ENVIRONMENT, SOCIAL AND GOVERNANCE (ESG) Reporting

Shift from Compliance to Commitment

MASTER THESIS

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ABSTRACT

The background to this research is the directive 2014/95/ EU on disclosure of non-financial information and the principle of the United Nations Principles of Responsible Investment (UNPRI) both demanding ESG disclosure. According to Tähtinen (2018), long-term value creation by the companies are not fully addressed in the current sustainability or annual reports of the firms. Plastic being the major global concern over climate change, stakeholders demand sustainable packaging, and long-term value creation process through ESG disclosure. Preliminary research was conducted on ESG disclosure in the consumer goods packaging sector and the market response in the Netherlands to support the construction of a research perspective. This study focuses on determining the key determinants of ESG disclosure in the creation of long-term business value for consumer goods packaging companies. First, content analysis was performed to study the sustainability reports of the six global companies on their long-term value creation process and methods adopted using the concepts of integrated value creation process theory. Later, through semi-structured interviews with ESG practitioners in the Netherlands, the findings were validated for credibility and reliability. Primary data was sourced from stakeholder interviews, while secondary data was retrieved from databases, academic journals, government reports, and guidelines. Overall, consistently with the literature, the results indicate that a strong business strategy integrated with ESG across the value chain, along with a multi-stakeholder and commitment-driven approach is critical in creating long-term business value. Finally, to create long-term business value through ESG reporting by moving beyond compliance-driven strategy, it is strongly recommended to reporting practitioners, sustainability leaders, policymakers of consumer goods packaging companies to implement all the key determinants of ESG reporting identified in this study.

Key Words: Environment, Social and Governance, Sustainability, Value Creation, Non-financial Disclosure, etc.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ACRONYMS

CDP	Carbon Disclosure Project
CFA	Chartered Financial Analyst Institute
CSR	Corporate Social Responsibility
DJSI	Dow Jones Sustainability Index
ECA	European Court of Auditors
EFFAS	European Federation of Financial Analysts Societies
ESG	Environment Social and Governance
EU	European Union
GHG	Green House Gas
GRI	Global Reporting Initiative
IVC	Integrated Value Creation Process
IIR	International Integrated Reporting Framework
KPI	Key Performance Indicators
NFRD	Non-Financial Reporting Directive
NGOs	Non-Governmental Organizations
PRI	Principles for Responsible Investment
LSEG	London Stock Exchange Group
SASB	Sustainability Accounting Standards Board
SDG	Sustainable Development Goals
SR	Sustainability Reporting
SRI	Socially Responsible Investments
SROI	Social Return on Investments
SRTs	Sustainability Reporting Tools
TCFD	Task Force on Climate-Related Financial Disclosures
UNIDO	United Nations Industrial Development Organization
UNPRI	United Nations Principles for Responsible Investment
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development

CHAPTER 1: INTRODUCTION

This chapter gives the background to this research and discusses the current practice of Environment, Social and Governance (ESG) reporting in consumer goods packaging companies leading to the problem statement and the research objective. The objective is divided into research questions guided by research design. The background covers the market response of the study area and the current practice of reporting in global consumer packaging companies.

1.1 BACKGROUND

Climate change, plastic waste, the future of work, and growing disparities are among the increasing number of sustainability risks that, if left unaddressed, will impact company credibility and financial performance. Reporting of non-financial disclosure by companies are increasing and are issued either integrated with financial reports or as a separate report detailing the performance, operations, and responsibilities of the organization, in addition to the standards laid down by relevant laws and regulations. These efforts were recently acknowledged by the Governance and Accountability Institute where it reported that 90 percent of the S&P 500 companies released corporate sustainability reports in 2019, reflecting a step towards greater transparency and accountability (2020 S&P 500 Flash Report, 2020). Companies are contributing to sustainable development goals by measuring their economic, social, and environmental impacts. Investors, on the other hand, are progressively practicing to integrate ESG metrics into their investment analysis for better decision-making, enabling them to reduce long-term risks and high returns (Siew, 2015).

According to Fitzgerald (2019), CEOs of nearly 200 companies agree that the value to shareholders being the top priority for any business is now no longer of importance. Now, CEOs believe that addressing stakeholders' needs is primary focus and shareholders are supporting this change (Summers, 2019). Ioannou and Serafeim (2017) states that regulatory requirements around the world is one of the key driving forces for companies to continuously measure, improve and report on ESG performance. According to EU Directive 2014/95/ on non-financial disclosure all companies are required to report their environment, social and governance information. In addition, new guidelines, frameworks, standards to improve ESG reporting practices are introduced by other organizations such as United Nations Principles of Responsible Investment (UN PRI), the UN (Global Compact), and Global Reporting Initiative (Lagasio and Cucari, 2019).

In the Netherlands, the KPMG report on non-financial disclosure and diversity shows that reporting in Dutch companies has improved since the enforcement of the EU directive (KPMG, 2019). In the current scenario, the company's financial gains are not attributed to the performance of the environment, social, and governance elements. This attitude towards financial performance by companies requires a significant change. On the other side, the demand from stakeholders on non-financial disclosures is mounting pressure on companies. The attention on responsible investment by Dutch government is the main driver for the connection between financial services and sustainability reports (Mair, 2019). In 2019, a study conducted by the European court of auditors (ECA) on sustainability reporting revealed that though reporting practices improved, the quality and clarity of reports remained a challenge for investors, which is crucial for making investment decisions. Stakeholders argue that the information related to long-term value creation of the firm are not being reported in their non-financial disclosures (Tähtinen, 2018).

1.2 PROBLEM STATEMENT

In the consumer packaging industry, the key driver for sustainability is the regulations and consumer awareness on single-use plastic packaging waste and its impact on the environment (Berg et al., 2020). Based on a recent literature review on sustainable value by (Cardoni et al., 2020) the term sustainable value is used just as a phrase to promote positive business value rather than a concept. Though the growth in sustainability reporting and its interlinkage to financial growth has been researched by many researchers and professionals over the last decades, the focus on long-term value creation through the information disclosed in the sustainability reports is still a challenge (Black Sun et al., 2018). This issue is evident in a recent study by Hillier et al., (2017) on the sustainability practice in packaging companies that though risks are identified, a proper procedure on how companies are planning to reduce risk and preserve exploitation of natural resources is not addressed transparently. Concerns related to materiality issues and assurance is less focused which further led to credibility issues and it is also observed that most of the packaging companies do not want their reports to be published in the market. It is noticed that the business model adopted is only intensive on growth, consumption, and adhering to existing legal norms. This study affirms that a sustainable business approach to sustainability and long-term value creation is not reported by most of the packaging companies.

This paper focuses on providing knowledge to consumer goods packaging industries on how long-term business value can be created strategically and communicate through ESG reporting. For the purpose of this study, the value creation process adopted by top ESG rated six global consumer goods packaging companies are studied to better understand the major aspects of ESG reporting and are further validated with ESG practitioners in the Netherlands.

1.3 RESEARCH OBJECTIVE

This research aims to contribute to the existing environment, social and governance reporting knowledge of consumer goods packaging companies in better understanding the implications and impacts of ESG reporting, and to recommend a sustainable business approach for long-term value creation.

1.4 RESEARCH QUESTIONS

The research will address this central question to achieve the research objective: **What are the key determinants of ESG reporting to be considered by Dutch consumer goods packaging companies that create long-term sustainable business value?**

This main research question is better explained in detail by the sub-questions below being considered in accordance with the theory of value creation process.

1. What are the drivers for ESG reporting and the market response?
2. What implications does ESG reporting have on businesses?
3. What the perspectives and expectations of stakeholders i.e., Employees and Investors on ESG reporting?
4. What are the available resources for reporting and the significance of ESG ratings on value creation?
5. In accordance with the main drivers, how can this be strategically addressed at the organizational level?

1.5 THESIS OUTLINE

The paper is set out as follows. After the introduction, chapter 2, proposes the existing literature and research gap. Chapter 3 presents the research methodology. Chapter 4 shows results from data collected and Chapter 5 discusses the research findings and recommends a long-term sustainable business approach through ESG reporting. The last Chapter 6 proposes conclusions, recommendations for ESG practitioners and future research work.

CHAPTER 2: LITERATURE REVIEW

In this chapter, relevant theories, peer-reviewed scientific literatures, and some grey literatures from the last 5 years (2015 -2020) on ESG reporting and its implications on business value and stakeholder value are reviewed in support of the research objective. The first section (2.1), describes the concept of ESG from a corporate and investor perspectives, and key reporting drivers. The second section (2.2), focuses on ESG implications on businesses and investors. The third section (2.3), focuses on Stakeholder engagement and Investor requirements from ESG reports. The fourth section (2.4), focuses on the reporting choices and ESG ratings that are used to assess corporate sustainability. Section (2.5), focuses on a sustainable business model and explains the theoretical framework. Finally, an overarching conclusion is drawn from the literature in support of this research paper.

2.1 ESG CONCEPT

This section discusses the concept of ESG and different definitions by corporates and investment firms. The following subsection illustrates the key drivers for ESG reporting and shows the key considerations, conclusions from the literatures.

Although the term "ESG" occurs frequently in the literature, the concept itself does not have a single definition. The definition varies among researchers and few investment organizations (Table 1).

Table 1: Definition of ESG

Author/s and Firms	Definition of ESG
Taliento et al., (2019)	"It is another way for representing sustainability and is defined as - *a set of activity or processes associated with an organization's relationship with its ecological surroundings, its coexistence and interaction with human organisms and other populations, and its corporate system of internal controls and procedures (such as processes, customs, policies, laws, rules and regulations, etc.) to direct, administer and manage all the affairs of the organization, in order to serve the interests of stockholders and other stakeholders*"
Iamandi et al., 2019	*"the criteria used to evaluate a company's commitment to CSR and is the most prominent source to measure sustainability performance of firms"*
Robecco, 2020	*"ESG uses Environmental, Social and Governance factors to evaluate companies and countries on how far advanced there are with sustainability"*

EFFAS -European Federation of Financial Analysts Societies (2019)	*"ESG is a generic term used in capital markets. Often, it is erroneously equated with terms like Corporate Responsibility or Sustainability. However, when mainstream capital markets look at ESG, two focal points immediately emerge: risk caused by (bad) ESG performance and business opportunities based on proactive ESG performance. Corporate Responsibility reports from corporates address several stakeholder groups, not just investors and financial analysts"*

In this paper, definition of ESG by EFFAS is considered due to its close relevance to the research area addressing ESG related risks, opportunities and their impact on business growth which are key factors for long-term value creation.

According to Nordqvist (2019), environment, social and governance factors are a category of non-financial performance metrics that involve legal, environmental, and corporate governance concerns that ensures processes are in place to maintain transparency and to reduce the carbon footprint of the companies. These three factors include , **Environmental factor** includes issues related to climate change, greenhouse gas emissions, resource depletion, waste, pollution etc, **Social factors** are related to working conditions, health and safety, employment opportunities, and diversity and **Governance factor** includes executive compensation, the composition of the Board of Directors, audit procedures and Corporate Executives' behaviours in terms of compliance with the law as well as ethical principles and code of conduct. ESG performance will increase if any one of the three criteria are performing well (Taliento et al., 2019). Duran and Rodrigo (2018), mentions that reporting non-financial data on ESG factors is important and beneficial for firms as it helps executives to assess the impact of the company and improve stakeholder's participation and intervention to minimize negative impacts.

2.1.1 Key Drivers for ESG reporting

To understand the key main drivers for ESG reporting, articles and reports published by corporate and investment firms were reviewed. It is observed that corporate firms have started to consider ESG aspects in their entire the business value chain not just focusing on financial aspects. Investment firms are assessing companies not only by their risk assessments but also prefer to see the way the corporates are managing these risks by integrating with their business strategy (Deloitte, 2016). According to world business council of sustainable development, the key reporting drivers for ESG information are (a)Compliance Requirements; (b) Communication of information to stakeholders; (c) aligning with peer practice or contribute to policy goals (WBCSD, 2019). An overview of the driving force and its significance is illustrated in the below table 2.

Table 2: Key Drivers and its Significance

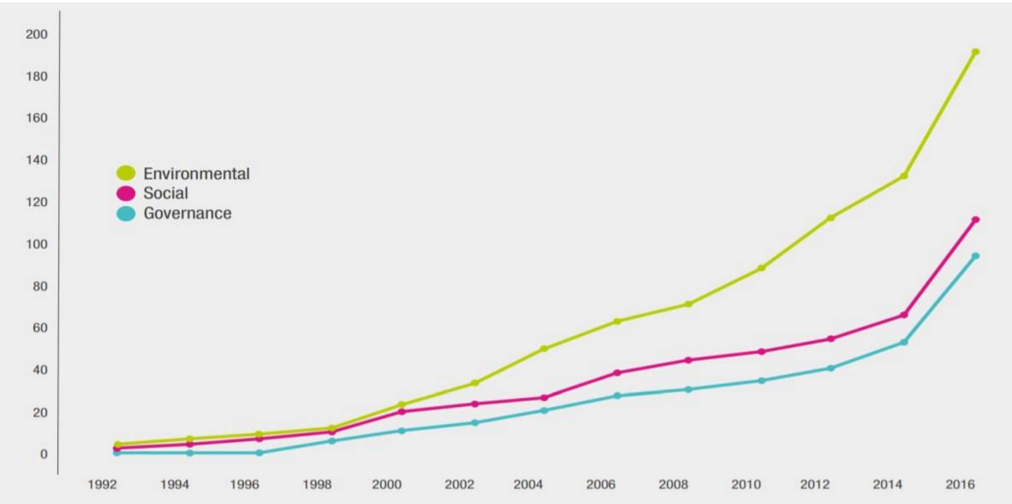
Key Driver for ESG Reporting	Significance
Compliance Requirements (Policies and Regulations)	In Europe, EU Non-Financial Reporting Directive is acting as a driver obligating companies that have employees above 500 to report environmental, social and governance information which should also include implementation of diversity policy and demands explanation if not implemented (LSEG, 2018). Firms are mandated to identify risks and opportunities, materiality issues specific to industry type and report the ESG components by developing key performance indicators and integrate with business strategy. In addition to the directive, EU and its member states have committed to adopt of 2030 agenda and its 17 SDGs that are based on the three dimensions of sustainability (ECA, 2019).
Communication to Stakeholders	Cardoni et al., (2019) mentions that the main aim of stakeholder is to evaluate company's performance measuring ESG metrics. Companies can be made accountable if ESG information is not complied to the regulations by stakeholders. It is important for an organization to identify its potential stakeholders and consider their needs to maintain a positive stakeholder relation. According to Romero et al., (2019), stakeholder management can be used as a strategic tool by engaging them rather than just providing information. Duran and Rodrigo (2018) mentioned that companies are pressurized to disclose ESG information that meets the needs of investors such as materiality issues, fines, penalties that could affect the reputation of the firms when published. However, few corporate executives are hesitant in revealing the data with a fear that could hinder their firm value, for example, packaging companies due to the negative impact of plastics or packaging waste. Stakeholder engagement is lacking in most of the firms which is creating a lack of awareness on the actual value of ESG reporting.
Align with peer practice or contribute to policy goals	According to an investment firm, Bloomberg professional services (2019) mentions the availability of ESG data offers a competitive advantage. Since investors measure the performance of corporates/firm's based on two metrics, non-financial KPI metrics to check if the company has identified materiality issues and has integrated into their business strategy and measure the history of firm performance comparing to their peers in the market. This step from

	investors is driving pressure on corporates to report ESG data aligning with their peers in the markets.

