standards (ESRS E1), disclosure requirements on Targets related to climate change mitigation and adaptation (E1-4) states that set climate change-related targets should follow the set of six requirements. One of the requirements is explaining how emission reduction targets are science-based and help limit global warming to 1.5°C. Moreover, GHG reduction targets should include

explanation critical assumptions about the company's consideration for future developments, which include shifts in consumer preferences and changes in sales (European Commission, 2023b, p. 86). Lastly, ESRS would help address sustainability disclosure problem of excluding information about low carbon CAPEX, and amount of R&D investments. The disclosure requirement on Internal carbon pricing (E1-8), which is a part of standards on Climate change (ESRS E1), states that a company is obliged to disclose if it applies internal carbon pricing schemes, and how they support the decisions on climate-related policies and targets. Thus, the company should disclose a type of internal carbon pricing scheme, such as for example, shadow prices applied for R&D or CAPEX (European Commission, 2023b, p. 91).

8.1.3.2 Social responsibility

8.1.3.2.1 Social impact of pesticides usage

Nestlé has set high environmental targets particularly for carbon emissions reduction, however they lack discussion about their key issues, which from their side cause even greater harm to the environment. Those are pesticides in their supply chain (Ethical Consumer Research Association, 2024). In their whole sustainability report pesticides are mentioned only a couple times. In their 2023 CSV report Nestlé mentions that they are helping wheat farmers in adopting regenerative agriculture practices, among them being reduction of pesticides in their fields (Nestlé, 2024b). Responsible sourcing is one of the material topics of the company. It consists of animal welfare and environmental and social impact of ingredient supply chain. The latter is considered a major importance and has a substantial impact on the company's business success, and on Nestlé's impact on people and the environment (Nestlé, 2024b). Thus, double materiality is present.

The EU's regulatory system monitoring pesticides is the strictest in the world. Out of 1,000 active substances available on the market 25 years ago, only 500 are still approved. This ensures maintenance of environmental safety and human and animal health protection. Not only does the EU monitor the level of pesticides in food, but in its imports. Thus, border controls ensure that imported foods comply with EU's safety standards (European Commission, n.d.-d). Regardless of the rigorous nature of the EU's monitoring system, some of the herbicides that are argued to be hazardous to health and biodiversity are still permitted. Most notably, the use of herbicide Glyphosate, which has been proven potentially by International Agency for Research on Cancer (IARC) as "probably carcinogenic to humans" (Guyton et al., 2015, p. 490). Regardless, its use has been approved for the next 10 years by the European Commission renewal in 2023 (European Commission, n.d.-e).

Notwithstanding the harmful pesticides banned in the EU, investigation by Repórter Brasil and Lighthouse Reports found that Nestlé continues to export prohibited herbicides to the countries that do not have the pesticide ban, such as Brazil. Brazilian sugar and orange farms then supply international markets, among which are also multinational corporations Nestlé,

Coca-Cola and PepsiCo. Such practices are in the words of Marcos Orellana, a UN Rapporteur on toxics and human rights, environmental injustices and a “form of modern day exploitation.” Harmful impact of pesticides was confirmed in a 2022 study by the University of Santa Catarina revealing that regions with higher number of sugar and orange farms also had higher rates of cancer death than the 2019 national average in Brazil (Lighthouse Reports, n.d.).

Nestlé’s first-tier suppliers that participate in spreading hazardous pesticides are Copersucar, Usina São Martinho and Tereos. Exposure to cancerogenic pesticide epoxiconazole that was spread in 2019 in São Paulo, had fatal consequences such as liver cancer, reproductive issues and development problems in fetuses (Freitas, 2023). Other banned pesticides used were Cyproconazole, Fipronil, and Triflumuron (Ramalho da Silva et al., 2023). Moreover, both Nestlé and Coca-Cola were accused of having business relations with Chinese company which gets sugar supplies from Brazilian plantation Usina Atena, which also spread health-threatening pesticides with crop dusters. However, Coca-Cola denies the business relation (Freitas, 2023).

Nestlé’s pesticides controversy reflects a failure of the group management to monitor the environmental and social impacts of its supply chain (Nestlé, 2024b), particularly regarding human rights and its abuses in a form of exposure to harmful herbicides (Lighthouse Reports, n.d.; Freitas, 2023).

Similarly to deforestation, ESRS’s general requirements would demand Nestlé’s transparency about direct and indirect business relationships in the upstream or downstream value chains, and their risks, impacts and opportunities (European Commission, 2023b, p. 15). Thus, following these disclosure requirements would ensure full transparency regarding collaboration with suppliers involved in spreading pesticides.

Additionally, ESRS would help address social information connected to the usage of pesticides in their standards that cover Affected communities (ESRS S3) (European Commission, 2023b, p. 3) by pollution-related impacts caused by the company (European Commission, 2023b, p. 126). Included disclosure requirements are among other also description of policies adopted to manage the impacts, processes for engaging with the effected communities and remediating caused negative impacts, and both acting on material harmful impacts and actual effectiveness of those actions (European Commission, 2023b, p. 256).

8.1.3.2.2 *Child labor*

Child labor and other forms of unfair labor practices are a salient issue at Nestlé. Thus, it is crucial for the company to be transparent about the issue and have programs in place that help the company to identify and then mitigate human rights risks (Nestlé, 2024b, p. 36). Nonetheless the company lacks transparency about these issues, which was also a finding Ethos foundation (Ethos Foundation, 2024b). Nestlé has a global CARE audit program in place, which helps with verification of compliance with corporate business principles, among them is also human rights, as one of the seven pillars (Nestlé, 2024b, p. 36). The company does disclose the annual number of audits that were carried out. However, they do not specify either what is the number of audits that were carried out specifically for the human rights issue or do they report on the outcomes of the audits (Ethos Foundation, 2024b). Additionally, Nestlé has an established grievance mechanism tool, called “Speak up”, which helps to capture complaints regarding their compliance with corporate business principles. Even though the company disclosed the number of messages received, and substantiated, of different categories, they do not provide additional information about the feedback. A lack of clarity is concerning especially for substantiated messages, which reflect that concerns of internal or external stakeholders were legitimately raised. Namely is what happened in the category human rights (child labor, forced labor and modern slavery risks), which had a validated complaint. This reflects there were problems with human rights in the financial year 2023, however Nestlé failed to provide an explanation for it (Nestlé, 2024b, p. 67).

How ESRS would help handle the problem of lack of transparency regarding human rights issues, particularly child and forced labour, is covered in the ESRS S1, under the section on Own workforce, specifically Other Work-Related Rights (European Commission, 2023b, p. 31). Disclosure requirements on incidents, complaints and severe human rights impacts (S1-17) state that a company should provide information on the number of incidents and/or complaints and severe human rights impacts of its workforce, together with related fines, sanctions and compensations that took place in the reporting period (European Commission, 2023b, p. 209). Additionally for incidents of severe human rights connected to their workforce, such as forced and child labour, the undertaking should disclose an indication of how many of these cases failed to respect either the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work, the UN Guiding Principles on Business and Human Rights, or OECD (Organization for Economic Cooperation and Development) Guidelines for Multinational Enterprises. Furthermore, an undertaking should also share information on relevant reconciliation of monetary amounts in its financial statements (European Commission, 2023b, p. 210).

8.1.4 Findings

Table 1 summarizes the uncovered discrepancies in Nestlé’s sustainability reports, and categorizes each one by sins of greenwashing, claim type and claim deceptiveness.

Table 1: Nestlé's sustainability reports' discrepancies categorized by sins of greenwashing, claim type, and claim deceptiveness

Discrepancies	Sins of greenwashing (TerraChoice, 2007; Scanlan, 2017)	Claim type and claim deceptiveness (Carlson et al., 1993)
<i>Environmental impact</i>		
<i>Recycling claims</i>		
Packaging to be 100% recyclable, reusable or compostable in 2023 CSV report.	Sin of Vagueness	Claim type: Product orientation Claim deceptiveness: Vague/ambiguous
No information about the total weight of plastic packaging, but only packaging pieces placed on the market (in 2020 and 2021 report).	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission
Unattainable recyclable plastic packaging goals.	Sin of No Proof	Claim type: Product orientation Claim deceptiveness: Combination (Vague/ambiguous and False/outright lie)
<i>Emissions</i>		
No information about emitted CO ₂ in 2020 CSV report (and all prior).	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission
Partial exclusion of Scope 3 emissions from net zero calculations (in 2021 CSV report).	Sin of Lesser of Two Evils	Claim type: Process orientation Claim deceptiveness: Omission
Not categorizing Scope 3 emissions according to GHG protocol in the most recent report.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Vague/ambiguous
Emissions peak appears to be in 2019 in 2021 report, but in 2020 in all 2022, 2023 reports.	Sin of Fibbing	Claim type: Process orientation Claim deceptiveness: False/outright lie
Incomparability of emissions reduction indicators between the years.	Sin of Vagueness	Claim type: Process orientation Claim deceptiveness: Combination (Omission and Vague/ambiguous)
<i>Deforestation-free claims</i>		

continues

Table 1: Nestlé's sustainability reports' discrepancies categorized by sins of greenwashing, claim type, and claim deceptiveness (cont.)