According to Wilcox and Sodali, (2019) and BlackRock, (2016) though above-mentioned drivers push the corporates to report non-financial disclosures, companies and investors still struggle to include ESG factors in their sustainability reports because of the use of different terminologies used by corporates and investment firms such as “CSR Report”, “Sustainability Report”, “Corporate Report”, “ESG Report” that leads to confusion among practitioners on the exact data to be reported.

To know the current status and market response on ESG factors in the Europe region, I referred to recent research conducted in 2018 by Climate Disclosures Standards Board (CDSB) and World Business Council for Sustainable Development (WBCSD) on ESG reporting trends. This study suggests that though the reporting practice in the EU region has increased compared to other regions in the past 25 years, it is observed that implementation of governance factor is lagging compared to E and S factors as shown in figure 1.

Figure 1:ESG Reporting Trend in past 25 years EU Level (CDSB and WBCSD, 2018)



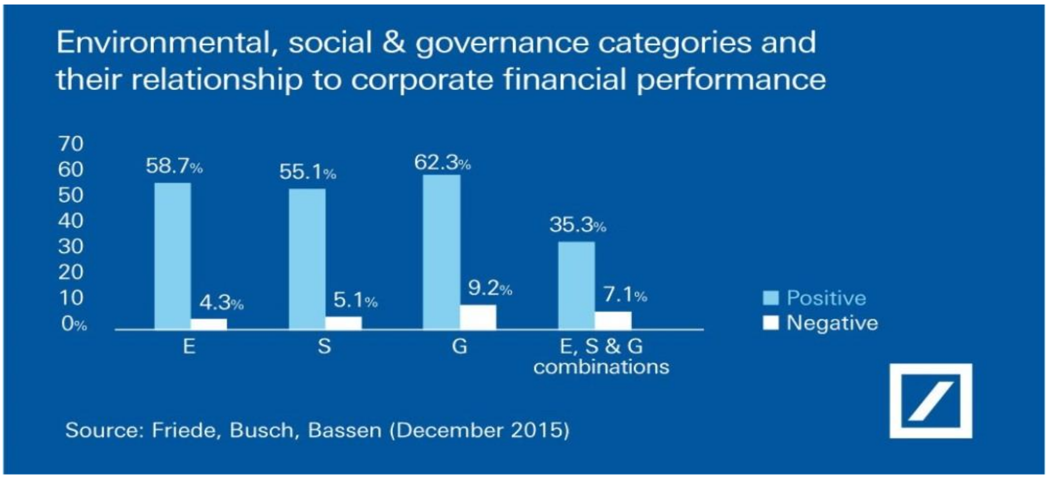
From the above figure, it can be concluded that environmental aspect of sustainability is given more importance and being tracked as part of compliance. However, there is less focus given to the social and governance aspects in the reporting process.

In order to guide the reporting practitioners to ensure proper implementation of ESG reporting, it is important to know the benefits and value add from reporting. In the following section, ESG reporting implications on businesses and investors is discussed for better understanding on the value creation.

2.2 ESG Reporting Implications for Businesses and Investors

To know the implications of ESG on business various literature studies Friede et al., 2015; Shaukat et al., 2015; Velte, 2017 were reviewed. It was noticed that the impact of ESG reporting on Corporate financial performance is positive as shown in figure 2.

Figure 2: ESG Factors correlation to CFP (Source: Friede et al., 2015)



The graph above indicates that when assessed independently, there is are no major variance between E, S, and G factors. According to Friede et al., 2015, however, positive financial implications are observed when specific areas related to E, S, and G are focused as compared to a combined approach. According to Iamandi et al., (2019) companies practicing ESG reporting can attain certain advantages such as (a) strong stakeholder engagement; (b) building trust which ensures long-term investor relations and business value; (c) better profits; (e) improved risk management practices; (f) enhance process/product innovations which increase productivity and operational performance; (g) high market competition; and (h) effective governance.

In contrast to the advantages, Brooks and Oikonomou (2018) argue that ESG's negative effect on financial results is more than the positive impact because investors are deeply focused on how firms identify and act on ESG risks than opportunities. He emphasizes on analysing E-S-G factors independently to gain better insights because different stakeholders have different choices about which company to choose based on corporates response to ESG issues. For instance, according to Han et al., 2016, corporate governance is the key to ensure good financial results but, on the contrary, the environmental component can have a significant impact on profits in the form of fines, penalties etc if not complied effectively.

Xie et al, (2019) said the impact of ESG disclosure is moderate (i.e., neither low nor high) on corporate performance. However, disclosure of governance has more positive implications followed by disclosure of social and environmental. For example, non-compliance to the environment deals with regulatory aspects can lead to negative firm value if not governed effectively. Companies are urged to follow green practices in their business value chain such as reduce, reuse, and recycle to address these negative impacts. In terms of social and governance components, capability enhancements and management commitment are crucial considerations for business growth. Also, the results of the study show that under-reporting or over-reporting has a weak relation on organization performance.

Based on the literatures reviewed, it is understood that ESG reporting has positive implications on both companies and investors, in terms of financial gains and it is also significant that reporting on the governance aspect is critical in creating long -term business value. For long-term value, it is indeed required to maintain a strong relationship between companies and investors. In the following section, managing stakeholder expectations, investor needs are discussed to ensure a positive relation.

2.3 Stakeholder Engagement and Investor Needs

Bellantuono et al., (2016) defines stakeholder engagement as a key theme in stakeholder theory. From previous literatures, sustainability is best explained using legitimacy and stakeholder theory. Legitimacy theory states that firms due societal pressure releases sustainability reports that indicates firms are meeting the societal standards to sustain the place in the market. Businesses are expected to provide their stakeholders with clear and accurate information about the effect of their operations according to stakeholder theory. The data required for sustainability reporting vary from stakeholder to stakeholder as well as different industry sectors. Therefore, it is necessary for firms to prioritize the stakeholders related to the business and map the operational issues considering stakeholders views. It is practically important to consider stakeholders perception on materiality issues and business strategy (Romero et al., 2019). Other researchers such as Lokuwaduge et al., (2017) believes performance of firm is dependent on both financial gains and ESG value which can be obtained through effective stakeholder involvement. Douma and Dallas, 2018 and Cardoni et al., 2019 agree that engagement can lead to new innovations and strategic growth.

In a study conducted by Bellantuono et al., 2016, he defined five-stage stakeholder engagement framework like AA1000 Stakeholder Engagement Standard for better understanding on how to engage stakeholders in business processes as given below,

1. **strategic thinking:** involves engaging stakeholders, finding and categorizing issues, defining strategic goals and targets
2. **analysis and planning:** performance measurement, benchmarking with peers and partnerships and collaborations, defining stakeholder responsibilities and plans

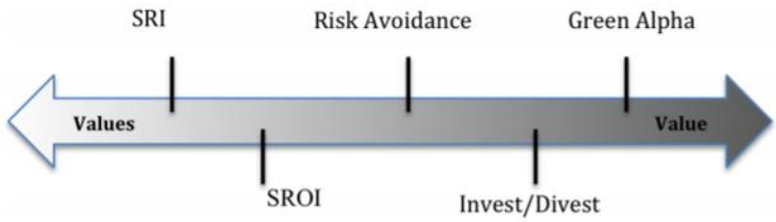
3. **maintenance and strengthening** of the capacities needed to engage effectively, which development of internal skills, building stakeholder capacity
4. **engagement techniques** – identify the best engagement approach
5. plan **follow up activities and review** the engagement process.

This approach is believed to improve the quality of sustainability reporting as materiality analysis is done engaging stakeholders which are a core element in ESG reporting as it ensures reliability and comparability of reports with other peer companies in the same industry sector. Furthermore, stakeholders' views when considered as key priority builds trust towards the companies which further improves engagement adding value to the business

To know the role of investors and their expectations from ESG reports, I reviewed a few analytical studies conducted by private research and investment firms between the period 2015- 2019. The results from various studies indicate, investors are looking at the long-term effect of ESG on business results while making investment decisions. In 2016, MIT study on investing in a sustainable future depicts investors have become more conscious in decision making on investments and that nearly half of investors dint agree to invest in unsustainable companies. Seventy-five percent of investors and analysts believe that consideration of ESG factors improves financial performance (Neill, 2016). The growing trend in investor demand on ESG matters is largely due to the emerging concept of sustainable investing by United Nations Principles for Responsible Investment (UN PRI) that stresses on investors adopting six guiding principles (PRI Six Principles) and integrating sustainability in their financial domain.

In the research study conducted by Esty and Cort, 2017 on status of ESG data and Metrics, the authors describe five types of investors who are interested in the sustainability context. According to the authors, every investor has specific needs on the ESG aspect therefore firms should understand the needs of their principal investors and provide the relevant data as shown in Figure 3.

Figure 3: Spectrum of Sustainability Investor Types (Source: Esty and Cort, 2017)



This figure elaborates the investor types and their interest work areas. These investors interest on sustainability are exhibited on a range from those ready to sacrifice returns to those concentrating on maximum returns as given below,

Investor Type	Roles
1. Socially Responsible Investors or Values investors	These investors filter organizations and eliminates firms of lower performance considering impact on returns.
2. Impact or Social return on Investment (SROI) investors	These investors wish to bring a sustainable change in the community by emphasizing on ESG factors by their investments.
3. Risk-oriented mainstream investors	These investors observe the sustainability issues of a firm and decide on investment decision to avoid loss by investing in unsustainable firms.
4. Mainstream investors	These investors prefer to move away from unsustainable companies and invest in sustainability leaders i.e. a sustainable company with strong governance and decide on the acceptable amount of risk from reduced returns.
5. Green Alpha investors	These investors consider sustainability leaders to be out-performing in the market.

The authors summarize that investors have different facets of sustainability, and corporate behavior considering ESG measures. The authors suggest that Investors need to have a common understanding of sustainability and its metrics while firms should consider engaging their investor's needs for a win-win situation to both parties.

For deeper insights on investors engagement, peer research studies were reviewed, and the expectations and needs were analysed. Recent studies indicate that investors are interested and expecting firms to **identify the ESG issues and align the risk mitigation plans with business strategy**. This information transparency in sustainability reports can help investors assess the risk, returns, and impact on real-world before making any investment decision (Espahbodi et al., 2018; Van Durren et al.,2016; Douma and Dallas, 2018). Investors want firms to have a systematic **stakeholder engagement** process as they believe sustainability related issues can be best addressed with the support of stakeholders. Investors expect firms to have stakeholder dialogue with them as well as other stakeholders important to their business (Douma and Dallas, 2018). Investors strongly believe that **good governance** attributes to a good corporate performance. Hence, investors focus on governance mechanism adopted by firms to handle the risks in all three dimensions of ESG (Van Durren et al.,2016; Douma and Dallas, 2018). In accordance to European Union's 2014 directive on non-financial reporting and the Financial Stability Board's creation of the Task Force on Climate-related Financial Disclosures in 2015, investors agree that sustainability-related activities has major impact on the financial aspects of companies and therefore expect risks to be mapped as per their industry sector needs. Investors looks for **materiality analysis** to understand the risks of the industry sector and assess the potential of long-term engagement. (Bernow et al., 2019). Investors look for data **reliability** when assessing sustainability reports as it ensures incentive consistent (Espahbodi et al., 2018). Investors want sustainability reports to get assured by third party for reliability and credibility of data (Boiral et al., 2017) and also desire to get the reports audited (Bernow et al., 2019).

Summarizing section 2.3, the value add of stakeholder engagement on financial performance is clear from the previous studies and is one of the expectations of investors from corporates. This emphasizes that stakeholder engagement is a dependent variable which determines the corporate performance and ensure long-term relation with investors. Therefore, this research will consider two stakeholders i.e., employees and investors as key actors in achieving the research objective.

After knowing the value addition of ESG reporting on firm's performance and the relevance of stakeholder engagement, it is required to know the suitable reporting framework for communicating ESG information adhering to transparency factor. In the following section, the most widely used reporting frameworks and ESG rating agencies are discussed to help companies analyse which framework would be suitable for their materials and how ratings are considered by investors.

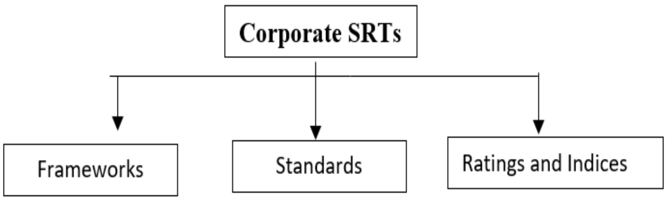
2.4 Reporting Choices and ESG Ratings

In the current reporting scenario, there are several ESG reporting frameworks available in the market. This often creates confusion to the users in choosing a framework that is best suitable for their nature of business and material issues. Also, similar issue is faced by the firms and investors to choose an ESG rating agency from the list of available ones in today's market. To help companies overcome this confusion, in this research paper I prioritized top five ESG reporting frameworks based on their usefulness and acceptance by investors.

2.4.1 Reporting Frameworks

According to the guideline for reporting non-financial disclosure by EU directive, a company can adopt any widely recognised national or international reporting frameworks. Corporate sustainability reporting tools (SRTs) are classified by (Siew, 2015) as frameworks, standards, ratings and indices.

Figure 4: SRT - Sustainability Reporting Tools (Source: Siew, 2015)



As mentioned in section 2.3.2, corporations are expected to meet the diverse needs of investors. Since number of reporting frameworks, ranking platforms are available in the market it is a challenge for firms to choose the framework to meet investor expectations. I shortlisted top five widely used ESG reporting frameworks suitable for various types of stakeholders given in the below table 3.

Table 3: ESG Frameworks (Source: Adapted from Conference-board and Nareit, 2019)

Framework	Focus Area	Target Audience	Purpose	Information to Report
Global Reporting Initiative (GRI) Framework		Broad set of stakeholders	Helps organizations to report on economic, environmental and social impacts	General information about organization structure, strategy, ethics, integrity, governance, stakeholder engagement and ESG metrics
Carbon Disclosure Project (CDP) Framework		Investors, buyers and other stakeholders	Assess environmental impacts, helps investors, stakeholders benchmark and make better decisions on climate actions.	Captures environmental performance data related to GHG emissions, water, forests, supply chain.
International Integrated Reporting Framework		Investors	Explains investors how an organization creates value overtime	Organization Overview, Risks and opportunities, business models, strategy, performance, outlook, basis of presentation.