Not holding suppliers accountable for deforestation and participating in illegal palm oil purchases but pledging to adopt forest-positive promises.	Sin of Broken Promises	Claim type: Image orientation Claim deceptiveness: False/outright lie
Deforestation policy lacks deadlines.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Combination (Omission and Vague/ambiguous)
Weaker definition of deforestation (exempting small farms or smallholder farmers in 2023 Responsible Sourcing Core Requirements).	Sin of Vagueness	Claim type: Process orientation Claim deceptiveness: Vague/ambiguous
Claiming deforestation-free supply chains, but not considering usage of palm oil-based animal feed by suppliers.	Sin of the Hidden Trade-off	Claim type: Image orientation Claim deceptiveness: Combination (Omission and Vague/ambiguous)
No published third-party verification of deforestation free supply chains.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission
<i>Offsets and Net-Zero targets</i>		
Nature-based solutions potentially greenwashed offsets.	Sin of False Hopes	Claim type: Image orientation Claim deceptiveness: Vague/ambiguous
Net-zero commitments instead of “real-zero” targets (reductions of sales of highly emitting agricultural commodities).	Sin of Lesser of Two Evils	Claim type: Image orientation Claim deceptiveness: Vague/ambiguous
Not disclosing low carbon CAPEX or the number of R&D investments.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission
<i>Social responsibility</i>		
<i>Social impact of pesticides usage</i>		
Export of prohibited herbicides to countries that do not have the pesticide ban.	Sin of Injustice	Claim type: Process orientation Claim deceptiveness: Combination (Omission and Vague/ambiguous)
Cooperating with first-tier suppliers that spread pesticides.	Sin of Hazardous Consequences	Claim type: Process orientation Claim deceptiveness: Omission
<i>Child labor</i>		
Not specifying the number of audits carried out for the human rights issue, or the outcomes of the audits. And no explanation for a substantiated complaint.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission

Source: Own work.

In the case of Nestlé misleading sustainability reporting is quite prevalent. Deceptive practices are present in both the environmental and social aspects of companies CSV reports. The largest number of discrepancies, 16 to be exact, were uncovered in the category of environmental impact, whilst 3 concerned the social aspect. Discrepancies are categorized as various different “sins of greenwashing”, however the sin of no proof was by far the most prevalent as it concerned 8 examples. It reflects Nestlé’s failure to provide information or third-party validation of their claims, which are consequently often lacking in legitimacy. Second came the sin of vagueness, with 3 instances. Other discrepancies identified for Nestlé are categorized under the following greenwashing sins: lesser of two evils, for their partial exclusion of Scope 3 emissions from net-zero calculations and commitment to net-zero rather than “real-zero”, fibbing, for questionable emissions peak disclosures, broken promises, regarding their pledges to adopt forest-positive policies, hidden trade-off, for ignoring the use of palm oil-based animal feed by suppliers, false hopes, related to their nature-based solutions, injustice, for exporting prohibited herbicides to countries where they are not banned, and hazardous consequences, due to cooperating with pesticide-spreading suppliers.

Majority of the claims were of a process orientation, second came image orientation, and lastly product orientation. Predominant types of claims reflect that Nestlé was primarily concerned with disclosing overly positive ecological performance, but they were also keen on activities that would increase their sustainable brand image.

Examples of fraudulent disclosures show that the biggest problem with the claims was their omission, in other words, they were missing validation. This was especially evident in their 2020 sustainability report, where the company failed to provide information on emitted CO₂, and then in later reports in the claims regarding deforestation free supply chains, usage of pesticides, and child labor. Besides omission, the second biggest problem with the disclosures is that they are often too vague and ambiguous. That leads consumers to misinterpret the disclosed information, specifically statements about recyclable packaging, deforestation, usage of pesticides and net zero targets. Lastly, inaccurate claims, referenced to as false or outright lies, were discovered in Nestlé’s claims pledging unattainable recyclable plastic packaging goals, unreliable disclosed peak of emissions in 2021 sustainability report, and dishonest forest-positive promises whilst they participate in illegal palm oil purchases.

Implementation of ESRS would help Nestlé both to address and overcome discovered discrepancies and other challenges related to sustainability report disclosures. Since adherence to these standards will be mandatory from 2026 onward, failure to comply could result in negative consequences, such as penalties, fines, and reputational damage for not meeting shareholders expectations. These negative consequences align with “sticks”, in carrot-and-sticks theory. On the other hand, benefits such as favorable financial conditions for raising capital, potentially higher share prices, and increased revenues due to enhanced reputation represent the “carrots”, which are the other type of driver for Nestlé.

8.2 Perutnina Ptuj

8.2.1 Overview of the company

Perutnina Ptuj (PP) is a Slovenian limited liability company specializing in poultry production. It operates in the FMCG industry, comprises 14 different companies, operates in 7 countries, has over 4,600 employees, and cooperates with more than 500 farmers who raise broiler chickens. Net sales revenues of the company in 2023 amounted to € 504 million, which is € 62.5 million more than in 2022. Majority of these sales, particularly 75% or € 376 million, were exports outside Slovenia, primarily to the eastern European markets (PP Group, 2024a). It is a leading meat-processing and poultry producer in the Balkans and has its operations vertically integrated involving all stages of chicken meat production, from feeding, hatching, breeding to slaughtering, and producing meat products (MHP SE, 2023).

As of 2019 PP's sole owner is MHP Group, which is both one of the leading international groups in the food processing and producer of poultry meat and grains (PP Group, 2024a). The acquirer is Ukrainian, however the war events in the country have not directly affected operations at PP, due to its independence and self-assurance of both operational and supply chain (MHP SE, 2023).

8.2.2 Sustainability Reporting Practices and External Perception

PP plays a significant role in the Slovenian food industry and is recognized for its achievements in business success, both from a financial standpoint and in terms of innovation and sustainable development. Their exceptional performance was acknowledged at the 2024 Summit of Agricultural and Food Companies, where they were awarded the title of Excellent Food Company 2024 (PP Group, 2024b). The company has received numerous awards for the quality of its products and meat at the international professional competition AGRA. In 2023, they participated in 8 quality championships, earning 22 gold and 15 silver awards (PP Group, 2024a).

As of now the Slovenian company has disclosed four sustainability reports starting in 2020 when they put out its first non-financial report 2019. The disclosures, which follow the GRI guidelines, cover five main topics, which are the company's impact on the environment, employees, the quality and safety of the products, welfare of animals and relations with the stakeholders (PP Group, 2020). Due to the 2019 acquisition by the international agro-industrial group (MHP, 2019), PP's non-financial reports are linked to the ones disclosed by its acquirer (PP Group, 2020). The latter, however, did not provide sustainability reports from 2022 further (MHP, n.d.).

The mother company MHP lists objectives in their corporate environmental policy, the following are (MHP, 2020):

- contribute to the fight against climate change, and be a carbon neutral by 2030,
- consider sustainability in all business decisions and procurements,
- comply with applicable environmental legislations and commitments,
- constantly improve environmental management in accordance with the requirements of stakeholders and legislations,
- prevent and minimize negative environmental impacts,
- reduce pollutant emissions to the atmosphere, including GHG's, waste generation and its harm, consumption of freshwater, waste waters and their concentration of pollutants,
- minimize human-induced impacts on land resources,
- rationalize the usage of resources, and decrease non-renewable energy consumption by utilizing renewable sources,
- accurately account the waste, waste waters, emissions, and ensure environmental impact monitoring,
- support beneficial relationships with stakeholders,
- rise environmentally aware culture among the stakeholders.

Nevertheless, in last year's financial results, MHP stated that the company has a fully functional, independent supply and operational chain (MHP SE, 2023), therefore sustainability reports disclosed by a Slovenian company can also be analyzed separately.

8.2.3 Identification of Discrepancies

PP sets a good example for other Slovenian companies, operating in the food industry, with its consistent sustainability reporting. However, after conducting a detailed examination of their annual non-financial disclosures, there are instances that indicate superficiality, moreover the presence of a potential sustainability reporting deception. Examples of fraudulent occurrences are connected to the disclosures regarding company's impact on the environment, specifically emissions and usage of renewable materials, alignment with GRI guidelines, and missing presence of external audits.

Poultry producer's acquirer MHP will be obliged to put out ESRS reports for all its subsidiaries, due to it reaching the balance sheet, net sales, and average number of employees thresholds. Therefore, recognized discrepancies in PP's own sustainability reports are additionally analyzed through ESRS perspective. Particularly how the standard will address uncovered reporting disclosures issues.

8.2.3.1 *Environmental impact*

Efficient environmental stewardship, catered towards responsible energy usage, utilization of reusable materials in their production process, and decreasing GHG emissions are all the key focus points for PP. Nonetheless, disclosures about the company's environmental impact are often incomplete and unclear.

8.2.3.1.1 *Fuel consumption*

In the sustainability report PP states that by investing in newer farm machinery in 2022, they are reducing fuel consumption and emissions (PP Group, 2024a, p. 32). However, in 2023, both have increased, moreover no explanation or corrective measures are mentioned. Fuel consumption grew by 5.98%, as it increased from 585 TJ in 2022 to 620TJ in 2023. Additionally, share of fuel from renewable sources has been consistently falling since 2020, even though their goal is to increase energy efficiency and reduce non-renewable energy sources. Thus, the percentage of renewable sources went from 20% in 2020, to 15% in 2022, and only 11% in 2023. Namely reflects direct contradiction to PP's statement that deviations from set goals are analyzed and acted upon, as it is apparent no effective corrective measures have been taken to stop the annual decrease of the share of renewable fuel sources (PP Group, 2024a, p. 35).

ESRS would address this sustainability reporting problem with disclosure requirement E1-1 – The transition plan for climate change mitigation. Namely mandates that the company discloses a transition plan for climate change mitigation that ensures compatibility of business model and strategy with Paris Agreement's objective of limiting global warming to 1.5 °C and being climate neutral by 2050 (European Commission, 2023b, p. 81). Information that PP would be required to include is, among others, also what actions they took for climate mitigation, with both explanation and qualification of investments that support the set transition plan. Namely must reference key performance indicators of taxonomy-aligned capital expenditures and, if relevant, capital expenditure plans disclosed according to Commission Delegated Regulation (EU) 2021/2178 (European Commission, 2023b, p. 82).

8.2.3.1.2 *Emissions*

In all of the disclosed sustainability reports of PP, GHG emissions are missing detailed information, moreover the topic is only vaguely covered. The company fails to disclose certain information about their ecological footprint, most notably indirect scopes of GHG emissions. Moreover, it praises the reduction of emissions, while their increases are not specifically pointed out.

This is particularly problematic considering that PP lists environmental issues, specifically sustainable operation, and biodiversity, which also include emissions, as one of their material topics (PP Group, 2024a). Even though emissions are not specifically written out, they are most definitely present in Sustainable operation and biodiversity topic. This is because as GRI states: "Some GHGs, including methane, are also air pollutants that have significant negative impacts on ecosystems, air quality, agriculture, and human and animal health." (GRI, 2016, p. 4). GHG emissions are a major contributor to climate change, therefore they should be reported diligently.

In their Topic Standard 305, which covers emissions, GRI states that an entity which is reporting in accordance with their standards is required to report certain disclosures if it has determined emissions to be a material topic. The three disclosures the company ought to

provide for emissions are the following. Firstly, management of material topics, using Universal Standards GRI 3 disclosure 3-3, secondly, explanation whether offsets were used for GHG emissions targets, and thirdly, relevant disclosures on emissions-related impacts, which are specified in Topic Standard disclosures from 305-1 to 305-7 (GRI, 2016).

Omissions of the mentioned disclosures are not permitted, however there are exceptions. The first one is if a company cannot meet disclosure requirements due to information being confidential or legally restricted (GRI, 2016). Namely is not applicable to PP, if it was, they should have clearly stated which disclosure they were unable to provide and the reason for omission. The second exception would be permitted if the information required to be disclosed does not exist, meaning that the company does not have a policy, committee practice or process, in place that would enable them to provide the data (GRI, 2016). Described is most likely the case with the Slovenian company. Nonetheless GRI Standards require the company to acknowledge the absence of the item, explain the reasoning behind it, and describe if they have any plan to develop a policy that would enable them to disclose the information in the future sustainability reports (GRI, 2016).

PP fails to provide any kind of explanation for exclusion of disclosures on their emissions impacts. Even though the company illustrates in their GRI table of content, that disclosure regarding energy indirect, Scope 2 GHG emissions are missing, by using a hyphen, there is no explanation why. Nonetheless, in their 2023 ESG report it is stated that one of their plans for 2024 regarding their supply chain is: “Preparation for Sustainability reporting - Development of ESG reporting about supplier CO₂ footprint.” (PP group, 2024a, p. 47). In other words, the company plans to disclose their other indirect or Scope 3 GHG emissions. Their set goal lacks specificity, as they neither clarify nor describe the means of how they will measure suppliers’ CO₂ footprint. Furthermore, another concerning fact is that Scope 2 emissions disclosures’ plans for development are not mentioned at all. Even though GRI states, that a company is not required to develop a policy that would enable them to disclose the information (GRI, 2016), it is questionable that the Slovenian company is keen on implementing Scope 3 emission disclosures, before considering Scope 2.

In sum, the first problem is missing Scope 2, which is detrimental part of reporting in accordance with GRI. PP states it is following the GRI G4 requirements, of which GHG reporting protocol prescribes reporting direct (Scope 1) and energy indirect (Scope 2) emissions, while other indirect emissions (Scope 3) are solely optional (GRI, 2013). However, the company neither reports on Scope 2 nor 3 emissions. This is problematic, as indirect emissions are potentially higher than Scope 1, and might have a substantial environmental impact. Thus, such omissions give a false impression about CO₂ intensity. Another apparent problem is only disclosing CO₂. In all four sustainability reports they only reported on emissions from their direct operations, thus Scope 1. Moreover, they only disclosed the information on emitted CO₂ (PP Group, 2024a), while they left out gasses such as ammonia (NH₃), nitrous oxide (N₂O) and CH₄ which are considered to have a great impact on GHG emissions of poultry production (Gržinić et al., 2023). Namely is concerning,

because some of the omitted GHGs pose a threat to both human and animal health, have an adverse impact on ecosystems, agriculture, and the overall air quality (GRI, 2013). Furthermore, exposure to compounds also threatens the quality of life of farm workers and communities in close proximity to the farms, due to it potentially causing different forms of respiratory disorders, cancer, or lung or heart disease (Gržinić et al., 2023). The company's lack of transparency in the total emissions is also apparent because their sustainability report references CO₂ emissions, and not CO₂e. The latter would be more appropriate to include as it would also entail inclusion of equivalents, consequently holding the company accountable for CH₄ and other GHGs (Zero Carbon Analytics, 2024).

The last problem regarding the emission disclosures is PP's different portrayal of reductions compared to increases throughout the years. The bias for highlighting positive achievements in GHG emissions and neglecting increases is clear when we compare sustainability reports from different years. As shown in Table 2, the company has not been consistent in emissions reduction. According to the most recently disclosed data, GHG emissions in 2023 amounted to 32,221 metric tons of CO₂. The number is significantly higher than the previous year, 2022, when it amounted to 31,251 metric tons of CO₂. The yearly difference in total amounts to 970 metric tons of CO₂ increase or by 3.1 %. Therefore, the statement in the 2023 ESG report that the GHG emissions "were about the same as in previous years" is incorrect, as the emissions have significantly increased. The company's statement about their current emissions being about the same as before, becomes problematic, when we additionally consider that in their first report, from 2019, they explicitly pointed out: "Our greenhouse emissions of CO₂ were 107 tones lower in 2019 compared to emissions in 2018." (PP Group, 2020, p. 16). Categorizing 970 metric tons of emissions yearly increase as "about the same" as previous years, and putting an emphasis on the reduction of 107 metric tons of emissions raises a question about company's possible deceptive reporting practices.

Table 2: PP's disclosed Scope 1 emissions from 2018 to 2023 (metric tons of CO₂), and yearly differences (metric tons of CO₂ and %)

CO ₂ emissions	2018	2019	2020	2021	2022	2023
Total (tons of CO ₂)	27,855	27,748	25,628	31,357	31,251	32,221
Yearly difference (metric tons of CO ₂)		-107	-1,926	5,729	-106	970
Yearly difference (%)		-0.38	-6.99	22.35	-0.34	3.10

Source: Adapted from PP Group (2020), PP Group (2022), PP Group (2023), PP Group (2024a).