Sustainability Accounting Standards Board (SASB)		Investors	Defines operational material industry specific metrics affecting the financial performance of the organization.	Environment, Social capital, Human capital, Business model and innovation, leadership and governance.
Task Force on Climate-Related Financial Disclosures (TCFD)		Investors, Lenders, Insurers and other stakeholders	Measures and respond to climate change risks and encourage firms to align with investor needs.	Governance, Strategy, Risk management, Metrics and Targets

From the above-mentioned frameworks, GRI is the widely used framework by industries followed by SASB which clear focuses on materiality issues specific to industries. Materiality is considered as reporting principle by frameworks as it helps firms to prioritize risks and plan mitigation measures based on severity and contributing to external reporting. Investors believe guidance issued by reporting frameworks such as SASB and the IIRC are beneficial for firms to adopt as it addresses the financial materiality aspects required by investors (WBCSD, 2019)

Though materiality is considered crucial in reporting practices, the main challenge in determining the material issues lies with a wide range of ESG issues, different stakeholders' opinions. Investors say that ESG data reported by firms are not helpful in making investment decisions (WBCSD, 2019). Also, from the peer literatures it is evident that reporting lacks consistency, reliability, quality, comparability (Higgins and Coffey, 2016; Diouf and Boiral, 2017; Mynhardt et al., 2017; D'Aquila, 2018; Boiral et al., 2017; Morioka and de Carvalho, 2016; Bernow et al., 2019).

2.4.2 ESG Ratings and Indices

The growing practice of responsible investing among investment firms has led to considering ESG factors in the assessment of corporate sustainability performance. It is practically difficult for investors to analyse the metrics reported by the number of corporate firms. Therefore, investors rely on ESG rating indices for assessing the status of sustainability in firms. According to study conducted by Muñoz-Torres et al., (2018) these ratings are beneficial for investors and companies because (a) it is not clear how investing in sustainable firms contributes to sustainable development. Therefore, investors rely on ESG ratings to know the corporate sustainability performance of companies;(b) it also gives information on the financial status of the company and (c) helps organizations to solve issues/risks internally. This demand for information from rating agencies has made them a major player in the sustainability business. ESG rating agencies gather data from the firm's sustainability reports, separate questionnaires, and have their own assessment methods to rate a company on sustainability performance. In this paper, the top five ESG raters are discussed (Table 4) based on a recent survey conducted by Wong and Petroy (2020) on the usefulness of ratings by Investors.

Table 4: ESG Raters (Source: Wong and Petroy, 2020)

ESG Rating Agency	Information
Sustainalytics	ESG risk assessment is performed based on industry type considering the awareness, sustainability reports and trends.
MSCI	Industry specific trend analysis is performed to help investors better under the ESG risks and opportunities involved.
CDP Climate, Water and Forest Scores	Direct emission data is provided in which investors are interested. As mentioned in the framework, it discloses material information related to water, forest and GHG emissions
Institutional Shareholder Services (ISS E&S) Quality Score	Assess ESG issues in depth ensuring quality and recognizes important omissions in the disclosure
RobecoSAM Corporate Sustainability Assessment (Dow Jones Sustainability Indices (DJSI)	Assess ESG risks and opportunities emphasising on long-term sustainability subjects

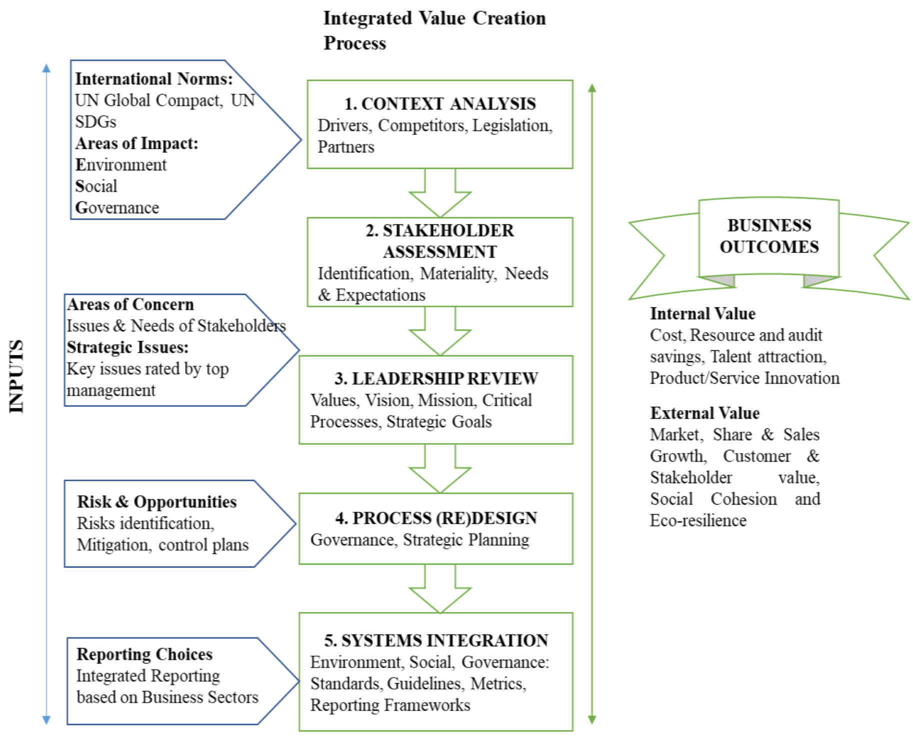
The authors recommend companies to always know investor needs, improve report transparency, and practice data consistency, regularly monitor the ESG ratings where investors are focused and act accordingly. Since the evaluation methodologies adopted by the reporting agencies are not unique, there are chances of a single firm being rated differently by two different agencies in the same time period due to variance in measuring criteria and metrics used. These agencies are mainly focused on environmental and social dimensions not considering the governance dimension (Muñoz-Torres et al.,2018).

Summarizing section 2.4, due to the availability of various reporting frameworks and ESG rating agencies it is difficult for both firms and investors to align to one-fit size for all reporting structures. However, as mentioned in EU directive firms are encouraged to adopt multi-frameworks if companies desire to be more specific in reporting. As these activities are generally top driven, it is can be confirmed that governance plays a key role in assessing the material data and decide on a suitable framework to report. After selection of suitable framework and understanding the rating criteria, it is now required to integrate all the reviewed components (drivers, implications, stakeholder engagement, reporting, and rating choices) to create long-term business value. For this, a theoretical framework is derived from the theory of sustainable value creation which is explained in the following section.

2.5 Theoretical Framework – Sustainable Business Value Creation

Manda et al., (2016) define sustainable value creation as ***" identification of strategies and practices that contribute to a more sustainable world by viewing global challenges associated with sustainability through an appropriate set of business perspectives, and the utilization of these strategies and practices to drive shareholder value "***. From the definition, contribution to sustainable development is possible when firms implement an integrated value creation process within their business strategy that includes ESG factors, risk assessments, and reporting, governance and strategy, stakeholder engagement, etc. In 2015, Visser and Kymal, two researchers have developed Integrated Value Creation process (IVC) model and believe implementing this model can help corporates achieve goals and stakeholders' expectations thereby contributing to long-term value creation by tackling global environmental and social challenges. For this research purpose, I adopted the concept of IVC process and developed the theoretical framework to achieve the research objective. Brief description of the model is described below

Figure 5:Theoretical Framework – Integrated Value Creation Process (Source: Adopted from Visser and Kymal, 2015)



As first step, businesses should always be updated and know the current trends in the market related to their business with respect to technology advancements or disruptions, risks or threats, best practices, any changes in legal aspects etc. Second step, businesses should identify all stakeholders across their value chain and prioritize the key stakeholders, understand their expectations and accordingly do the materialistic mapping i.e. materiality matrix as defined in the GRI Sustainability reporting guidelines. Third step, Leadership Review, top management should review the vision, mission of the business, if required change or modify to align with requirements. Leaders should develop strategic goals and targets based on the material issues identified and monitor the progress periodically against the targets defined. In the next step, process (re) design, apart from the material risks identified, firms should identify risks and opportunities associated with business through integrated risk assessment. Based on all the steps, firms can redesign their business process to meet stakeholder expectations and modify strategic goals based on the risks and opportunities identified. In the last step, Systems Integration, standards relevant to the business together with strategic goals should be integrated with management system requirements (ISO140001, ISO450001 etc). This is crucial and mandatory for firms to integrate their business process which also include reporting, auditing, management reviews, planning and budgeting.

This detailed framework is applied in the research in a constructive manner using qualitative methods to provide recommendations to Dutch consumer good packaging companies for long-term value creation through ESG disclosure.

To conclude, this chapter identifies current gap on long-term value creation through ESG disclosure. The knowledge gap on the concept of value creation is observed since stakeholders claim that required information is not being disclosed by the companies. Also, challenges related to quality of data, transparency, prioritization and selection of reporting frameworks and ESG ratings, implementation of governance factor remains a challenge for firms which is the main requirement of investors according to the literature. This research adds value by addressing the gaps identified by understanding the current practice of ESG reporting in the global market and assessing the value creation process adopted by global consumer good packaging companies. Recommendations are provided to adopt a sustainable business approach based on the findings and data analysis obtained from this research. The methodology applied to perform this study is discussed in the next chapter.

CHAPTER 3: RESEARCH METHODOLOGY

This chapter describes the methods and process of data analysis used to gather and analyse ESG information to achieve the research objective. This study is structured in a systematic manner in order to examine the main findings in ESG reporting value creation process. It uses the guidelines of Vershuren and Doorewaard (2010) to describe the research context.

This research aims to contribute to the existing environment, social and governance knowledge-of consumer goods packaging companies in better understanding the implications and impacts of ESG in the long-term, and to recommend a value creation business approach. The problem under investigation in this study is to identify the key determinants (aspects) of ESG reporting to be considered by Dutch consumer goods packaging companies that create long-term sustainable business value.

3.1 Research Framework

In order to answer the research questions and to deal with the main issue of this paper, namely, to understand the value creation process through ESG reporting, I have adopted qualitative method because of the nature of the topic and since different stakeholder perspectives are considered to describe some issues in more detail.

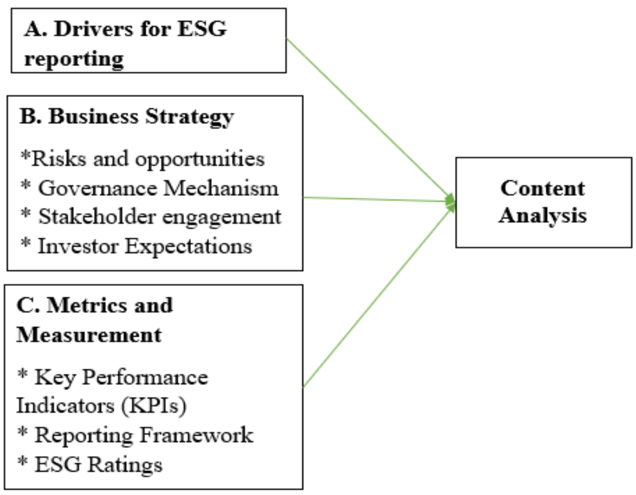
Research framework i.e., Figure 7 is built based on Vershuren and Doorewaard (2010), which represents the research work on each step towards achieving the research objective. The research object in this research is ESG reporting in consumer good packaging companies. This research combines theory and practical oriented research that stresses on the importance and implications of ESG reporting in businesses. As the first step, to get an overview of the topic an extensive literature search on relevant concepts and theories was conducted with reference to the publication of scientific journals published from the year 2015 -2020 using different database sources such as Scopus, Web of Science, University library. Google search has also been used to know the current market analysis and trends on ESG reporting. In addition, references to the ESG guidelines by external organizations have also been checked to identify data that are missing from the database quest and included in the study. The key concepts that are relevant to the research are derived from the literature as listed below,

Key Concepts	Definition
Materiality Analysis	*This concept in terms of sustainability reporting is a method to identify and prioritize the issues that are most important to an organization and its stakeholders* (Calabres et al., 2019)

Determinants of ESG reporting	*Variables that affect ESG reporting and have the impact on firm value* (Hahn and Kühnen, 2013)
Sustainable Business Strategy	*Integration of ESG into business strategy for creating long-term business and stakeholder value.* (Thomas, 2019)
Sustainability Governance	*Refers to mechanisms and processes involving stakeholders to overcome current unsustainable practices* (Rinaldi, 2019)
Long-term Value Creation	*Transitioning to long-term economically sustainable model by improving ESG value* (Schoenmaker and Schramade, 2019)

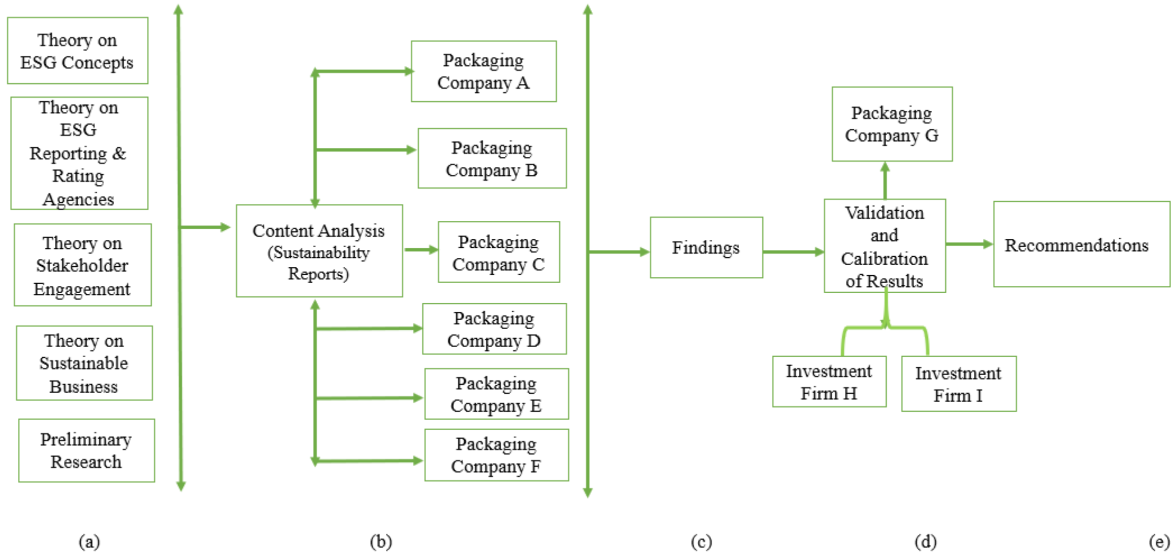
Next, using the selected theories, I developed a conceptual model to identify the value creating key determinants of ESG reporting (Figure 6). The six elements from the theory of value creation process (figure 5) was categorized in to three themes namely, (A) Drivers; (B) Business Strategy and (C) Metrics and Measurement for a more focused analysis. Drivers (A) of ESG concept are the primary reason for companies to be transparent in reporting. Since every industry has its own risks and opportunities, it is likely that packaging related material risks are identified, and strategy is developed by the management with goals and targets considering the expectations from various stakeholders which can be understood from variable (B). Also, Variable (C) is analysed to better know the value creation story of any business in demonstrating competitive advantage.

Figure 6: Conceptual Model (Source: Own Elaboration)



As shown in Figure 6, these variables (A), (B) and (C) are used to assess the sustainability reports. After categorizing the concepts, next, the research approach applied was content analysis of sustainability reports. I evaluated the contents of the sustainability reports based on the concepts of theoretical framework.