Furthermore, the company also fails to explain why its GHG emissions from combustion had increased in 2023 compared to 2022. In all sustainability reports, instances where PP delivered explanation for changes in CO₂ emissions were included only in 2021 and 2022 reports. In 2021 they explain emissions were higher than in 2020 due to 11% growth poultry production (PP Group, 2022). And later in 2022's report they elaborated that the main reason

for emissions being 106 metric tons lower than before is due to lower fuel oil combustion, which resulted from poorer corn harvest (PP Group, 2023).

Problems with transparency about emissions would be addressed by ESRS. Standard's section Climate change (ESRS E1) specifies the requirements for disclosures on Gross Scopes 1, 2, 3 and Total GHG emissions (E1-6). They state that a company ought to disclose all three scopes, and GHG total in metric tons of CO₂eq. Thus, the disclosure requirement would eliminate PP's current reporting issue of disclosing neither indirect emissions nor their equivalents. This disclosure requirement is crucial as it is a prerequisite for measuring progress towards reduction of emissions in accordance with EU policy goals. Thus, disclosure ensures company's climate related targets are being met (European Commission, 2023b, p. 88). Additionally, ESRS would expect the undertaking to disclose information about GHG intensity based on net revenue (European Commission, 2023b, p. 90).

8.2.3.1.3 Use of renewable materials

Similarly to disclosures about emissions, the company is biased in reports on the usage of sustainable materials. The 2022 sustainability report mentions their strategy is to lower the quantity of used material, by paying attention to reduction of resources employed in production process and packaging of products (PP Group, 2023). However, as the years pass by, use of materials is increasing. It is deceiving to point out the strategy of minimizing the use of resources solely in the sustainability report, which is the only year when they achieved the reduction, while not mentioning the goal in other ESG reports. Amounts of materials used in product production, life production, and soil management (PP Group, 2020) are presented in Table 3. It is apparent that tons of total materials used are increasing. The increase can be attributed to higher production of poultry and poultry products.

Table 3: PP's amount of materials used from 2018 to 2023 (tons, and % of total)

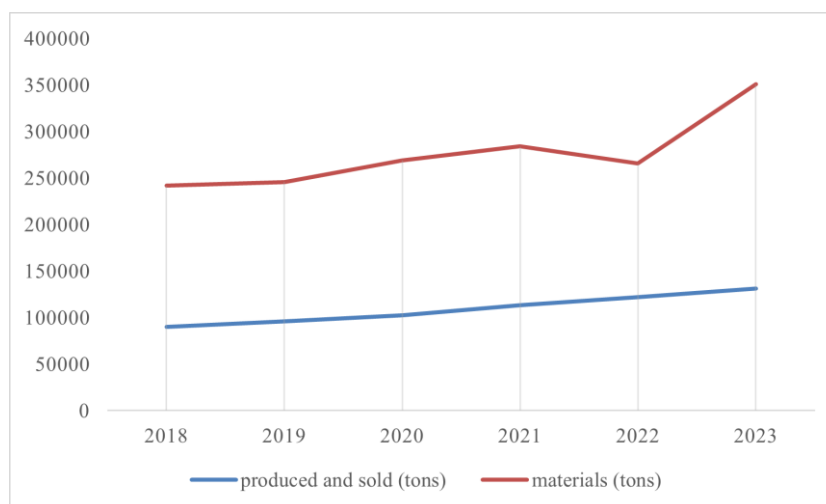
Type of materials used	2018	2019	2020	2021	2022	2023
Non-renewable (tons)	19,115	17,392	19,886	24,524	19,747	16,881
Non-renewable (% of total)	8%	7%	7%	9%	7%	5%
Renewable (tons)	222,273	227,933	248,774	259,037	245,574	333,510
Renewable (% of total)	92%	93%	93%	91%	93%	95%
Total (tons)	241,388	245,325	268,660	283,562	265,321	350,391

Source: Adapted from PP Group (2020), PP Group (2022), PP Group (2023), PP Group (2024a).

However, as shown in Figure 15, the growth of production and materials used is not aligned. On the one hand, the total amount of produced and sold products has increased steadily,

showing consistent growth. On the other hand, the amount of materials, also increased, but there was a noticeable spike in 2023 compared to years prior.

Figure 15: PP's amount produced and sold products and the amount of materials used from 2018 to 2023 (tons)



Source: Own work.

2023 disproportionate material usage compared to the produced and sold quantities indicates PP has a problem with inefficient material usage, which contradicts the company's 2022 aim to decrease overall quantity of materials. Sharp increase in material used is detrimental for company's sustainability, therefore must be addressed. Thus, PP should not ignore the increase but explain why it was present, and how they will optimize the production process in the following years.

Table 4 showcases calculated annual difference of used material by type, and increase/decrease in share of renewables and non-renewables in the total of material used. Gray color presents what PP specifically pointed out in their sustainability reports. Red color on the other hand illustrates what was not additionally pointed out, but presents a bigger problem connected to the number of materials used, thus it would be more appropriate to be highlighted instead.

Table 4: PP's a of materials used from 2018 to 2023 (tons, and %)

Type of materials used	2019	2020	2021	2022	2023
Non-renewable yearly difference (tons)	-1,723	2,494	4,638	-4,777	-2,866
Non-renewable yearly difference (%)	-9.0%	14.3%	23.3%	-19.5%	-14.5%

continues

Table 4 (cont.): PP's a of materials used from 2018 to 2023 (tons, and %)

Renewable yearly difference (tons)	5,660	20,841	10,263	-13,463	87,936
Renewable yearly difference (%)	2.5%	9.1%	4.1%	-5.2%	35.8%
Total yearly difference (tons)	3,937	23,335	14,902	-18,241	85,070
Total yearly difference (%)	1.6%	9.5%	5.5%	-6.4%	32.1%
Difference in share of non-renewable in total (%)	-1%	0%	2%	-2%	-2%
Difference in share of renewable in total (%)	1%	0%	-2%	2%	2%

Source: Own work.

Specific highlights and what would be more appropriate are the following.

- In 2021 share of renewable sources and all materials decreased by 2% compared to 2020 (PP Group, 2022).

Instead, it is worth pointing out the total yearly increase was 14,902 tons of material, mostly due to a high increase of non-renewable materials. Specifically, non-renewables increased by 4,638 tons, or by 23.3%, and renewables increased by 10,263 tons, or by 4.1% compared to a year prior.

- In 2022, there was a reduction of 18,240 tons (PP Group, 2023).

Sustainability report highlight is appropriately used as the most important indicator was mentioned. However, for more clarity they could additionally provide percentage amounts.

- In 2023 the increase of used renewable materials amounted to 87,963 tons (PP Group, 2024a).

Solely focusing on the increase of renewable materials can be deceiving. Increased renewables in the share of total materials have a positive correlation to the company's sustainability practices, even though their total amount of materials used decreased substantially. The increase in total materials, by 32.1%, is the biggest growth up to this date, and not a positive achievement for the company as it worsens their sustainability.

Reporting on Resource use and circular economy is covered in ESRS 5 (European Commission, 2023b, p. 3). This section of standards addresses the transition away from non-renewable resources and implementation of practices that prevent generation of waste (European Commission, 2023b, p. 126). The disclosure requirement on Targets related to resource use and circular economy (E5-3) will expect PP to disclose resource use targets, which address its material impacts, risks, and opportunities (European Commission, 2023b,

p. 180). Thus, the issue of only pointing out strategy of minimizing use of resources in specific sustainability reports would be solved using ESRS.

8.2.3.1.4 Sustainability goals

Another problem with PP's sustainability report is how it presents its goals towards a more sustainable future. In all the ESG topics they fail to provide comprehensive, tangible goals and the means they will take to achieve them. The only goals the company shares are catered towards being leading in the market and increasing their profitability. Thus, neither 17 sustainability aspects are mentioned nor how the company is working toward Paris agreement 2030.

Goals and company commitments to improve food quality, environmental management and satisfy consumers are only mentioned in the context of being implemented in all of mother company's affiliates and communicated to employees through The Rules of Quality and Environmental Management. The latter are only available to an internal audience and not to the wider public. But those goals, which are said to be shared with employees during their training, are not specified in their sustainability report. The goals mentioned in the recent non-financial report are rational energy use with the help of new technologies, confirming consumers' brand choice by delivering the best quality of products, meeting consumers and stakeholders by providing them with the best services, choosing reliable suppliers and guaranteeing quality for the best price (PP Group, 2024a, p. 11). From the examples it is apparent that they lack a timeframe in which they are expected to be reached or the strategy that will enable their actualization.

Chapter 3 of ESRS's General disclosures (ESRS 2) specifies the Strategy each undertaking should disclose in their non-financial reports. Namely should interact with defined material impacts, risks, and opportunities (European Commission, 2023b, p. 7). For this requirement to be met PP should firstly do materiality assessment, based on which they would define targets, policies, action plans, scenario analysis, and transition plans (European Commission, 2023b, p. 41). Furthermore, the Climate change standards (ESRS E1), have in place the nine disclosure requirements, which also include, setting Transition plan for climate change mitigation (E1-1), Policies related to climate change mitigation and adaptation (E1-2), Actions and resources in relation to climate change policies, and Targets related to climate change mitigation and adaptation (E1-4) (European Commission, 2023b, p. 78). This section of ESRS is crucial as it explains undertaking effects on climate change, and its Paris agreement aligned mitigation efforts towards limiting global warming to 1.5°C (European Commission, 2023b, p. 79).

8.2.3.2 Corporate Governance

Government and state authorities are one of the major stakeholder groups of PP. They are significant because they ensure that the company's business operations follow appropriate legislation (PP Group, 2024a). In reference to corporate governance, PP has two major

problems. Firstly, not having independent assurance, and secondly, complications are present with their overall sustainability reporting practices and guidelines they claim to utilize.

8.2.3.2.1 Third-party assurance

The issue with PP's sustainability report is that the group does not have independent assurance of the disclosed information. The company only had the reports reviewed by professional advisors for consistency, with other already published information, and for completeness (PP Group, 2024). The lack of independent assurance means that the information is not additionally verified, increasing the risk of failing to detect false claims. This could potentially open the door to fraud, as the absence of standardization makes it more difficult to verify the claims in the sustainability report (KPMG International, 2020, p. 10).

Nonetheless even if the company used a professional advisor, neither consistency nor completeness are present in the report. In all the sustainability reports there are plentiful examples of inconsistencies, which indicate reports are written sloppily, and were not thoroughly reviewed or scrutinized for accuracy before its release. The lack of diligence, present particularly in their most recent 2023 sustainability report, gives the impression that the report was not accurately audited and checked for inconsistencies.

Firstly, inconsistencies are present in the section key indicators, where PP summarizes key indicators for People, Animal welfare, Environment, Supply chain, and Product quality and safety. In the section regarding employees, it is written that in 2023 905 new staff members were recruited, whereas in later chapters a table shows the total in 2023 was 1,445. Secondly, the company is inconsistent with disclosures about their staff turnover. Both in their most recent and in previous years non-financial report it states that in 2022, the staff turnover amounted to 1.43%, in 2021 to 1.46%, and in 2020 to 1.41%. However, in their 2023 sustainability report they also state: "In 2023, we had 1.46% staff turnover and in 2022 1.41%.". Thus, in the same report the turnover for 2022 is reported to be 1.43% and not 1.41%, moreover, 1.46% turnover is associated with 2021 and not 2023.

Later, upon examining the fuel consumption data of the company there are two major inconsistencies with their disclosures. Disclosures were unvetted, which led them to use the same fuel consumption data both for 2020 and 2021. Then in 2023 report it states that their "Green manure crops were sown on 207 hectares in 2021 (on 211 hectares in 2020 and on 255 hectares in 2019)." (PP Group, 2024a, p. 32), which is not consistent with their 2022 report where they state "Green manure crops were sown on 207 hectares in 2022 (on 211 hectares in 2020 and on 255 hectares in 2019)." (PP Group, 2023, p. 32). Moreover, both in their 2023 and 2022 sustainability reports the company states that they used 22.701 tons of organic fertilizers in 2021. Which is inconsistent with the data disclosed in their 2021 sustainability report where they state they used 23.306 tons. Another error detected was that in their 2023 report they state that "In 2023 we used 90% of organic fertilizers, that is 4%

more than in 2021” (PP Group, 2024, p. 32) which is completely inconsistent with the fact that they also used 90% in 2021. Thus, the statement is incorrect, and applies to the year 2022 comparison, when they actually had 86% of organic fertilizers. Not only is the information inconsistent, but the company also does not explain what the reason behind the decrease of usage of organic fertilizer in 2022 with 16,175 tons compared to 2021 with 22,701 tons is.

Furthermore, there are also contradictions caused by switching between ascending and descending order of years. Changing the order of years complicates the traceability of progress of different indicators. Not only does that confuse the reader, but it can also confuse the writers of the reports. This is exemplified, when PP’s sustainability report writers falsely wrote that the GHG emissions from combustion in 2023 amounted to 31,357 tons of CO₂, which is data for 2021, instead of 32,221 tons of CO₂.

Similarly, the less significant mistakes uncovered in the most recent report are PP’s nonsensical statement that in 2023 they used 95% renewable and 9% non-renewable materials, instead of 5% of non-renewables. Additionally, Scope 2 emissions are referenced as 305-1, which is wrong, as they belong to group 305-2 according to the GRI standards.

The presence of direct contradictions, errors by information differentiating throughout document and similar inconsistencies give an impression of disclosed information being neither accurate nor credible. Namely potentially compromises their trust in companies conduct of business.

Missing independent assurance issues will be addressed with ESRS, as it requires that any kind of material information is disclosed, and that materiality assessment process is externally assured in accordance with Accounting Directive provisions (European Commission, 2023c).

Furthermore, General disclosures (ESRS 2) chapter 2 discusses Governance (European Commission, 2023b, p. 44). The disclosure requirement on Risk management and internal controls over sustainability reporting (GOV-5) states that internal control process over sustainability reporting process should be in place. Here an undertaking should consider risks, such as accuracy of estimation result, availability of value chain data, timing of the availability of information, and completeness and integrity of the disclosed data (European Commission, 2023b, p. 66).

8.2.3.2.2 Alignment with ESG reporting standards

The next problem that reveals itself is the fact that in all their annual ESG disclosures, from 2019 to 2023, PP specifies that their non-financial report “has been aligned with the reporting requirements of the Global Reporting Initiative G4” and that it aims to “disclose information that the Company’s stakeholders view as being a material aspect of the Company’s activities.” (PP Group, 2023, p. 55). The sentence gives the stakeholders and

other readers a false assurance that the sustainability report is following the up-to-date guidelines, falsely lifting their credibility.

The first problem with this sentence is that GRI G4 Guidelines, developed for each specific sector, have not been relevant since 1st of July 2018. GRI states that the G4 Guidelines have been transitioned to GRI standards, and that business entities are required to report according to the standards, if they wish to be recognized as credible by GRI (Sustainability-Reports, 2018).

As specified in the table of contents showing what was disclosed according to GRI standards, PP belongs to the food processing sector, which is one of the 40 sectors for which GRI plans to prepare Sector Standards (GRI, n.d.-b). The food processing sector has not yet developed sector standards, therefore if PP were to report according to GRI, they would have to utilize Universal standards and Topic standards.

The company not adopting the recent GRI requirements is apparent also from the content index they provided at the end of their ESG report, which summarizes the information they reported on, and specifies the GRI Standards they used. The GRI disclosures company failed to provide, are restatements of information, scope 2 emissions, and operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.

Furthermore, the company's annual sustainability report does not thoroughly cover GRI 1 of the Universal Standards, which is crucial as it represents a requirement "an organization must comply with to report in accordance with the GRI Standards" (p. 2). Particularly, PP does not disclose its material topic and its management as GRI guidelines expect, which are specified in GRI 3 (GRI, n.d.-a). Regarding the management of material topics in GRI 3, they have to specify what are the actual and potential impacts on ESG factors, explanation if organization is directly involved with the negative impacts or through business relationship, clarify what are the policies or commitments and actions taken to manage the material topic and its impacts, report on the tracked effectiveness of these actions, and lastly, describe how engagement with stakeholders was utilized into taken action and their effectiveness (GRI, 2021). PP does not reach the requirements of GRI 3 disclosures, but rather covers material topics only by including the table which shows the "Assessment of stakeholders' expectations according to the importance of stakeholder groups" (PP Group, 2024a, p. 54). Namely only labels different topics as less important, important or very important, but does not clarify how the company's business operations impact those topics or how they plan to manage them.

In conclusion, even though the company is not inherently claiming that they reached all of the requirements to be approved or aligned with GRI, it has vaguely indicated the connection to GRI, which can deceive the readers into thinking it is actually GRI credible. Thus, even if the company is working towards implementing more requirements in the future it should be clear in their ESG report that it has not yet reached the required level of disclosures. Only

on the focused attention to detail the sustainability report, which at the beginning appears to strictly follow the guidelines, it is revealed that in reality it is quite sloppy and skips over the topics that they do not wish to disclose on. One of the principles of GRI reporting is nonetheless to address what has been ignored in the sustainability reports and provide explanation behind it.