Figure 7: Schematic presentation of Research Framework (Source: Adopted from Vershuren and Doorewaard, 2010)



(a) A research on concept of ESG, the drivers and implications on business based on reading relevant reports of companies, provides criteria for assessment(Content analysis)

(b) by means of which analysis of sustainability reports, annual reports of top ESG rated six global consumer goods packaging firms is carried out.

(c) Findings as the basis for validation

(d) Four stakeholders (i.e., two employees and two investors) validate the results

(e) Recommendations for a sustainable business approach

3.2 Research Design

The research process was initiated using the concepts defined in the theoretical framework (figure 5) on value creation through ESG reporting. The data was collected from sustainability reports of six global consumer packaging companies. In order to check data reliability and gain additional information, the findings were validated with individual opinions of ESG practitioners.

3.2.1 Selection of Packaging Companies

For research purpose, six global consumer goods packaging companies from different geographies and packaging applications are selected based on their ESG ratings for the years 2019 and 2020. Two rating agencies namely, MSCI ESG rating Indices and Dow Jones Sustainability Indices (DJSI) were chosen as basis for selection. The main reason for choosing these two ratings is that most SRIs and main stream investors rely on these two ESG ratings for a thorough analysis of environment, social and governance risks and opportunities within the companies before making any investment decisions. More details on MSCI ESG rating and DJSI ratings are given in (Appendix 1). The final shortlisted six packaging companies are given in the below table 5. *(*Note: In this paper companies are referred as Company A, Company B etc as shown in first column of table 5).*

Table 5: Six Global Consumer Goods Packaging Companies (MSCI ESG Ratings, 2020 and DJSI, 2019)

*Company Referred As	Name of the Company	Country	ESG Rating Agency	Rating	Application
A	Billerud Korsnas	Sweden	DJSI	Industry Leader	Food and Beverages, Industrial, Consumer and Luxury, Medical and Hygiene
B	Mondi Group	Austria	MSCI	AAA	Industrial Bags, Speciality Kraft paper, Corrugated solutions, personal care components, barrier coatings, container board, printing papers
C	Amcor	Australia	MSCI	AA	Beverages, Food, Healthcare, Homecare, Personal care, pet care, specialty cartons, technical applications
D	Stora Enso Ojy	Finland	MSCI	AA	Food and Beverages, Buildings, retail, manufacturing, publishing, pharma, cosmetics, confectionary, hygiene and textiles
E	Smurfit Kappa	Ireland	MSCI	A	Automotive, Food, Beverage, Chemicals, consumer goods, electronics, homecare, industrial, pet care, pharmaceuticals
F	DS Smith	UK	MSCI	A	Retail and Shelf ready packaging, Industrial packaging, Consumer packaging, Hazardous goods

3.2.2 Selection of ESG practitioners

According to Carmichael and Cunningham (2017), expertise and experience of respondents facilitates smaller sample size. For validation of the findings, I considered smaller sample size (n=4) ESG practitioners (2 employees from packaging company G and 2 investors each from investment firms H and I) based on two components. Firstly, the selected practitioners are experienced professionals (typically managers and above) with extensive subject knowledge and expertise in the field of sustainability, whose work involves the reporting and investment aspects of ESG. Second, since the time span for research was short.

3.3 Research Boundary

This study is confined to desk research using only one sector sustainability report within the packaging industry i.e., consumer goods packaging companies. Moreover, only two focus groups (employees and investors) were selected from the Netherlands for the study to understand their individual perspectives on ESG disclosure. These restrictions were applied to the research primarily because of the pandemic situation which led to a lack of resources i.e., availability of people or respondents and time constraint for the research.

3.4 Research Material, Accessing Method and Validation

This section describes the methods used to source the required data, the approach adopted to carry out the data analysis and the process of validation.

3.4.1 Data and Information Sources

Data sources to answer the sub-research questions are collected through several methods. Semi-structured interviews with individual ESG practitioners, are the primary sources to validate the information. Secondary sources such as the media (electronic, printed), sustainability and annual reports of companies, global survey reports by independent firms, and previous research on business sustainability, environment sustainability, packaging strategies are considered.

3.4.2. Data Collection Methods

In this research, firstly, sustainability reports and annual reports of the companies selected for this study are collected from their respective company websites. Other supporting documents such as global online survey reports, peer research or articles directly or indirectly related to the research topic are collected. Second, semi-structured interviews were conducted with four stakeholders (2 employees of the packaging firm and 2 investors from independent investment firms) using an open-ended questionnaire (Appendix 2) which is developed based on theoretical framework to understand their perspectives on ESG reporting and value creation. Two set of questionnaires was prepared one set of questionnaires for employees and other for investors as expectations vary. Each interview lasted approximately 30-40 minutes, and all the interviews were audio recorded and transcribed manually for data analysis.

3.4.3 Analysis of Data

Content analysis technique was adopted to analyse the contents of the sustainability reports of the selected companies in the data set. According to Hsieh and Shannon (2005), this technique analyses certain communication material such as sustainability report in a structured and systematic manner and can be used to describe a phenomenon following a set of categories (codes). This approach is in line with the purpose of the research, as it corresponds with the careful analysis of practical approaches to value creation process. In accordance to the research questions, directed content analysis is performed manually in Microsoft Excel using the concepts in theoretical framework and condensing them to codes be more specific in answering the research question. The data was extracted against each code and tabulated in excel for effective comparison on the key aspects and processes adopted by companies to create long-term value. Sample illustration of the process is given in Appendix 3.

For the data collected from semi-structured interviews with ESG practitioners, Coding technique is used to analyse the data. Carmichael and Cunningham (2017) defines coding as the ***"****process of assigning an interpretive label to concepts, ideas, constructs or themes that arise from the data* **"**. Saldana's Code to Theory Model, 2013 was used for this study to derive meaningful insights. Through repeated reading of interviews transcripts, 50 codes were generated in the initial step and then combined into groups with similar characteristics termed as categories. The categories are further then combined and abstracted into themes. Sample illustration of step-by-step process of coding is given in Appendix 4. An overview on how this research is tackled in a systematic way is represented by a research matrix in Table 6.

Table 6: Research Matrix

Sub-Research Question	Data/Information Required	Data Information/Sources	Method of Accessing Data	Method of Analysis
Q1. What are the drivers for ESG reporting and the market response?	Concept of ESG and its significance	<u>Secondary Sources:</u> Literature, Documents	- Content analysis	<u>Qualitative Analysis</u>:
	- Drivers for focusing on ESG matters - Current reporting status in the market	<u>Primary Sources:</u> Employees of packaging company	- Semi-Structured Interviews	- Documents and content analysis
		<u>Secondary Sources:</u> Literature, Sustainability Reports, market surveys	- Web Search	- Analysis of interviews
Q2. What implications does ESG reporting have on businesses?	- Integration of ESG benefits - Consequence or risks	<u>Primary Sources:</u> Employees packaging company		
		<u>Secondary Sources:</u> Literature, Sustainability Reports		
Q3. What the perspectives and expectations of stakeholders i.e., Employees and Investors on ESG reporting?	- Materiality Issues - Employees and investors view on ESG reporting and its significance to business	<u>Primary Sources:</u> People – Employees of packaging company, Investors		
		<u>Secondary Sources:</u> Literature, Sustainability Reports		
Q4. What are the available resources for reporting and the significance of ESG ratings on value creation?	- ESG reporting frameworks - ESG Scores and Rating agencies	<u>Primary Sources:</u> Employees of packaging company, Investors		
		<u>Secondary Sources:</u> Literature, Sustainability Reports		
Q5. In accordance with the main drivers, how can this be strategically addressed at the organizational level?	- Strategy planning	<u>Primary Sources:</u> Employees of packaging company and Investors		
		<u>Secondary Sources:</u> Literature, Sustainability Reports, Annual Reports		

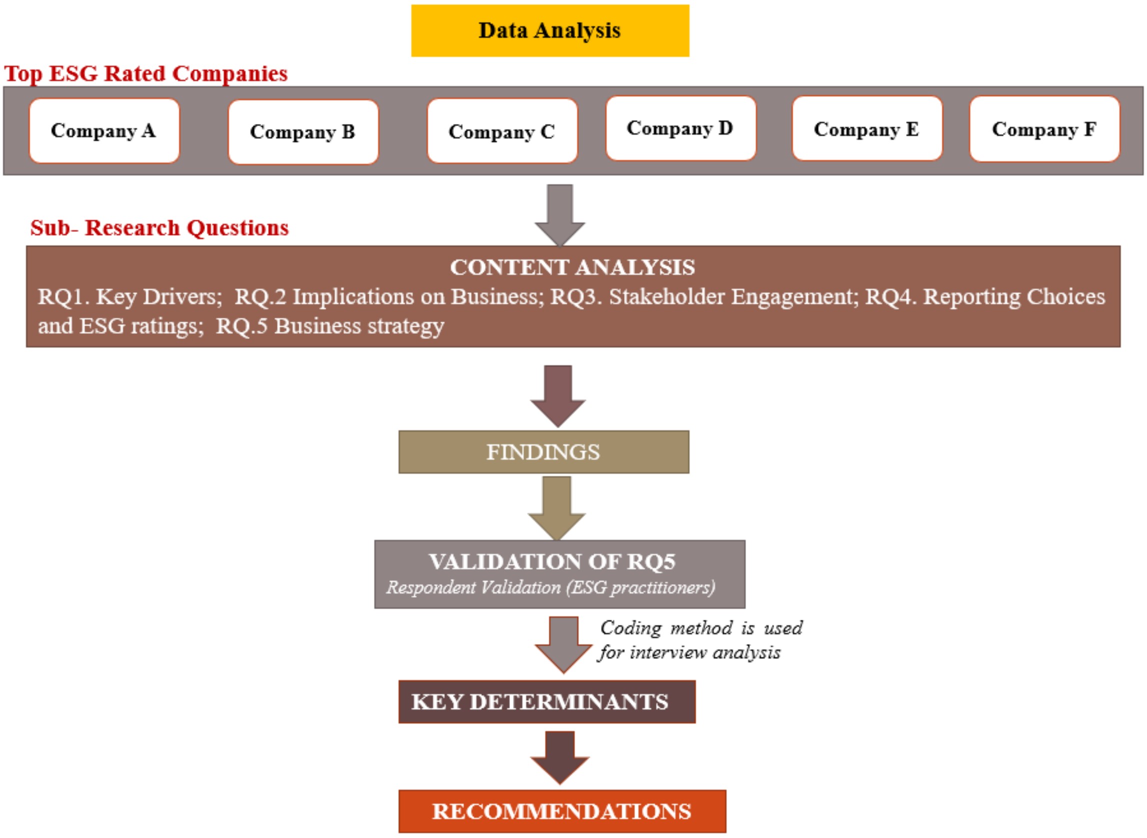
3.5 Validation of Data Analysis

This is done by triangulation method using respondent validation technique. In this research, for respondent validation, ESG reporting practitioners (employees) of packaging firm and investors are the chosen as informants and data is validated based on their inputs provided during semi-structured interviews.

3.6 Analytical Framework

A detailed framework describing step-by-step process of data analysis answering each sub-research question is developed for this research as shown in figure 8.

Figure 8: Schematic Presentation of Analytical Framework (Source: Own Elaboration)



As the first step, data analysis included selecting of global top ESG rated packaging companies based on the rankings published by rating agencies (MSCI and DJSI) on electronic media. In the next step content analysis with respect to each sub-research question was performed using sustainability reports of the companies in the database. Then, as next step the findings were from each report was consolidated and key aspects for ESG reporting was identified. Later, these findings were validated with ESG practitioners for data reliability and to gather some additional information. This step includes collecting perceptions of internal and external stakeholders through semi-structured interviews, the data collected is coded according to the sub-research questions to determine the final common key determinants. The value creating key determinants are identified in the final step. This step is answering the main research question. Based on the results, recommendations for sustainable business approach for the packaging companies in Netherlands is proposed.

3.7 Research Ethics

This research study was conducted in compliance with University of Twente's Research Ethics Policy, 2019. A brief introduction about the research was shared with the participants through email. Consent form to participate in this research (sample is given in Appendix 5) was given to all participants before the interviews, and a written approval was received. In this research, the details of the participants and company are kept confidential as requested by with the participants. Participants were given an option to stop the interview anytime if they felt any question was inappropriate.

CHAPTER 4: FINDINGS AND DATA ANALYSIS

This chapter identifies important standpoints in Environment, Social and Governance disclosures of packaging companies and is divided into two sections. In the first section, main determinants are identified through qualitative content analysis of six sustainability reports of packaging companies. To get deeper insights, findings against each sub-research question is discussed. In the second section, qualitative semi-structured interview method is used to validate the findings. Finally, the summary of key determinants of ESG reporting for value creation are highlighted and recommendations for a sustainable business strategy is provided in the next chapter.

4.1 Content Analysis:

In this section, contents from sustainability reports of firms in the database are analysed based on the concepts mentioned in the theoretical framework, figure 5. To provide a detailed overview, each sub research question is answered in a narrative way elaborating the value creation processes adopted by the global companies.

4.1.1. S-RQ1: Drivers for ESG Reporting and Current Market Trend

Regarding drivers for ESG reporting, the analysis confirms that regulations such as the Global Climate Paris agreement, UN Sustainable development goals, Task-force climate change disclosure, etc; Investors demands, stakeholder's awareness on climate change are key factors that are driving packaging companies to report environment, social and governance disclosure. It is observed that companies have built their business strategies based on these drivers and consider sustainability as core to their businesses. Company A, for example, stated that *"global external trends affect the packaging industry and contribute to our strategy going forward" [Sustainability report of Company A, 2019, p.8]*; meanwhile, Company B reviewed its contribution to the SDGs in 2019 in order to know their impact areas with respect to business and society and create a long-term value. According to the Sustainable Development Chair of Company B, investors demand for transparent reporting and interest of employees in knowing what and how their companies produce are driving forces for reporting. In terms of addressing global challenges and gaining stakeholders trust, most of these firms are engaged in industrial collaborations with external partners and believes it adds value to their business. According to the Group Strategy Head of Company F, to address the global challenges involvement of experts is desired which can be assured through engaging in multi-stakeholder partnerships. Company C in their sustainability report claimed that *"Each of our partnership helps address at least one of the United Nations Sustainable Development Goals (...) through Ellen Mc Arthur foundation partnership we contribute our global packaging and supply chain expertise to help rethink and redesign future of plastics" [Sustainability Report of Company C, 2019, p.3].* The need for collaboration with partners is also stressed by Company E affirming that they faced a challenge in achieving their target to reduce waste to landfill due lack of availability and collaboration with partners in finding alternative methods.

Regarding the current market trend on ESG reporting, from the literature, it is observed that governance factors are less focused than social and environmental factors. In this context, I was interested to know how these global companies are driving governance factors in their organizations. The data analysis indicates that all these companies have a dedicated sustainability committee with a fixed agenda which is generally driven by the top management including all leads from each department across the value chain as committee members. This committee is responsible for all the activities related to sustainability. For example, company D claimed, "*Everyday implementation of Stora Enso's sustainability agenda is the responsibility of line management supported by functional experts at all levels*" *[Sustainability Report of Company D, 2019, p.6].* This company had linked sustainability aspects in their leadership team's renumeration to drive sustainability agenda through effective governance. Company C has included governance factors to their highly material topics and coordinates sustainability action across the company through its sustainability leadership council. Overall, from the study of the reports, I observed that value created from businesses, either financial or stakeholder value, is positive when sustainability is considered core to meet the goals of global challenges and drivers of ESG are aligned into business strategy. The practice of collaboration with external partners to recycle, reduce plastic waste and improve processes in the value chain through new innovations etc. is critical for positive long-term business impacts.

4.1.2 S-RQ2: Implications on Business

In terms of implications on business, the results of the analysis largely confirm implications acknowledged in the literature overview: investment in innovation increases productivity, talent retention, and consideration of customers and other stakeholder requirements increases stakeholder value and market value. The analysis also shows the responsible sourcing of materials and technological resources which are governed by the management is the most considered one with respect to value creation. For example, Company C made positive progress in lowering carbon footprint by reducing the amount of material used through innovation and product redesign resulting in a significant elimination of plastics contributing to a greener environment. In terms of technological advancement, Company A aims to digitalize its entire business value chain and believes that access to real-time data creates opportunities for new business, logistics and distribution models, which in turn stands out to be a competitive advantage in the packaging industry over the long term. Engaging employees and giving them the opportunity to voice their opinions aided Company E in employee retention adding value to the business. Regarding investors, from the literature (section 2.3.2) it is known that they are key stakeholders of sustainability reports as this helps them to make investment decisions. This shows that these firms by being transparent in their reporting and disclosing their methods of operations, business strategy, and contribution to SDGs etc., are gaining long-term business and stakeholder value. Overall, these observations indicate all the factors E, S and G must be assessed for risks and opportunities and integrated as part of business strategy.

4.1.3 S-RQ3: Stakeholder Engagement and Investor Needs

Considering stakeholder engagement and requirements of investors, materiality analysis is found to be the main aspect of sustainable value creation through reporting in both the literature and according to the findings. The analysis confirms that all firms identified their material topics based on their business nature and in consultation with key stakeholders. For instance, Company B states *"Our material issues articulate what matters most to our business and our stakeholders. This awareness is crucial to identify our risks and opportunities and to respond effectively to our stakeholders" [Sustainability Report of Company B, 2019, p.23]* and Company C also claimed that *"We value our stakeholders and regularly engage with them to determine the environmental, social and governance topics that are most crucial to Amcor"[Sustainability Report of Company C, 2019, p.56].* Various engagement methods such as direct interviews with senior management, investors; conducting surveys with customers, suppliers; interacting with local communities, etc. are seen adopted by firms to take their views on material topics. However, not all firms mapped the impact level of risks. Companies A, E and F, for example, reported material topics by mapping their level of impact on their business ranging from high to low; meanwhile, Company C reported only high material topics. Other firms, Company B and D, did not prioritize the risk although identified materiality topics. Interestingly, firms are considering periodical reviewing and revising the identified materiality issues, say yearly or once in three years. This however depends on the growth of individual businesses and the change in the processes. Nevertheless, the data shows that companies consider assessing the risks and opportunities across their value chain important for long-term value creation. I summarized the common materiality issues identified for consumer goods packaging companies during this study in appendix 6.

As for Investor requirements, the analysis indicates that investors are driven by the impact of plastics on climate change. They are expecting an honest and transparent reporting process demonstrating a link between sustainable business and corporate value for making better investment decisions. The growing climate risks that can lead to heavy regulatory costs are the main reason for the investment debate. For example, Company F states that **"***Investors top priority is honest and transparent* *communication. Their primary focus has been on plastics, forestry, and carbon" [Sustainability Report of Company F, 2019, p.40].* According to Company E, Customers and investors expect a strategical approach to climate change. Not much data was published in the reports on specific expectations from investors as it was generalized as stakeholder needs. However, from the available data, I found that governance factor which oversees the strategy development and responsible for transparent reporting is major consideration for investors along with environmental and social indicators.

4.1.4 S-RQ4: Reporting Landscape and Ratings

As a tool for disclosing non-financial information, ESG reporting is widely practiced by global organizations. However, from the literature (section 2.4) it is seen that few companies still face challenges with respect to choosing the right reporting platform to communicate their value creation. The analysis confirms that the GRI reporting framework is extensively used by all the firms in the data set. According to Company B, this framework is preferred as the information captured is transparent and satisfies the expectations of all stakeholders. Company E claims that it helps to communicate the positive impact created by their business on critical sustainability issues. Besides the reporting framework, the option of where to publish the report is decided by individual firms. For example, Company A and company D, both report their financial and non-financial data in a joint report, whereas other companies keep their data separate as sustainability reports and annual reports. All the sustainability reports of firms were externally assured by third party assurers for data reliability.

As for ESG rating, the analysis indicates that all the companies adopted evaluation of their sustainability performance by multi-ESG raters. It shows that firms consider sustainability as a competitive advantage that add value to their business. This is helping them to benchmark their performance with peers which is found to be another important aspect for driving continuous improvement and implementing best practices. It is observed that investors are the key stakeholders for these ratings as this helps them in comparing business-to-business performance within the same industry sector and make investment decisions in accordance to the data provided in the literature.

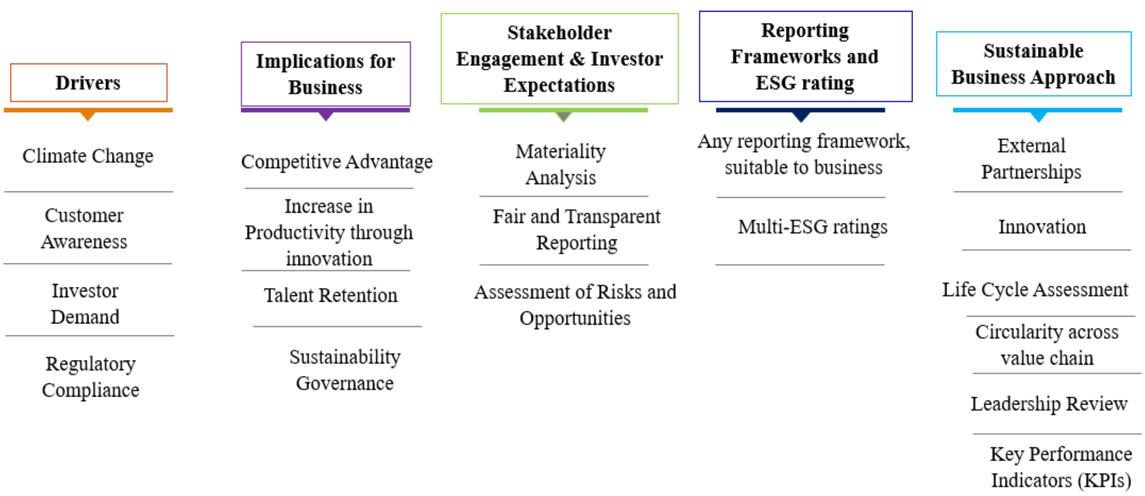
4.1.5 S-RQ5: Sustainable Business Strategy

The analysis confirms that the structure adopted by companies in the dataset to communicate their value and impact is variable in terms of value creation and business strategy. However, key aspects like purpose (vision and commitment), material issues, and their current status, the impact created across their value chain, governance are found common in their disclosure. It shows that each company has their own understanding of what creates long-term value to their business. For example, according to Company A, its Knowledge of materials and packaging design say innovation; meanwhile, for Company B it is growing responsibly across the value chain and operating responsibly with an effective governance framework. Similarly, its innovation capabilities, collaboration with partners and allocation of budget to sustainability program for Company C. Company D reported that they view customer requirements as a key to improve productivity, resource quality and reduce the environmental effect of their goods and processes by circular systems and life cycle analyses. Circularity business model, stakeholder engagement and innovation create value according to Companies E and F.

Another critical observation found regarding the implementation of the strategic drivers and value creation is that, all these companies had linked their commitments with global goals. It was interesting to note that, commitments are assured for social and governance factors along with environmental factors. For instance, Company C claimed, *"Amcor's commitment to environmental stewardship and product responsibility have helped us achieve widespread recognition as a sustainability leader and cemented our role as the leading global packaging company" [Sustainability Report of Company C, 2019, p.45].* According to Company F, commitment and drive had helped them achieve their vision Zero goal KPIs for the year. Company B has made sixteen public commitments against their identified material issues and defined a timeline to achieve i.e., short-term and long-term goals. Similarly, other companies too implemented a commitment-driven approach for creating long-term business value. From the analysis of the companies reports in the dataset, I found the most common aspects that companies consider as part of their business strategy are sourcing of materials, circularity reuse/recycle, strong governance mechanism, innovation across the value chain, collaboration with external partners, stakeholder engagement, material risk assessment and measuring performance (KPIs) that are driven by a strong commitment approach.

4.1.6 Summary of Findings based on Content Analysis:

The findings from content analysis of sustainability reports of selected companies are grouped as per the sub-research question and summarized below.



The results from the observations indicate that external drivers play a key role in motivating companies to report their ESG data with transparency. For an organization to disclose their value creation story through reporting all these listed elements should be considered for long-term benefits on financial aspects (profits, returns on investment), social aspects (employee retention, faith in customers, investors, etc) and environmental aspects.

These collected results are validated and discussed in the next chapter to check the reliability with the ESG practitioners i.e. from internal stakeholder perspective (employee) and external stakeholder perspective (investor).

4.2 VALIDATION OF FINDINGS:

To check the reliability of the findings from previous section and gain additional information on how ESG reporting can be addressed strategically to create long-term value, I validated the findings (section 4.1) by gathering opinions from ESG practitioners i.e. Employees and Investors.

Before knowing ESG practitioners' opinions on factors that contribute to value creation through ESG reporting, I was interested in understanding their views about why some packaging companies still hesitate to report non-financial disclosure. It was observed that respondents had different views. According to Interviewee 2, Employee from packaging company G, due to increased consumers awareness on eco-friendly products, packaging companies are pressurized to constantly be conscious of the materials used in making their products. The respondent says most of the packaging companies feel threatened with disclosure of any information that could result in reduced sales or loss of customers. Another interviewee 3, Investor from Investment firm H, claims that the image of plastic is negative for people. This is illustrated in an extract from the interview where the respondent talks about the image of plastic attributing to the reason for companies being hesitant to report.

> ***"****I think one of the reasons could be that especially around packaging I have noticed that plastic is seen as evil. I can imagine some companies are hesitant to communicate around that as it is always not clear what is good and what is bad. There are always benefits to plastic, but you must recycle them****"*** (Interviewee 3, Investor from Investment Firm H)

In addition to the above perceptions, a different view on packaging companies not reporting was given by Interviewee 4, Investor from investment firm I during the interview. According to this interviewee, packaging companies never felt the need to invest significant time that goes into sustainability reporting, as for long they haven't been questioned by investors. However, the respondent agrees that the scenario now has changed with investors demanding reports.

These observations regarding the negative image of plastic and customer awareness show that these potential constraints could be the reasons for lack of ESG reporting by a few packaging companies. However, Interviewee 3, an investor from Investment firm H, believes that the negative image can change by taking care of the recycling and the collection part and being more vocal on plastics and their benefits. This will also educate society and demonstrate that companies are working on recycling plastics.

About long-term value creation through ESG reporting, the respondents agree that a well-defined ESG integrated business strategy with clear goals and targets aligning to their commitment is critical to enhance the value of the business and stakeholder. From an employee perspective, according to Interviewee 1 from packaging company G, ESG integrated business strategy acts as a confirmation to its stakeholders on their purchasing or investing activities or their contribution to being a sustainable company and producing sustainable products. The respondent further mentions that it helps them to communicate their mission and vision of the company to their employees and ensures everyone is aligned and knows the reason for what and why they are doing things in a certain way. On the other side, Investors also agree that it creates value and helps them in making investment decisions. Interviewee 3, Investor from packaging company H claimed that investors consider investing in sustainable companies that can continue their operations for long-term with a proper operating licence.

> ***"****We believe that it creates value for a company not only to look at it but also to report on it. If we look at our international philosophy, we invest in sustainable companies. For us that means companies that can exists for a long-term and for that they need to have license to operate and basically that is given to them by the society both directly and indirectly and if you mess up too much on the ESG front, you can lose the license to operate. That's why we think it is important****"***
> (Interviewee 3, Investor from Investment company H)

To get deeper insights, I asked interviewees according to them what are key aspects of value creation and how it can be addressed in ESG reporting. From an employee perspective, Interviewee 1 said that employees, investors, and customers are key stakeholders for business. It is critical to know the needs of the stakeholders and incorporate them in business strategy. The respondent stresses that customers demand for ESG disclosure so that they are assured of using sustainable products, whereas for investors it is more of transparent reporting that not only confirms their investment in products but also how companies manage the safety and wellbeing of employees. On a similar note, another interviewee 2, an employee from packaging company G, states that transparency sets competitive advantage.

"Transparency about your operations could also set you apart from competitors. I think we see it a need for it because we see them in markets increasing demand in transparency not only on environmental but also on social and governance that I think in my opinion it could definitely lead to financial profit" (Interviewee 2, Employee from Packaging Company G)

From investors perspective, according to Interviewee 3, Investor from Investment firm H, companies that have high R&D value and sales ratio, which generally have a competitive advantage are considered for investments. The respondent also emphasizes on materiality analysis and governance as key focus areas for investors. If governance is not proper in an organization, investment companies do not consider them for investing purposes. In terms of governance, the respondent said it is not only about how activities are managed and pasts behave, it's also about having an independent supervisory board, having right skill sets, board incentives on EPS, return on investment capital etc all these are important for investors. In agreement to the above, another Interviewee 4, Investor from Investment firm H, adds that they generally focus on five indicators. This is illustrated in an extract from the interview where he talks about evaluation of companies on their performance using these indicators.

> *"Basically, we have five topics that we focus on i.e.,**[1] innovation management** really looking at what are companies driving in terms of R&D to come to more sustainable packaging solutions… **[2]how companies relate their innovation strategy to UN sustainable development goals** which we think are very important sort of external anchored to see which also specific targets has on reducing ocean plastic pollution so that's important….**[3] plastic harmonization**, that's an important one where whole supply chain has to talk to each other and lot of these issues you typically would not find back in sustainability report…**[4] regulatory change and responsible lobbying** where many companies will say well we are in favour but only they well-crafted and only in certain jurisdictions where they make sense where there is lot of other places say lobbying against it and **[5]Industry Collaboration**, it's very important we would also really want to see how is the company committed, does it really put money in the and does anything or is it really involved in actually industry collaboration to a fact or change…. So, these are sort of five pillars on how we look at single use plastic problem against which we evaluate company's performance when it comes to specific indicators"* (Interviewee 4 – Investor from Investment Firm I).

Therefore, from investors perspective it is found that innovation strategy, collaboration with partners, materiality analysis across the value chain, and governance along with regulatory compliance are critical for businesses and expect companies to report the methodology adopted by firms against these aspects in their sustainability reports.