The problem of not following proper sustainability reporting standards will be addressed by the ESRS. European standards will be mandatory to implement from 2026 onward by PP's parent company MHP, which will be expected to provide annual sustainability reports, that comply with reporting standards, on behalf of its subsidiaries.

8.2.4 Findings

Table 5 summarizes the discrepancies within PP's sustainability reports, and categorizes them by sins of greenwashing, claim type, and claim deceptiveness.

Table 5: PP's sustainability reports' discrepancies categorized by sins of greenwashing, claim type, and claim deceptiveness

Discrepancies	Sins of greenwashing (TerraChoice, 2007; Scanlan, 2017)	Claim type and claim deceptiveness (Carlson et al., 1993)
<i>Environmental impact</i>		
<i>Fuel consumption</i>		
Increased fuel consumption (and emissions) despite stating investments in newer farm machinery are reducing it.	Sin of False Hopes	Claim type: Process orientation Claim deceptiveness: False/outright lie
No explanation for the increase of fuel consumption in 2023.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: (Omission and Vague/ambiguous)
<i>Emissions</i>		
Missing Scope 2 GHG emissions and no explanation why or plans for development.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission
Only disclosing CO ₂ without equivalents (NH ₃ , N ₂ O, CH ₄).	Sin of Vagueness	Claim type: Process orientation Claim deceptiveness: Vague/ambiguous

continues

Table 5 (cont.): PP's sustainability reports' discrepancies categorized by sins of greenwashing, claim type, and claim deceptiveness

Categorizing a 970 metric tons of emissions yearly increase as “about the same” in 2023, but emphasizing reduction of 107 metric tons of emissions in 2020. Thus, negative impacts are downplayed, but small positive achievements are highlighted.	Sin of Vagueness	Claim type: Process orientation Claim deceptiveness: Combination (Vague/ambiguous and False/outright lie)
No explanation for the increase of emissions in 2023.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Vague/ambiguous
<i>Use of renewable materials</i>		
Point out the strategy of minimizing the use of resources solely in the sustainability report 2022, the only year when they achieved reduction, but not mentioning it in the other reports.	Sin of Irrelevance	Claim type: Image orientation Claim deceptiveness: Combination (Omission and Vague/ambiguous)
No explanation for the sharp increase in materials used in 2023.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission
Highlighting less relevant data about materials used increase/decrease.	Sin of Lesser of Two Evils	Claim type: Process orientation Claim deceptiveness: Vague/ambiguous
<i>Sustainability goals</i>		
Sustainability goals lack timeframe and connection to Paris 2023 Agreement or 17 sustainability goals. Moreover, goals are catered towards being leading on the market and increasing profitability.	Sin of Profits Over People and the Environment	Claim type: Process orientation Claim deceptiveness: Vague/ambiguous
<i>Corporate governance</i>		
<i>Third-party assurance</i>		
No independent assurance, thus ESG claims do not have third party certification.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission
Inconsistencies, contradiction and mistakes due to information differentiating throughout document.	Sin of Fibbing	Claim type: Process orientation Claim deceptiveness: False/outright lie

continues

Table 5 (cont.): PP's sustainability reports' discrepancies categorized by sins of greenwashing, claim type, and claim deceptiveness

<i>Alignment with ESG reporting standards</i>		
GRI G4, which was used, has not been relevant since 2018.	Sin of Irrelevance	Claim type: Image orientation Claim deceptiveness: Combination (Omission and Vague/ambiguous)
Materiality assessment not in accordance with guidelines of GRI 3.	Sin of No Proof	Claim type: Process orientation Claim deceptiveness: Omission

Source: Own work.

PP's study case reflects high incidence of misleading discrepancies in sustainability reports. Results show examples of fraudulent and deceptive sustainability practices were mostly in the environmental aspect of ESG, with 10 instances in total. However, 4 examples concerned corporate governance, due not correctly following sustainability reporting standards and missing independent, third-party assurance. A lack of reliable, neutral certification to support sustainability claims is further demonstrated by the fact that the sin of no proof was the most prevalent, appearing in 6 out of the 14 examples. Second came (each with 2 examples) the sin of irrelevance, which concerned their strategy to minimize use of resources, and usage of outdated GRI G4 disclosures, and the sin of vagueness particularly regarding emissions. Other recognized sins of greenwashing, each present one time, for PP include: false hopes, for increased fuel consumption and emissions despite claims that new farm machinery investments reduce them, lesser of two evils, for emphasizing less relevant data about material usage, profits over people and the environment, for prioritizing profitability goals that lack substantial sustainability measures, and fibbing, due to inconsistencies and errors throughout their ESG reports

Claims which were primarily oriented towards processes, and then brand image, were in most cases too vague and ambiguous. Particularly there were 8 cases of such claims. They lack clarity about increases of fuel consumption and emissions, indirect scopes of GHGs, sustainability goals and usage of renewable materials. Furthermore, 7 instances of omission present in the claims again confirm that information to validate the statements made is missing. Similarly, 3 false claims are a result of no third-party assurance. This is apparent as they are predominantly in the form of inconsistencies, which could have been minimized by a properly executed third-party assurance and independent audits.

The ESRS would help the company address and combat the problems of sustainability reports' disclosures, thereby enhancing their transparency and fostering strong relationship with stakeholders. Adherence to the ESRS will be mandatory for PP's acquirer, MHP, from 2026 onward. Therefore, failure to comply could lead to negative consequences, which align

with “sticks” in carrot-and-sticks theory. These potential negative consequences include financial repercussions, such as fines and penalties for noncompliance with regulatory requirements, as well as reputational damage. While the initial motivation for publishing sustainability reports may have been solely the benefits associated with active CSR engagement, referred to as the “carrot” in the carrot-and-stick theory, future compliance will be additionally driven by the need to avoid negative outcomes associated with regulatory noncompliance.

9 CONCLUSION

The main purpose of this master’s thesis was to answer the research question: “How prevalent is misleading sustainability reporting, and how do discrepancies usually manifest?”. Namely was proposed for each of the two independent study cases. The results indicate that both Nestlé and PP demonstrated numerous examples of discrepancies when their sustainability reports were compared to their actual ESG impact, as documented through credible articles, research papers, and sustainability disclosure requirements. Symbolic actions were compared to substantive ones, identifying deceptive sustainability practices, or greenwashing. Specifically, 19 examples of fraudulent or deceptive reporting practices were found for Nestlé, while 14 were identified for PP.

On the one hand, recognized deceptive practices were present in the environmental and social aspects of Nestlé’s non-financial reports, while, on the other hand, PP’s examples of deceptive sustainability disclosures related to its environmental and corporate governance ESG components. The biggest concern for both companies was that their disclosures lacked supporting information or reliable neutral party certification. This is referred to as the “sin of no proof”, which undermines the legitimacy of the companies’ claims. For Nestlé, years of publishing CSV reports revealed gaps in their disclosures regarding the total weight of plastic packaging, achievable recyclable plastic goals, CO₂ emissions, verification of a deforestation-free supply chain, low carbon CAPEX or R&D investments, and the number of audits conducted for human rights issues. For PP the “sin no proof” was evident due to of failure to diligently follow sustainability reporting standards, particularly GRI, and absence of third-party assurance. Additionally, in both study cases, the “sin of vagueness” was the second most common issue, indicating that that the companies were not clear in defining their claims, potentially misleading consumers who could misinterpret broad statements. In Nestlé’s case, the company was unclear and vague in its disclosures regarding sustainable packaging, reductions of GHG emissions, and the definition of deforestation, which it pledged to eliminate from its primary supply chain by 2022. For PP, vagueness was evident in their claims about emissions, as the company failed to provide information about CO₂ equivalents and downplayed the negative impact of increased emissions in 2023 while emphasizing minor positive achievements in emissions reductions in 2020. Furthermore, poultry producers’ disclosures demonstrated the “sin of irrelevance,” particularly through claims about their resource use minimization strategy and the use of outdated, irrelevant GRI

G4 disclosures. The deceptive claims of both companies were primarily oriented towards processes, followed by enhancing the overall brand image. This indicates that the main concern for both companies was to present an overly positive ecological performance, which is followed by highlighting activities that would strengthen their ESG-friendly image. While Nestlé's deceptive claims were characterized in most cases by omission, thus lacking validation, and then by being vague and ambiguous, PP's claims exhibited these negative traits in the reverse order. Although false claims or outright lies were also observed in both case studies, they were present to a lesser extent.