Regarding the reporting framework and ESG ratings, all the interviewees were of the same opinion that company practicing any type of reporting framework whether GRI, CDP or Integrated reporting, etc. is not material to them as long as the companies communicate clearly through their sustainability reports their commitment towards delivering sustainable products, the process adopted in reaching their goals, the status quo on their targets, materiality assessment, and further improvement areas. They emphasized on having a proper communication mechanism to ensure the work being done is communicated effectively and transparently to all the stakeholders. On ESG ratings, both the interviewees (investors) agree that they use multiple ESG ratings for initial screening of companies on their ESG performance before making investment decisions. As mentioned by investors, they invest in companies that score higher considering ESG materiality perspective.

Another important element mentioned by interviewees is the key performance indicators. All interviewees agreed that it is equally important to track and monitor environmental, social, and governance indicators against the business performance. Two investor interviewees emphasized their interest in value creation from handling packaging waste. They agree that it's not just the volume of waste generated but also the type of waste and its disposal methods that are important for them. The granular the data the more beneficial it is for investors to make the investment decisions.

To summarize, all interviewees had similar opinions on the communication of value creation by adopting ESG integrated business strategy, and it was found that key determinants include special focus on governance factor, a robust risk management process (materiality risks and opportunities), ESG across the value chain, circularity, industrial collaboration and partnership, innovation strategy and contribution to SDGs, continuous performance measurement, and transparent reporting. I found that most of the findings from the analysis of the interviews acknowledge the literature overview and findings from the content analysis of sustainability reports. However, other aspects such as communication on plastics and their value creation through recycling and the need for more specific indicators on waste management across the value chain, peer benchmarking was emphasized to create value to the investors and businesses.

4.3 OVERVIEW OF FINDINGS

In this section, findings from content analysis and the opinions from ESG practitioners are combined and the most critical aspects of value creation through ESG reporting are summarized below in table (7).

Table 7: Main Insights from the analysis

RQs	Main Insights	References and Respondent Quotes
1. What are the drivers for ESG reporting and the market response?	Main drivers for ESG reporting are Climate Change, Regulatory Compliance, Customer Demand, Investor Demand and Internal motivation in companies. The market trend on ESG reporting reveals that focus on Governance and social factor is increasing along with Environmental factors. Global challenges part of business strategy and multi-stakeholder partnership help in addressing the issues.	Refer Appendix 3 *"In markets increasing demand in transparency not only on environmental but also on social and governance" (Interviewee 2, Employee from packaging company G)* *"global external trends affect the packaging industry and contribute to our strategy going forward" (Sustainability Report of Company A, 2019, p.8)*
2. What implications does ESG reporting has on businesses?	Positive implications such as competitive advantage, increase in financial value, talent retention, long-term investor relations, increase in stakeholder value	*"Positive progress in lowering carbon footprint by reducing the amount of material used through innovation and product redesign resulting in significant elimination of plastics" (Sustainability Report of Company C, 2019, p. 14)*
3. What the perspectives and expectations of stakeholders i.e., Employees and Investors on ESG reporting?	Customers, Investors, Employees, Suppliers, NGOs, External partners are stakeholders. Employees and Investors views ESG reporting as value add to business. Investors want transparent reporting on all elements of E, S and G; and strategical approach to climate change	*"ESG integrated business strategy acts as a confirmation to its stakeholders on their purchasing or investing activities or their contribution to being a sustainable company and producing sustainable products" (Interviewee 1, Employee from packaging company G)* *"Investors top priority is honest and transparent communication" (Sustainability Report of Company F, 2019, p.40)*
4. What are the available resources for reporting and significance of ESG ratings?	Various reporting frameworks such as GRI, SASB, CDP etc are available. Companies are free to choose a suitable framework according to their stakeholder needs. Multi- ESG ratings are seen important and used by as investors for making investment decisions.	*"We use all the different materials. We don't have a specific one that we would be recommending. Typically, GRI is I think is a very good standard [...] I think it is important that the process how companies sets its reporting clear" (Interviewee 4, Investor from Investment Firm I)* *"we would like to invest in the companies that score higher and for the portfolio has a whole" (Interviewee 3, Investor from Investment Firm H)*
5. In accordance with the main drivers, how can this be strategically addressed at the organizational level?	A well-defined ESG integrated business strategy with clear goals and targets aligning to their commitment is critical to enhancing value of the business and stakeholder - Commitment driven approach Key determinants of ESG reporting are a good risk management process, integration of ESG across the value chain ensuring circularity, innovation strategy, contribution SDGs, stakeholder dialogue, good social and governance mechanism, right skill sets, partnerships and granular waste management metrics.	*"When you have a good sustainability strategy, comes good report" (Interviewee 4, Investor from Investment Firm I)* *"innovation is important, waste management, transparency, stakeholder dialogue in terms of how is that the company sort of seeing its role within a larger environment with companies on other business ways, NGOs other who have expectations from the company and you need to bring all these views in your materiality assessment to have a good sustainability strategy" (Interviewee 4, Investor from Investment Firm I)*

CHAPTER 5: DISCUSSION

This chapter elaborates the discussions on results obtained from previous chapter. The research findings further led to conclusions and recommendations which is discussed in the next chapter.

Cardoni et al,.2020 mentioned despite recognizing the management aspect as crucial, most of the previous studies on sustainable value creation lack in describing the mechanism of value creation through corporate sustainability. From the literature, it is evident that though the number of companies reporting ESG disclosure has increased, the information required by the stakeholders is not addressed (Dilling, 2016) and companies are still struggling on creating value through ESG disclosure (Purpose to profit). To address the gap, this research was carried out focusing particularly on the management aspect mainly on business strategy with respect to sustainability in order to provide a structural approach to implement ESG reporting and leverage value. This study focused particularly on packaging companies because the evidence from the previous researches i.e., Hillier et al., (2017) reveal that few packaging companies are compliance-oriented and still hesitant to report their ESG disclosure. Also, in the recent years, since issue regarding plastics and plastics waste is adding pressure on packaging firms, the consumer goods packaging companies who are major contributors to this issue are under constant pressure to meet the regulatory compliance and stakeholders demands on long-term value creation. This research provides knowledge and supports packaging firms in reporting their value creation through ESG disclosure.

The analysis from the findings favoured two main results, namely (a) an enriched perspective on ESG integrated business strategy or a sustainability strategy through a combination of theoretical and practical implications; (b) insights in to key aspects of ESG reporting to achieve long-term sustainable value. The results demonstrate climate change, customer awareness, investor's demand as key drivers for ESG disclosure in packaging companies. Regarding the enriched perspective on ESG's integrated business strategy, the data analysis shows that companies have integrated global challenges such as climate change into their business strategy. It is evident that through global commitments towards ESG goals companies are creating long-term value. A clear approach to how the companies planned to achieve their goals, supported by data on current progress, target outcomes, and future steps and initiatives provides information to all types of stakeholders on their value creation. Also, from the interviews with ESG practitioners it evident that investors review the firm's business strategy on sustainability before making investment decisions as it gives them a complete overview on the business performance and assures them on long-term investment opportunities. In fact, addressing climate change strategically is expected by investors also makes it an even more strong point to integrate ESG into business strategy. This result is accordant with Espahbodi et al., 2018 and Douma and Dallas, 2018.

From an employee's perspective, ESG integrated strategy as a resource to instruct their workforce on stakeholder needs and their contribution towards the vision and mission of the company.

Another observation with regards to sustainability strategy is that companies have embedded circularity principles in each stage of their value chain of business i.e., right from sourcing to distribution of products and this entire process is managed by the sustainability governance committee. The progress made in terms of targets vs actual is shown with a clear description of methods and initiatives taken at every step in the value chain to be circular. This entire process is governed by a team that ensures involvement of top management along with their executives representing each department in the value chain. The results indicate this approach of being transparent about operations and showcasing the procedures or initiatives taken to handle the risks involving the environment, social and governance factors helps stakeholders to get a detailed overview on the business performance in the long-term which indeed is evident from the data analysis and literature as one of the key requirements of investors. Overall, the data suggests that aligning business strategy with global challenges and integrating all three factors E, S, and G across the value chain enhances business and stakeholder value.

In terms of insights on key aspects of ESG reporting, I observed few common aspects that are identified as critical in the value creation process from the evidence gathered from literature, analysis of global sustainability reports, and interviews with ESG practitioners. Starting with the current market status of ESG reporting, it is observed that governance factors are given less importance compared to environmental and social factors. Since environmental and social factors are compliance-oriented priorities it is constantly monitored for licensing purposes, while the organization must drive governance factor. About governance, the results indicate that it has a positive influence on long-term value creation and is the primary factor considered by investors and shareholders in assessing the organization's performance. This result is found to be consistent with Van Durren et al.,2016 and Mahmood et al.,2018, which illustrates that impact of corporate governance is positive in the long-term and enhances ESG disclosure. As mentioned in the literature, good governance attributes to good corporate performance, investors focus on this factor to understand how global challenges are addressed by the companies in their value chain in the long-term. From the interview with investors, the results show that governance is not only about how the companies have behaved or handled risks in the past, but also about future long-term plans and initiatives linked to their commitments. A comprehensive **sustainability governance structure** or model is seen as intended to track the efficacy of operations with respect to ESG variables (compliance, human rights, skill set, business ethics, independent board, etc) that have a direct impact on business sustainability for continued growth. Another value-creating aspect is **stakeholder engagement**, from the perspectives of employees and investors in this study, the results confirms that stakeholder's involvement in the implementation of business strategy is much needed and beneficial. They believe that this allows packaging companies to better understand the expectations of customers, investors, government authorities, NGOs, etc and to align their business goals and targets accordingly. This engagement is proven to add value to the business in the global companies by aligning their stakeholder requirements (importantly customer and investor needs) to their business strategy. In addition, engagement with suppliers across the supply chain and **collaboration with external partners** are found to have impact on long-term value creation and is also considered as one of the key expectations from interviewees (investors). Another key aspect identified is involving stakeholders in the **materiality analysis**. The results suggest that considering the risks that are material to stakeholders and that which have an impact on business enhances stakeholder value and business value. To manage these risks, companies, and investors agree that innovation (design/process/product) across the value chain as crucial for long-term growth. A clear **strategy on innovation** and the initiatives to manage the risks is seen as the expectation from investors for making long-term investment decisions. Regarding transparent reporting, the results show that companies are committed to provide quality data with respect to their operations and initiatives and are assuring the reliability of data reported through **external (third party) assurance.**

Measuring and knowing the key areas of improvements is important to drive business growth. In this regard, the results indicate that since packaging companies are major contributors to plastic waste, investors are expecting more detailed **KPI related to their waste**. This requires the right skill set for analysing and creating value which that can be achieved through **enhancing knowledge and capability building** of ESG practitioners. In terms of the gap observed in the literature regarding reporting framework and ESG rating, the results indicate that investors are not biased with any reporting framework if their expectations are met. But, on ESG rating, the results show that investors screen the performance of the companies using **multiple ESG ratings**. Regarding the gap observed in the literature on a few packaging companies not reporting on ESG, the results specify that companies fear to open-up and report since public perception of plastics is negative. I agree with the suggestion made by the interviewee (investor) that this image can be changed by being more vocal on plastics and their benefits and communicating the initiatives taken by the firms on plastic waste recycling and re-use. The analysis confirms that a proper **communication mechanism** is desired to cascade the right and useful information to all stakeholders.

Overall, from the findings on business strategy and insights on key aspects that are all related to management aspects, the results suggest that a strong commitment towards global challenges is desired for long-term value creation in businesses. Therefore, it is recommended that packaging companies revisit their compliance-oriented disclosure process and shift the focus to long-term value creation through a commitment-driven approach

CHAPTER 6: CONLCUSION AND RECOMMENDATIONS

This chapter discusses the conclusion of the research and provide recommendations for future research scope.

6.1 Conclusion

This study identifies key determinants of ESG disclosure for consumer goods packaging companies, focusing on long-term value creation. Disclosure of value creation is crucial for enhancing business value and stakeholder value. This research used two qualitative methods, content analysis on value creation process adopted by six consumer goods packaging companies and semi-structured interviews with ESG practitioners in the Netherlands to validate the findings. Two stakeholders' perspectives i.e., employees and investors who are key stakeholders for business are considered in this study.

The results from the findings on key determinants reveal that long-term value creation through reporting can be achieved through a robust business strategy integrated with global challenge, climate change. Multi-stakeholder perspective through partnerships is seen as a competitive advantage in tackling issues related to ESG. Incorporating materiality analysis, innovation practices, stakeholder engagement, align business strategy to SDGs goals, governance management, tracking waste footprint, educating people on ESG elements, monitoring quality and transparency of data through third party assurance, developing a communication mechanism, participating in multi-ESG ratings as part of sustainability strategy are found to create long-term business value and stakeholder value. The gap identified in the literature with respect to value creation concept through reporting can be addressed by implementing these key aspects in company's sustainability strategy. To conclude, to drive all the determinants a strong commitment is desired for creating long-term business value. It is understood from the study by Hillier et al., (2017) that the current approach adopted by packaging companies are compliance oriented. In order to create long-term business value through ESG reporting, a transition from compliance-oriented approach to commitment driven approach is required. To implement this change, I have given few recommendations based on the knowledge acquired through this study to guide ESG reporting practitioners of packaging companies to going beyond level of compliance and future research scope in the next section.

6.2 Recommendations

This section responds to the research objective and based on the research findings provides recommendations for packaging companies or practitioners to align their business strategy with a commitment driven ESG reporting approach for sustainable long-term business value and recommendations for future research work.

6.2.1 Recommendations for Practitioners

Few recommendations are listed below to guide practitioners to create long-term business value by disclosing ESG to all stakeholders through commitment driven approach.

a) **Demonstrate Commitment to Sustainability by integrating ESG into value chain**

It is recommended to align company's goals and strategy with global commitments with respect to ESG factors and integrate into business value chain. A thorough life cycle analysis (LCA) across the value chain is desired to identify the potential of circularity at each process step and look for other alternatives with respect to technology or materials or product design to reduce the impact on environment and increase productivity. This shall include all activities starting from sustainable sourcing, procurement, production, supply chain, logistics and distribution, human resources, dealing with suppliers etc. This shows that firms are committed to operate responsibly towards achieving their sustainability goals.

b) **Report the performance against each focus area (material risks) identified and describe the impact (value) created to business and society.**

In consultation with stakeholders it is recommended to first identify the key material risks across the value chain that has impact on environment, social and economic factors and map the risks against the level of impact (high, medium, low). Companies shall commit and set targets against each material risk, including climate-related risks, and disclose the current status of implementation against the target set (plan vs actual) and the initiatives to be taken in the future to address these issues. A detailed description of risk management process adopted by the company is recommended for stakeholders to understand the company's value creation.