The implementation of ESRS, which will become mandatory for both Nestlé and PP's acquirer MHP starting in 2026, would help improve the sustainability reports' disclosures. Adhering to these standards would enhance the transparency of ESG reports and foster stronger relationships with stakeholders, by meeting their expectations regarding sustainability. Failure to comply with regulatory requirements could lead to negative consequences, such as penalties and reputational damage. These repercussions align with "sticks" in the carrot-and-sticks theory. Conversely, companies can also benefit from proactive engagement in CSR, which represents the "carrot" in this theory. The question of the main driver for publishing sustainability reports, whether negative consequences or benefits, remains open. However, particularly for PP, which has not yet followed strict regulatory requirements for sustainability reporting, we can anticipate a shift from focusing solely on benefits, to including the negative repercussions of failing to comply with ESRS.

Recommendations for exploring examples of sustainability reporting fraud include implementing the case study approach on additional examples, which would provide a better understanding of how sustainability reporting deceptions and fraud typically manifest. This would allow for comparisons among companies from different industries and regions. Future research should also focus on analyzing how regulatory frameworks, such as the ESRS, impact sustainability reporting practices. Additionally, it would be valuable to explore whether these standards influence the "carrot-and-stick" theory related to the benefits and negative consequences of CSR engagement. Lastly, future research should include more in-depth qualitative studies, such as interviews with stakeholders. This could uncover new, harder to detect examples of sustainability reporting fraud.

The conducted study contributes to the field by highlighting the ways in which sustainability reporting fraud can occur. Furthermore, the research examined how the ESRS would address the identified challenges in sustainability reporting.

In summary, examples of sustainability fraud and deception highlight the importance of rigorously verifying the validity of companies' claims. ESG standards and frameworks are crucial as they help minimize greenwashing. While PP and Nestlé were used as examples of deceptive sustainability reporting, it is important to acknowledge that it is still admirable that they have published ESG reports and provided some level of ESG disclosures for stakeholders.

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APPENDICES

Appendix 1: Povzetek (Summary in Slovene Language)

Stremimo k zelenemu prehodu, posledično pa je trajnostno poročanje vedno večjega pomena. Po eni strani je motivator za izdajo nefinančnih poročil lastna iniciativa podjetja. Ta temelji na morebitnih finančnih koristih in povečanju ugleda, ki jih s seboj prinese znatno angažiranje k družbeni odgovornosti. Po drugi strani, pa so eden ključnih motivatorjev vedno bolj striktni standardi o trajnostnem poslovanju, kot sta GRI in ESRS. Kazni ob neupoštevanju dorečenih standardov in potencialne koristi, ponazarjajo teorijo “palice in korenčka”, ki zadeva izdajo trajnostnih poročil.

Ohranjanje visoke ravni okolijske, družbene in upravljske uspešnosti (ESG) je vedno večja prioriteta, posledično pa se poraja vse več goljufij pri poročanju o trajnostnem razvoju. Zavajajoče prakse v nefinančnih poročilih je pogosto težko odkriti, zato sta obsežna raziskava in analiza primerov nujni. Magistrsko delo naslavlja problem zavajanja in zlorab prisotnih v trajnostnem poročanju z iskanjem odgovora na raziskovalno vprašanje: “Kako razširjeno je zavajajoče poročanje o trajnosti in kako se neskladja običajno kažejo?”. Slednje je zastavljeno vsaki izmed dveh neodvisnih študij primerov, namreč švicarskemu podjetju Nestlé in slovenskem podjetju Perutnina Ptuj. Raziskovalna metoda, aplicirana za prepoznanje in analizo primerov trajnostnih neskladij, ki kažejo na greenwashing, je torej študija primera. Ta temelji na triangulaciji, ki pomeni uporabo več različnih virov dokazov. Vključuje namreč trajnostna poročila, ESG točkovanje, standarde in okvire trajnostnega poročanja, verodostojne članke in raziskovalne dokumente, povezane s trajnostnimi praksami subjekta, ter javne izjave podjetja. Prepoznana neskladja med trditvami v nefinančnih poročilih in drugimi viri, so preučena v kontekstu evropskih standardov poročanja o trajnosti (ESRS), poleg tega pa je vsak primer analiziran v kontekstu terminologije greenwashing-a, specifično prek “grehov zelenega pranja” (angl. sins of greenwashing), same vrste trditev in varljivost teh trditev.

Rezultati kažejo, da sta imela tako Nestlé kot Perutnina Ptuj več primerov zavajajočih praks pri trajnostnih poročilih. Najbolj prisotna slabost je bilo pomanjkanje certifikacije s strani nevtrálnih tretjih oseb, kar je opredeljeno kot “greh neobstoja dokaza”. Temu je sledil “greh nejasnosti”, ki odraža nejasno opredeljevanje ključnih okolijskih trditev, kar je potencialno zavajajoče za potrošnika. Primeri neskladij pri Nestlé so vključevali nejasne trditve o recikliranju embalaže, uporabi plastike, emisijah, krčenju gozdov, ogljični nevtrálnosti, uporabi pesticidov v dobavni verigi, ter človekovih pravicah. Pri Perutnini Ptuj pa so se neskladja odražala pri trditvah o investicijah v stroje, ki naj bi zmanjšale porabo goriva in emisije, izpustih toplogrednih plinov, ki niso predstavili informacij niti o indirektnih emisijah ne o ekvivalentnih ogljikovega dioksida, porabi obnovljivih materialov, pomanjkljivih ciljih trajnosti, zagotovilu tretjih oseb o legitimnosti trditev, ter sledenju standardov za trajnostno poročanje. Poročanje v skladju z ESRS, ki bo za podjetji obvezno od 2026 dalje, bo pripomoglo k reševanju tovrstnih pomanjkljivosti trajnostnih poročil in posledično prispevalo k večji transparentnosti.

Appendix 2: Summary of study cases' units of analysis

Table 6: Study cases' units of analysis

Unit Being Characterized	Total System (Main Unit)	Intermediate Units Nestlé	Intermediate Units Perutnina Ptuj
	<i>Sustainability report, ESG scoring</i>	<i>Sustainability report, ESG frameworks and standards, articles, public statements, research papers</i>	<i>Sustainability report, ESG frameworks and standards, articles, public statements</i>
Entity as a whole	Organizational structure, Sustainability reporting practices, and external perception		
Environmental impact	Sustainability goals and strategies in connection to environmental spectrum	<ul style="list-style-type: none"> - Recycling claims - Emissions - Deforestation-free claims - Offsets and Net-Zero targets 	<ul style="list-style-type: none"> - Fuel consumption - Emissions - Use of renewable materials - Sustainability goals
Social responsibility	Sustainability goals and strategies in connection to social spectrum	<ul style="list-style-type: none"> - Social impact of pesticides usage - Child labor 	
Corporate governance	Sustainability goals and strategies in connection to governance		<ul style="list-style-type: none"> - Alignment with ESG reporting standards - Third-party assurance

Source: Adapted from Yin (2003, p. 44).

Appendix 3: Summary of discussion with dr. Andreja Kodrin

Neskladja je bistveno težje dokazovat kot pa zavajanja s pomočjo specifičnih indikatorjev. Kljub temu pa je zavajanje potrebno specifično nasloviti, saj se pojavi v mnogih situacijah, kjer je le nekaj primerov pozitivnih.

Primer podjetja, pri katerem je bilo evidentirano neskladje in zavajanje glede trajnosti je Coca-Cola. Kljub temu, da je bilo podjetje eno prvih s pridobljenim dosežkom Water Neutral Award in Rating, je njihova glavna pomanjkljivost to, da so trajnostna poročila fokusirana le na procese znotraj podjetja. Poudarek je namreč na spremljanju tovarn, ne pa na predelavo sladkornih trsov, kjer se izkoristi 90% vode. Te gojijo še posebej tam kjer vode že tako ali tako ni.

Naslednji primer je Starbucks. Literatura govori, da so bili investitorji (financerji) za kampanjo proti plastičnim slamicam. Te so zato nadomestili s pokrovom, ki porabi približno 1-krat več CO₂. To je evidentno iz literature, kjer je veliko primerov in študij na to temo. Podjetje je torej milijarde vložilo v svetovno kampanjo, nato pa v resnici naredilo slabšo verzijo. Res da ni plastika, ampak moramo to gledati iz vidika, da je planet omejen z resursi in da imamo dejansko še zelo malo časa, da dosežemo cilje CO₂, ki so še preživetveni.

ESRS-ji nam pomagajo najti tudi primere korupcije, tako v državah kot znotraj posameznih podjetij. Specifično Siemens je imel v preteklosti velik koruptivni škandal, ki jih je vodil v znatno denarno investicijo njegovega preprečevanja. Naredili so primerjavo, in dobili indikator koliko je bilo primerov znotraj podjetja in ali so kaj naredili. Podjetja, ki takšne primere priznajo (angl. awareness), so boljše od tistih, ki tega ne naslovijo. Kljub temu pa je odgovor na primere zavajanje mnogokrat le "pesek v oči".

Kar se tiče aspekta zaposlenih pri trajnostnih poročilih, imajo podjetja še vedno možnost, da navajajo zgolj všečne stvari o trajnosti in o tem kako jo poskušajo izboljšati. S tem kažejo na svojo zavzetost (angl. engagement). Takšne trditve pa v resnici ne odražajo ali imajo zaposleni dostojno življenje, kako je z burnout stresorji, kakšni so pogoji overwork-a, kako se spoštuje popoldansko, večerno in vikend ne delanje. Posledično zasledimo primere podjetij, ki se hvalijo s situacijo zaposlenih, ki pa imajo v resnici samomorilna nagnjenja. Slovenska podjetja ne delajo nič drugače in dokler se trajnost tretira na takšen način se ne bo nič spremenilo.

Trajnost je specifično tretirana tudi glede uprave (angl. governance). Povsod, kjer je to oddelek pridemo na nivo računovodstva, poročanja in revizorskih poročil. Temu je tako zaradi poročanja in zakonskih obveznosti. Ko pa imamo podjetje, ki v to verjame in je to edini način preživetja postane zgodba popolnoma drugačna. Slednje je posebej opazno pri mlajših generacijah, kjer trajnost postaja imperativ, kar posledično vpliva tudi na njihovo odločitev o primernem delodajalcu. Dandanes je vedno več primerov podjetij, ki plačujejo za boljši trajnostni rating, kljub temu da je realna situacija drugačna. Vseeno pa so današnje

generacije dovzetne do tovrstnih prevar in zahtevajo, da podjetja naslovijo trajnost s konkretnimi spremembami načina poslovanja.

Primere zavajanja v trajnosti je torej navzven težko zaslediti, zato se je potrebno posluževati pozitivnemu pristopu, dvomu in sistemskemu razmišljanju. Podjetja namreč rada naredijo parcialne dejavnosti (primer Starbucks slamic), kar posledično vodi do tega, da je sistemska situacija vse slabša.

Nastaja vedno več orodij umetne inteligence za trajnostno poročanje. Tako na primer evropska komisija s taksonomijo sistemsko naslavlja trajnostno poročanje. To pa je hkrati nevarnost, saj za mnoga podjetja predstavlja veliko količino dela in zanje ni smiselno. Gre za palico in korenček, saj podjetja tega niso naredila sama od sebe, ampak so bila prisiljena. Torej podjetja niso sama naredila koraka ampak se njihovo trajnostno naravnost spreminja s prisilo.

Podjetja, še posebej multinacionalke, bodo iskala načine, da izpadejo bolj trajnostna. Zato uporabljajo kazalnike (KPI) v svojih trajnostnih poročilih, ki bodo generirana na osnovi člankov. Zato je v zadnjih dveh letih močna struja porasta podjetij, ki s pomočjo umetne inteligence same generirajo indikatorje. Večina teh orodij generirajo na osnovi člankov, ti pa so v današnjem svetu v večini primerov plačani (le 10% je neodvisnih). To pomeni, da je področje komuniciranja v zadnjih 10 letih naredilo največji poraz. In dejansko je za ta namen generirana vsebina, prek katere ne nastavljajo probleme in nasvete, ampak gre za promocijsko vsebino. Umetna inteligenca bo na osnovi tega generirala indikatorje, na primer o otroški delovni sili. Ti nimajo glasu v globalnih medijih in seveda bodo posledično indikatorji zelo ustrezni za bogatejši, zahodni, multi-nacionalni svet. Za ostala podjetja, ki pa to dejansko delajo pa ne.

Zato še posebej podjetja, kot so multinacionalke, ki imajo denar hočejo prekriti probleme, ki jih imajo s trajnostjo. Veliko podjetij dejansko opravlja delo kot ogljično-nevtralna, pa tega nikjer ne propagirajo, saj to dojemajo kot normalno.

Trajnostna poročila so zelo močna sredstva propagande in komuniciranja, zato je tudi prišlo do izraza Glossy Green Sustainability Report. Boljše kot je financiranje pripravljavcev trajnostnih poročil, bolj so podjetja bleščeča v trajnostnih aspektih. Zato se je nujno vprašati, kaj je bilo v trajnostnih poročilih zamolčano.

Dodaten primer trajnostnega zavajanja je prisoten tudi v slovenski cementni industriji ob Soči. Imamo ogromno primerov, še posebej ker v Evropi kjer velja konsenz, ker potrebujemo delovna mesta. Manj primerov pa je na primer v Ameriki, kjer je vzpostavljen business model, ki temelji na dokazovanju škodljivosti s strani uporabnika (za vse produkte; od zdravil do okolja škodljivih zadev). In v Evropi je bila do zdaj kontra mantra, oziroma ni mantra, ker je zakonsko uzakonjeno, da se mora dokazati da produkt ni škodljiv. To pa velja le zaradi predpostavke, da se določeni negativni učinki dokažejo šele čez desetletja. V Evropskem kmetijstvu bi se moral škodljiv glifosat (angl. Glyphosate) absolutno

prepovedati, ker je dokazano z vsemi študijam evropske komisije, da je rakotvoren in smrtonosen. Pa vendar le se z lobisti vsakič doseže, da se njegova uporaba podaljša za deset let, če tudi študije kažejo na obolenja z rakom. Podobno je tudi s proizvajalci barve za lase, kjer že 15 let obstajajo kredibilni dokumenti, ki dokazujejo da so barve karcinogene in spodbujajo njihov umik iz trga. Na lasišču je koža kjer je najmanj plasti te kemikalije direktno prodrejo v sistem. Zaradi prisotnih kemikalij je dodajanje barve na lasulje strogo prepovedano. Kljub temu, pa je barva še vedno v ponudbi, kar kaže na močno korelacijo, trade-off v življenju.

Dandanes se bližamo “adaptiranju” klimatskim spremembam. Ne-finančna poročila pa so zgolj odraz kako malo je dejansko narejeno za trajnost. Moral bi se spremeniti celotni način kako se nekaj proizvaja (cementna industrija, jeklarska), vseeno pa moramo vzeti v zakup, da morajo podjetja naslavljal potrošništvo.

Appendix 4: PP's annual amount produced and sold products

Table 7: PP's amount produced and sold products from 2018 to 2023 in tons

Produced and sold	2018	2019	2020	2021	2022	2023
Poultry meat (tons)	55,062	60,018	62,794	72,841	78,152	84,406
Poultry meat (% growth)		9%	5%	16%	7%	8%
Poultry products (T)	34,475	35,509	38,813	40,366	43,492	46,555
Poultry products (% growth)		3%	9%	4%	8%	7%
Total (tons)	89,537	95,527	101,988	113,207	121,644	130,961
Total (% growth)		7%	7%	11%	7.5%	7.7%

Source: Own work.

Appendix 5: Count summary of study cases' Discrepancies, Sins of Greenwashing, Claim Types, and Claim Deceptiveness

Table 8: Count summary of study cases' Discrepancies, Sins of Greenwashing, Claim Types, and Claim Deceptiveness

Typology	Category	Count
Nestlé		
Discrepancies	Environmental impact	16
	Social responsibility	3
Sins of Greenwashing	Sin of Vagueness	3
	Sin of No Proof	8
	Sin of Fibbing	1
	Sin of Broken Promises	1
	Sin of the Hidden Trade-off	1
	Sin of False Hopes	1
	Sin of Lesser of Two Evils	2
	Sin of Injustice	1
	Sin of Hazardous Consequences	1
Claim Type	Product orientation	2
	Process orientation	13
	Image orientation	4
Claim Deceptiveness	Vague/ambiguous	10
	Omission	11
	False/outright lie	3
Perutnina Ptuj		
Discrepancies	Environmental impact	10
	Corporate governance	4

continues

Table 8(cont.): Count summary of study cases' Discrepancies, Sins of Greenwashing, Claim Types, and Claim Deceptiveness

Sins of Greenwashing	Sin of Vagueness	2
	Sin of No Proof	6
	Sin of Fibbing	1
	Sin of Irrelevance	2
	Sin of False Hopes	1
	Sin of Lesser of Two Evils	1
	Sin of Profits Over People and the Environment	1
Claim Type	Process orientation	12
	Image orientation	2
Claim Deceptiveness	Vague/ambiguous	8
	Omission	7
	False/outright lie	3

Source: Own work.