Special focus on Waste Foot Print : Apart from other environmental indicator or footprints, for packaging companies since waste being the major issue, it is recommended to track and disclose not just the quantity of waste generated and recycled annually but also track and monitor the quantity of various types of waste produced (highly polluted, toxic etc) in the value chain and the disposal techniques adopted. Such data gives users a better picture of the efforts made by the organization in being circular and reducing the waste generation. Waste footprint can be calculated by quantifying packaging material that has not been reused, recycled or recovered. Also, ensure the metrics include historical trends and forward-looking projections.

c) **Commitment to Innovation and Value creation**

Companies are required to continuously work to eliminate or reduce the level of risk by finding alternative or innovating methods. An innovation strategy – a holistic approach to finding solutions that tells about the work being done on the process or design enhancements to meet the stakeholder requirements and contribute to SDGs is recommended. It has been found from this study that this can be done by collaborating with external partners such as industry experts, research centres, NGOs, local communities, governments etc. By disclosing these information, investors and customers are assured of long-term sustainability value.

d) **Establish a robust governance structure for sustainability which demonstrates accountability across operations.**

Setting a sustainability agenda and having a separate sustainability committee are recommended to oversee ESG business operations and drive the sustainability goals set. This committee shall include representatives of the top management reporting directly to the board management and individual representatives from different departments in the value chain. A clear description of involvement of Board management in sustainability decisions and how stakeholders across the value chain are engaged into the business strategy gives an overview of how firms are managing the compliance, risks involving people and environment. This committee is responsible for gathering the requirements from all stakeholders and ensuring that they are captured during materiality analysis. It is desired to disclose in ESG report who are the key stakeholders for the firm and how their requirements have been addressed.

e) **Contribute to Sustainable Development Goals and disclose the value creation**

Packaging companies should commit to aligning their strategic goals with sustainable development goals that are related to the business. By reporting the approach or initiatives (collaboration with external partners) taken to achieve those goals and providing current status of contribution to SDGs, it confirms that companies have a resilient strategy for long-term that creates business value.

f) **Build a communication strategy and ensure to stakeholder engagement**

It is recommended that a clear communication strategy be established that allows people to share knowledge or educate people on plastics, and what the companies are doing on recycling. This is suggested to engage stakeholders and align them with the objectives of the companies. From this research it is seen that stakeholder engagement is critical for addressing global challenges and helps maintain long-term relationships with investors and shareholders. In order to enhance brand value, it is commended for companies to participate in multi-ESG ratings.

g) **Commit to Transparent Reporting and Data Assurance**

The data information provided in the report must be clear, fair and transparent to the operations data addressing all stakeholder requirements. It is recommended to get the sustainability report assured by third party agencies for data reliability and as suggested in the literature ESG reports shall be audited like the financial reports.

6.2.2 Recommendations for Future Research Work

This research is based on evidences from the top ESG rated consumer goods packaging firms excelling worldwide according to MSCI and DJSI ratings of 2019 and 2020. This focus considering only two rating systems represent a limitation leading to assessment of only six companies. Future research could examine more companies considering various other ESG rating systems and may provide additional insights on value creation process since the assessment methodology adopted to evaluate the performance of companies varies among ESG raters. Moreover, broadening industry coverage i.e., considering study on different sectors within the packaging industry may provide a holistic view on long-term value creation. About stakeholder perspectives, as this study was limited to only two stakeholders i.e., employees and investors due to time constraint of the research, future study may focus on multi-stakeholder perspectives on value creation that could emerge new dimensions to reporting and business value. Regarding value creation through contribution to SDGs, future study could evaluate the impact on financial performance with integration of UN SDGs goals into ESG business strategy using structural equation modelling (SEM) method. In closing, another future research stream may be to explore the value creation of ESG reporting through digital innovation.

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APPENDICES

APPENDIX 1: ESG Rating Methodologies by MSCI and DJSI

1. MSCI ESG Rating Methodology:

According to Moen (2019), for rating the industries MSCI adopts a rules-based methodology. The approach involves portfolio data accessed through public domains, company's disclosure documents through various media sources. A standardized methodology is used to evaluate company's risk exposure and risk management relative to industry peers, and this is done by MSCI corporate team by verifying company data. Based on the data collected, key issues related to ESG are scored based on a scale of 0-10. Scores against each issue is combined and overall ESG rating (AAA – CCC) of company is determined in comparison to peer industries. Illustration of MSCI's approach is given below in Figure 10.

Figure 9: MSCI ESG RATING METHODOLOGY (Source: Moen, 2019)

Based on the above-mentioned approach, MSCI scores on 37 key issues as listed below,

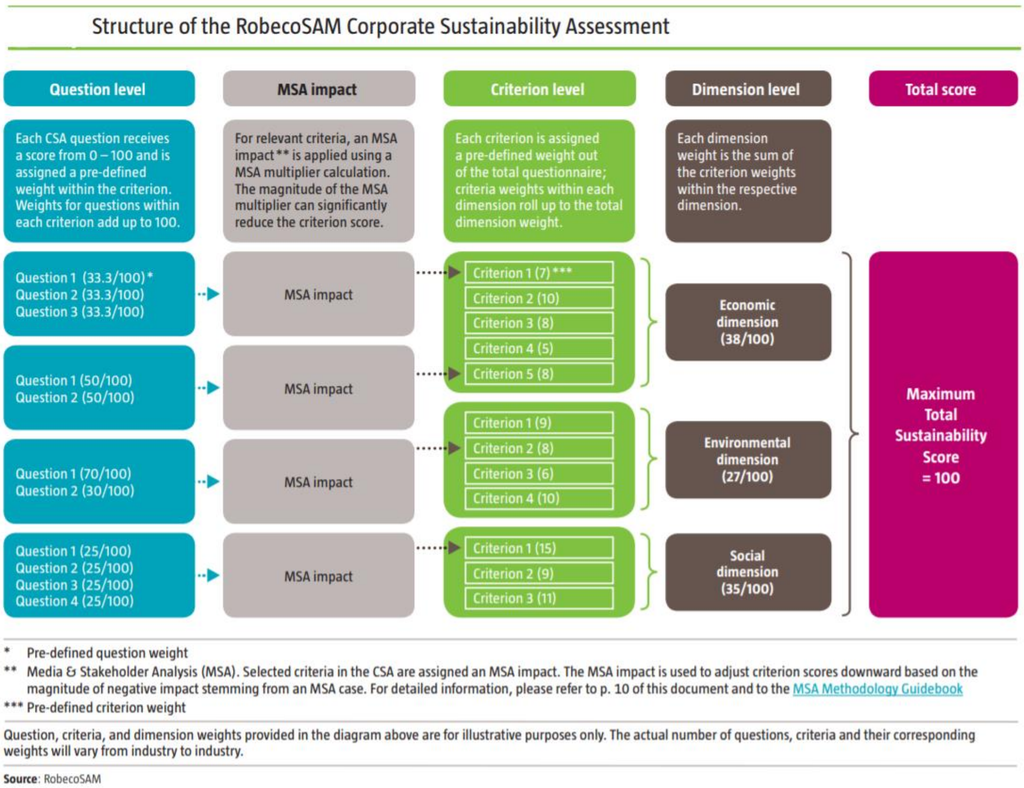
E, S and G parameters	37 Key Issues			
Environment	**Climate Change** * Carbon Emissions * Product Carbon Footprint * Financing Environmental Impact * Climate Change Vulnerability	**Natural Resources** * Water Stress * Biodiversity and Land use * Raw Material Sourcing	**Pollution and Waste** * Toxic emissions and waste * Packaging material and Waste * Electronic Waste	**Environmental Opportunities** * Opportunities in clean tech * Opportunities in green building * Opportunities in renewable energy
Social	**Human Capital** * Labor Management * Human Capital Development * Health and Safety * Supply Chain labour standards	**Product Liability** * Product Safety and Quality * Chemical Safety * Financial Product Safety * Privacy Data and Security * Responsible Investment * Health and Demographic Risk	**Stakeholder Opposition** *Controversial Sourcing	**Social Opportunities** * Access to communications * Access to finance * Access to healthcare * Opportunities in health and nutrition
Governance	**Corporate Governance** * Board Diversity * Executive Pay * Ownership and Control * Accounting	**Corporate Behaviour** * Business Ethics * Anti-Competitive Practices * Tax Transparency * Corruption and instability *Financial system stability		

ESG Ratings		*What it means*
AAA AA	LEADER	A company leading its industry in managing the most significant ESG risks and opportunities
A BBB	AVERAGE	A company with a mixed and unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers
B CCC	LAGGARD	A company lagging its industry based on its high exposure, and failure to manage, significant ESG risks.

2. Dow Jones Sustainability Indices ESG Rating Methodology:

Dow Jones indices being leading index provider specializes in delivering statistics, ratings, and benchmarking on ESG data. Corporate sustainability assessment follows a strict rules-based methodology. RobecoSAM focuses on issues related to sustainability that affect long-term value creation for businesses. Companies are evaluated on environment, social and economic factors and are given sustainability scores. Based on the score, those companies are ranked within top 10% of their assessed industries and are included in the DJSI world. An illustration of the approach is given in below figure 10.

Figure 10: DJSI ESG Assessment Methodology (Source: RobeccoSAM CSA Methodology, 2018)



From figure 10, evaluation methodology is seen to vary based on industry sector for E,S and G factors. The questionnaire contains multiple-choice questions and several points between 0-100 are allocated for possible answer. Then MSA (media stakeholder analysis) criteria is applied to reduce the criterion score. In the next step, each criterion is given pre-defined weightage and measured against Environment, Social and Economic dimensions . RobecoSAM analysts test the response using a predefined evaluation framework for questions where qualitative responses are allowed and turn the response into a quantitative score. Therefore, businesses are expected to provide documents to support the responses they received. Companies that have high score are termed as “Industry Leaders”. For this research, packaging companies rated as industry leaders in 2019 was considered.

APPENDIX 2: INTERVIEW QUESTIONNAIRES

To validate the findings of content analysis, perspectives of ESG practitioners was collected through semi-structured interviews. Four ESG practitioners participated in this study i.e., two employees and two investors. Interviewee details are given below,

Interviewee Name*	**Stakeholder**	**Company Name***
Interviewee1	Employee	Packaging Company G
Interviewee2	Employee	Packaging Company G
Interviewee3	Investor	Investment Firm H
Interviewee4	Investor	Investment Firm I

* *Name of the Interviewee and Company is kept confidential*

In order to better understand individual perspectives on ESG reporting challenges and value creation and how it can be strategically addressed, separate questionnaires for employees (top management and middle management) based on theoretical framework and general questionnaire for investors are prepared for this study. This questionnaire was shared with the respondents at least 2 days prior to the interview and their consent was taken as per university ethics code.

1. Interview Questionnaire for Employees of Packaging Firm G

a. For Top Management (Senior manager and above)

Questions
As a business leader, how you do perceive ESG/Sustainability reporting? In What ways you think it a value add to your organization?
What are the key drivers you see in the packaging companies these days with respect to sustainability /ESG reporting?
Impact of packaging waste (plastic) on climate is the current global challenge. How is your organization contributing to this global challenge?
What according to you are the key reasons why packaging companies are still not willing to disclose non-financial matters/ESG performance?
Stakeholders play a critical role in driving business value. Did you identify critical stakeholders for your business? How do you engage your stakeholders?
What are your stakeholders' concerns relating to ESG and how are these concerns addressed?
What is your opinion on integrating ESG considerations into the business strategy? Do you agree it could add value to business?

According to you, how ESG with the organization be encouraged and practiced? What steps or measures should management or board committee should take to ensure effective function?
What process does your management follow in identifying ESG material issues? How frequently you review your materiality issues?
What are the opportunities for developing technical (innovation) and implementation aspects of corporate sustainability reporting?
How satisfied are you with your current business model delivery ESG information? What differently you would like to do in comparison to your peers?
What are the key determinants of ESG reporting that can create value to your organization?
What is your opinion on various available reporting framework and ESG ratings? How is your organization responding to the market demand?
How do you plan to tell your value creation story through your sustainability report? What are your focus areas? How are you ensuring transparency of the reports?

b. For Middle Management (Assistant Manager and above)

Questions
How do you perceive ESG reporting? In what ways you think it could add value to your organization?
What is the key driver for your company to initiate sustainability /ESG reporting?
Impact of packaging waste (plastic) on climate is the current global challenge. How is your organization contributing to this global challenge?
Have you conducted materiality analysis for your business? And did you identify your key stakeholders and their primary areas of interest? (Shareholders, investors etc.)
How do you engage your stakeholders and keep them motivated towards sustainability reporting?
Does your leadership team review ESG matters/risks? How frequently review takes place?
Among E, S, G factors, which factor according to you is given most and least importance by your management?
How is your organization planning/planned to mitigate the material risks? And How frequently to review the risks and action plans?
What are the different opportunities you see in your organization that can enhance business value?
How satisfied are you with your current business model delivery ESG information? What differently you would like to do in comparison to your peers? (Best approach for ESG reporting)
What are the key determinants of ESG reporting that can create value to your organization?

How do you measure ESG metrics? Are sustainability KPIs defined in line with material issues? Do you track waste footprint?
What is your opinion on various available reporting framework and ESG ratings? How is your organization responding to the market demand?

2. Interview Questionnaire for Investors of Investment Firms H and I

General questions relevant to the research objective and research sub-questions were framed for understanding perspective of investors on ESG business strategy and value creation.

General Questions
According to you, what and how ESG factors affect your investment decisions?
How satisfied are you with the current reporting structure practiced by packaging companies in Netherlands?
As an investor, what information do you look at from the company's sustainability reports or annual reports? Which reporting framework do you prefer (Integrated reporting or GRI)?
Which factor among E, S and G you think can create value to business? As an investor, which factor you think needs more focus in the current packaging business and why? (Rate the impact from high to low on your investment decisions)
Do you agree that integrating ESG factors into business strategy can increase business value? What information do you expect from a business strategy?
Impact of packaging waste (plastic) on climate is the current global challenge. PRI plastic investors working group is creating awareness among investors on the risks involved with the plastic waste. Knowing the risks involved, as an investor based on what criteria would you take investment decisions? (Your expectations from packaging companies in terms of reporting)
What is your opinion on the metrics (KPIs) reported by packaging companies? Do you get all the information related to risks involved? If not, could you elaborate on the specific KPIs that can help investors to make better investment decisions? (For example: KPI on waste generated or recycle content)
It is clear from various literatures and surveys, that investors expect a transparent reporting. In what ways can companies reach this expectation and ensure long-term relationship with investors?
In today's scenario, investors consider ESG ratings from different agencies for preliminary screening of sustainable companies rely on ESG scores/ratings. Since there are many rating agencies practicing

different ranking methodologies, as an investor how do you make the best choice? Based on what criteria?
What according to you are the key reasons why few packaging companies are still not willing to disclose non-financial matters/ESG performance?
From your experience, what do you think are the key determinants of ESG reporting that can create value to packaging business?
What is your suggestion/advise to new or SME packaging companies on ESG reporting?

APPENDIX 3: Sample Illustration of Content Analysis

The contents related to the concepts defined in the theoretical framework was analyzed using codes (key words) according to the research questions considering the length of the reports. The codes include, drivers, implications, long-term value creation, stakeholders, engagement process, materiality, investors expect, reporting framework, ratings, strategy, and governance. These codes supported the study by condensing the data and to be focused on the research area. The contents were studied, and the data was extracted from sustainability reports, 2019 of six companies and tabulated in Microsoft Excel for quick and easy analysis. The sample illustration (given below) represents contents from sustainability reports of respective companies related to concepts of theoretical framework.

Figure 11: Sample Illustration of Content Analysis from Sustainability Reports of 2019

Concepts	Codes	Company A (Billuerd Kornsans)	Company B (Mondi Group)	Company C (Amcor)	Company D (Stora Enso Oyj)	Company E (Smurfit Kappa)	Company F (DS Smith)
Context Analysis	**Drivers**	*1. Climate Change* *2. Societal Awareness* *3. Contribution to UN SDGs*	*1. Climate Change* *2. Investors and consumers interests* *3. Contribution to UN SDGs*	*1. Climate Change* *2. Customer Awareness and investor demand* *3. Contribution to UN SDGs*	*1. Customer and Consumer demand* *2. Contribution to UN SDGs*	*1. Community awareness on climate change* *2. Contribution to UN SDGs*	*1. Pressure from Governments (Non-financial reporting directive)* *2. Customer and Investor expectation* *3. Climate Change* *4. Contribution to UN SDGs , UN Global compact*
Stakeholder Engagement	**Stakeholders**	*"Collaboration with business partners and other stakeholders is essential to drive change where it makes the biggest difference"* **[p.40].** *"Investors, Customers, Employers, Suppliers, Communities" [p.123]*	*"Listening to, communicating and partnering with our stakeholders is an important enabler of change. It helps us understand external developments, challenges and market expectations and identify potential*	*"We value our stakeholders and regularly engage with them to determine the environmental, social and governance topics that are most material*	*"Open dialogue with our key stakeholders is crucial if we are to successfully identify concerns, global trends and market expectations"* **[p.7]**	*"Stakeholders' opinions are essential to how we develop our business and innovations. Our key stakeholders are customers, investors, employees, communities and suppliers. For*	*"Engagement with a wide range of stakeholders enables us to highlight key topics to further develop or validate, and enables us to influence policy, standards and expectations across our*

			*opportunities and principal risks for our business. It also increases transparency and enables us to build strong, trusting relationships" "Employees, Customers, Suppliers and Contractors, Communities, Investors, Partners, Government and Regulators"***[p.17]**	*to Amcor. Employees; Customers; Investors; Suppliers; Consumers; Industry Bodies; Governments; NGOs, Regulators, Communities, Environment"* **[p.56]**	*Consumers, Customers, Employees, Forest Owners, Policy Makers, Investors, Local Communities, Media, NGOs, Partners and Suppliers, Trade Union".*	*stakeholders, our holistic approach ensures Relevance, Value, Influence and Affect"* **[p.10]**	*industry. Customers, Regulators and Policy Makers, Investors, Trade associations and cross-industry groups, Media, Consultancy and Education, NGOs and Charities"* **[p.40]**
	Investors Expect	*"Climate related risks in financial terms"* **[p.81]** *"Transparent reporting"* **[p.130]**	*"Transparent ESG reporting"* **[p.24]**; *"Climate related - financial disclosure's"***[p.51]**; *"The reporting, evaluation and monitoring of the sustainability performance of our supply chains are of increasing interest to customers and investors"* **[p.103]**	*"Plastic continues to be top-of-mind for end consumers – and consequently, for Amcor's customers and investors – this topic continues to grow in strategic importance"* **[p.59]**	*"Sustainability reporting for investment decisions" [p.64]; "focus on global warming and sustainable forestry management"* **[p.7]**	*"Detailed reporting of strategical approach to climate change"* **[p.22]**; *"demonstrate link between sustainable business and corporate value"* **[p.63]**	*"Transparent communication; focus on plastics, forestry and carbon"* **[p.40]**

This approach of data analysis given in figure 11 was applied to all the concepts of theoretical framework addressing the research questions. This method of evaluation best suited the purpose of the research because by comparing the value creation contents and understanding the processes and methods adopted by top six ESG rated companies, it gave elaborate insights on the best practices followed by the consumer goods packaging companies on a global level and as a researcher I could connect the data of different companies and interpret the reason behind their value creation and draw conclusions on common key determinants in ESG disclosures that are required for companies to create long-term value.

APPENDIX 4: INTERVIEW CODING PROCESS

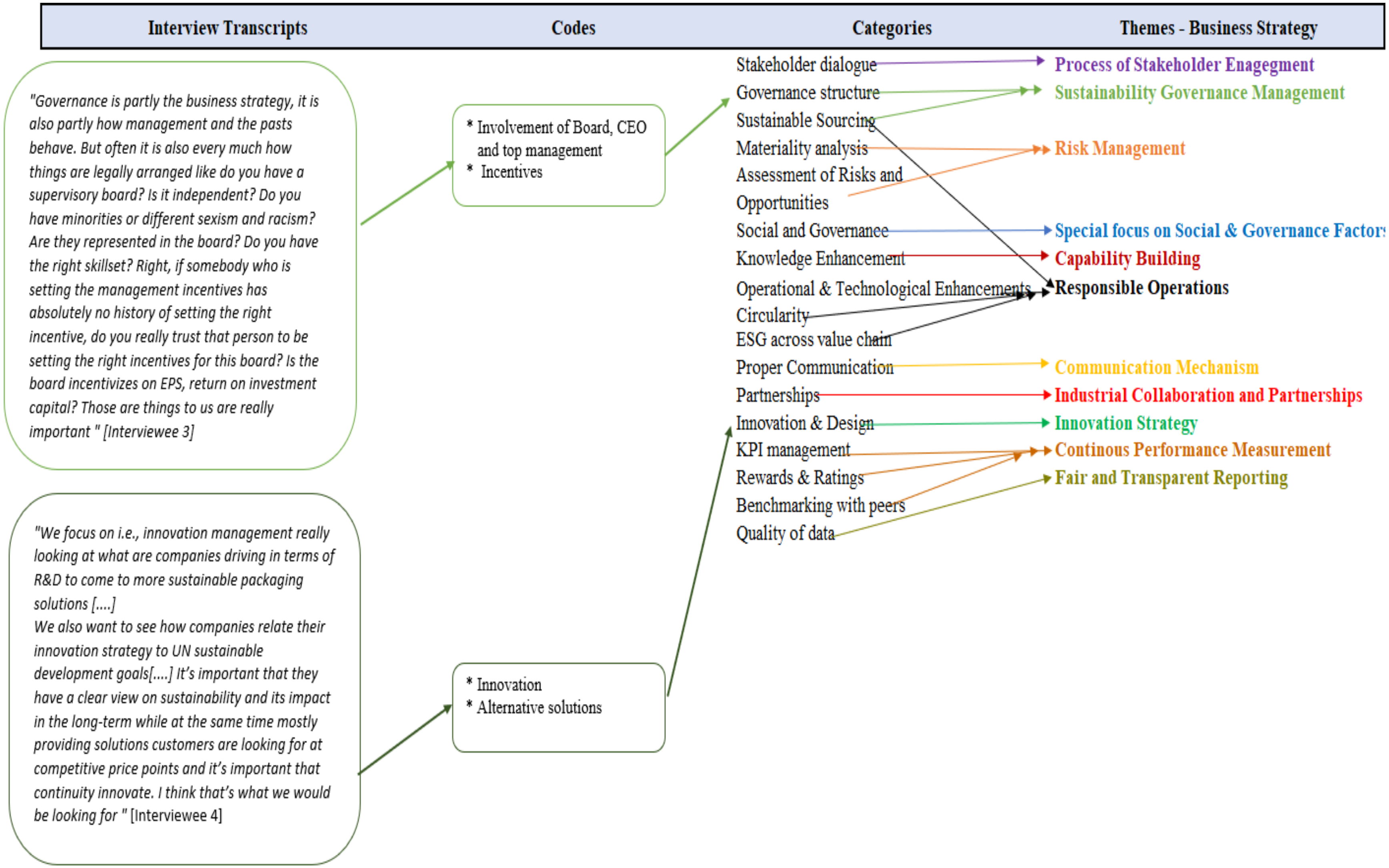
In total, four interviews for this study were conducted between 16th June to 2nd July 2020. All the interviews took about 30-40 minutes to complete and were conducted online via Skype or Microsoft Teams due to government orders to limit man movement due to Covid-19 situation. The data collected from interviews is analysed using coding technique.

Colour	Concepts
Yellow	Drivers for ESG Reporting
Pink	Reason for packaging industries not reporting
Blue	Implications of ESG on Business Value creation
Green	Stakeholder Engagement and Investor Expectations
Grey	Reporting Framework and ESG Ratings
Orange	Business Strategy
Amber	Key Determinants

Above mentioned colours are used to highlight the concepts answering the sub-research questions and main research question to extract relevant insights from the interviews conducted with ESG practitioners. A step-by- step process was adopted for data analysis of semi-structured interviews. At first, interviews were transcribed manually. Second, repeated reading of transcripts was performed to break down the data in to codes. Third step, the identified codes were grouped into categories for a more meaning full outcome. Last step, from the categories common themes were derived that are identified as key determinants for strategically addressing the value creation through ESG disclosure. This process of coding was adopted from Saldana's (2013), codes to theory model. A sample illustration of coding process representing two data from interview transcripts is shown below figure 12.

To begin, two interview segments are extracted from the interview for illustration purpose. The initial, descriptive was analyzed manually and codes were generated relevant to the topic. Initially 50 codes were generated from all the interviews and was later grouped in to 17 categories. The categories were further condensed to common themes derived from the data. This process using codes and data mapping favored the research by providing more insights to the study and helped in better understanding the requirements for ESG disclosure through two different stakeholder perspectives.

Figure 12: Illustration of Coding Process (Source: Adapted from Saldana's 2013)

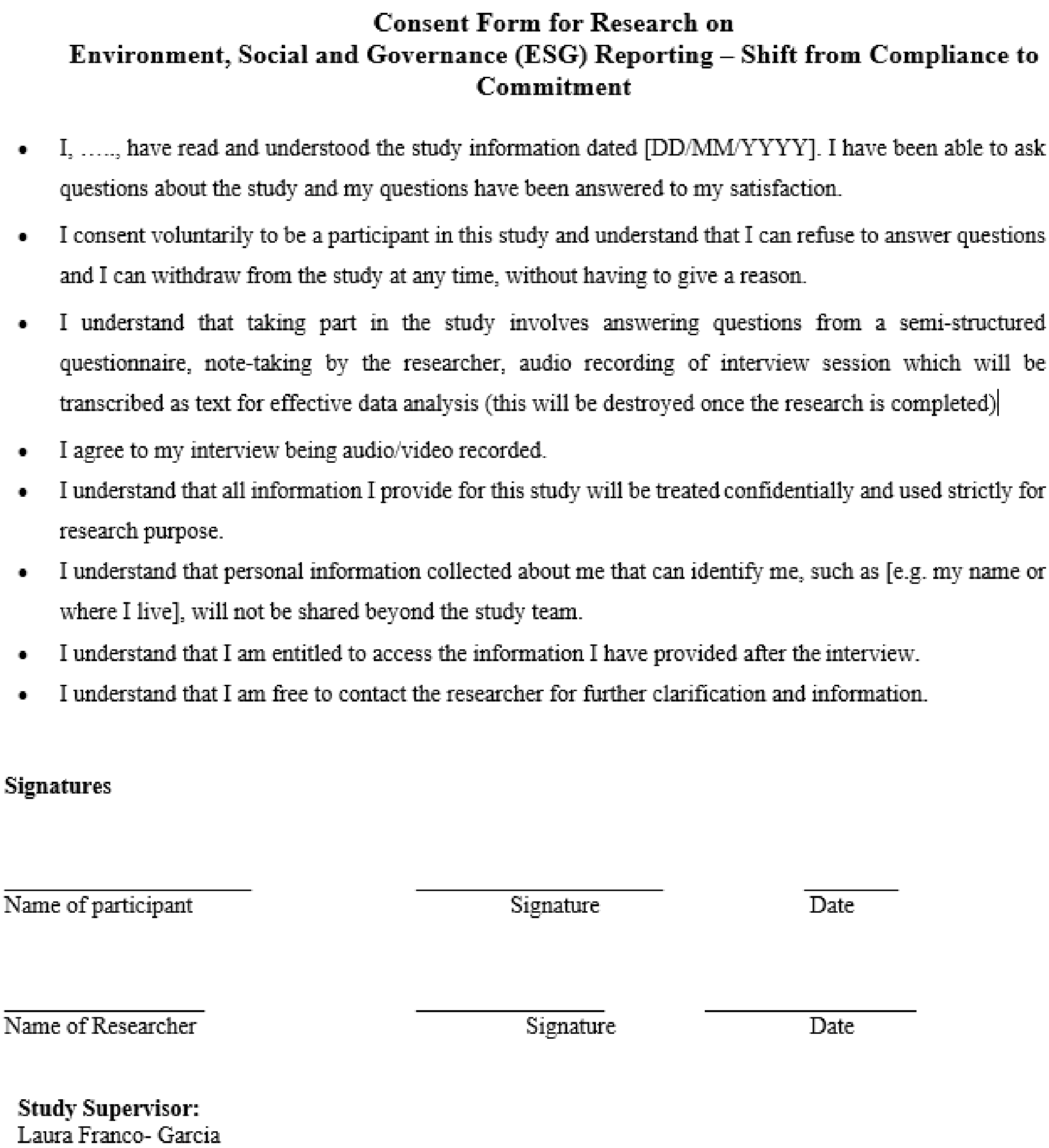


APPENDIX 5: CONSENT FORM

(Sample)

In accordance to the research ethics, all the participants were briefed about the research and information was shared with them through email communication. A written consent form was shared with the participants before conducting semi-structured interviews. Below, is the sample consent form used for this study.

Figure 13: Consent Form - Sample



Consent Form for Research on
Environment, Social and Governance (ESG) Reporting – Shift from Compliance to Commitment

- I, ….., have read and understood the study information dated [DD/MM/YYYY]. I have been able to ask questions about the study and my questions have been answered to my satisfaction.
- I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.
- I understand that taking part in the study involves answering questions from a semi-structured questionnaire, note-taking by the researcher, audio recording of interview session which will be transcribed as text for effective data analysis (this will be destroyed once the research is completed)
- I agree to my interview being audio/video recorded.
- I understand that all information I provide for this study will be treated confidentially and used strictly for research purpose.
- I understand that personal information collected about me that can identify me, such as [e.g. my name or where I live], will not be shared beyond the study team.
- I understand that I am entitled to access the information I have provided after the interview.
- I understand that I am free to contact the researcher for further clarification and information.

Signatures

Name of participant	Signature	Date
Name of Researcher	Signature	Date

Study Supervisor:
Laura Franco- Garcia

UNIVERSITY OF TWENTE.

APPENDIX 6 : Common Material Issues identified in Global Consumer Goods Packaging Companies

To deliver maximum sustainable value, it is observed that companies believe engaging their stakeholders in identifying materiality issues is beneficial in driving sustainability agenda. Materiality topics as mentioned in literature review may vary between different industry sector and within same sector based on the materials used, geography, political dimensions etc. The most common **materiality issues** identified by studying the shortlisted food packaging companies is given below,

Environment	Social	Governance
		
Climate Change	Human Rights	Business Ethics
Energy, GHG Emissions, Air pollution and Water	Health and Safety	Customer Needs
Responsible Sourcing	Diversity	Economic Value
Recycling and Waste	Communities	Sustainable Material and Products
Biodiversity	Responsible Employer	Sustainable Supply Chain
Circular Economy	Responsible Neighbour	Supplier Standards
Marketing and Labelling		Legislation and Compliance

Identified material issues are prioritised as high, medium, low based on their impacts to both business and that are material according to stakeholders.