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## Challenges and Opportunities of the European Sustainability Reporting Standards (ESRS) to Enhance Corporate Sustainability – Balancing Regulation and Innovation in Corporate Sustainability Reporting

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Master in Political Economy

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September, 2024



CIÊNCIAS SOCIAIS  
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Department of Political Economy

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## **Dedication**

I dedicate this thesis to Clapipa and my friends in Lisbon, making my last two years  
unforgettable.



## Acknowledgments

I would like to express my sincere gratitude to my supervisor, Prof. Nuno Bento, for his guidance and support throughout this research.

I am deeply grateful to my family and friends for their endless encouragement and love, pushing me through the tough times of writing this thesis.

To everyone else contributing to this journey—thank you.







## **Resumo**

Esta tese explora a implementação e as implicações das Normas Europeias de Relato de Sustentabilidade (ESRS) como instrumento regulador para melhorar a sustentabilidade corporativa. Inseridas no cenário em evolução dos relatórios de sustentabilidade empresarial, as ESRS visam uniformizar as divulgações ambientais, sociais e de governação (ESG) na União Europeia, aumentando assim a transparência e a responsabilidade das empresas. Utilizando uma perspectiva multinível e a teoria das transições sociotécnicas, este estudo investiga o papel das ESRS na promoção da sustentabilidade em empresas alemãs. A investigação recorre a metodologias qualitativas, incluindo estudos de caso de duas empresas de sectores diferentes e entrevistas semiestruturadas, para explorar os desafios e oportunidades associados à aplicação das ESRS. Os resultados sugerem que, apesar dos maiores encargos de conformidade, as ESRS promovem a inovação, eficiência operacional e alinhamento com os objetivos de sustentabilidade. As empresas relatam benefícios como maior envolvimento das partes interessadas e melhor gestão de riscos. No entanto, a investigação também identifica obstáculos como a complexidade do alinhamento dos sistemas internos com as novas normas e os custos administrativos envolvidos. Esta tese contribui para o discurso académico ao oferecer uma visão empírica sobre o potencial de quadros regulamentares como as ESRS para moldar o comportamento empresarial e promover a sustentabilidade, sublinhando a importância de orientações claras e da coerência regulamentar, enquanto destaca a necessidade de apoio contínuo para ultrapassar desafios de implementação.

## **Palavras-chave**

Normas Europeias de Relato de Sustentabilidade (ESRS), Sustentabilidade Empresarial, Relato ESG, Transições Sócio-Técnicas, Quadros Regulamentares



## **Abstract**

This thesis explores the implementation and implications of the European Sustainability Reporting Standards (ESRS) as a regulatory instrument for enhancing corporate sustainability. Positioned within the evolving landscape of corporate sustainability reporting, the ESRS aim to establish uniformity in environmental, social, and governance (ESG) disclosures across the European Union (EU), thereby increasing corporate transparency and accountability. Utilising a multi-level perspective and socio-technical transitions theory, this study investigates the ESRS's role in advancing corporate sustainability within German companies. The research employs qualitative methodologies, including case studies of two German companies from different sectors, and semi-structured expert interviews, to explore the challenges and opportunities associated with ESRS implementation. Findings suggest that, despite increased compliance burdens, the ESRS foster innovation, operational efficiency, and stronger alignment with sustainability goals. Benefits cited by companies include enhanced stakeholder engagement and risk management. However, the research also identifies significant obstacles, such as the complexity of aligning internal systems with new reporting standards and the administrative costs involved. This thesis contributes to the academic discourse by offering empirical insights into the potential of regulatory frameworks like the ESRS to shape corporate behaviour and promote sustainability. It stresses the role of clear guidelines and regulatory consistency in facilitating corporate transitions towards more sustainable practices, while also highlighting the need for ongoing support to overcome implementation challenges.

## **Key Words**

European Sustainability Reporting Standards, Corporate Sustainability, ESG Reporting, Socio-Technical Transitions, Regulatory Frameworks

## Table of Contents

<i>Abstract</i> .....	<i>iii</i>
<i>List of Abbreviations</i> .....	<i>vi</i>
<i>List of Figures</i> .....	<i>vii</i>
<b>1. Introduction</b> .....	<b>1</b>
<b>2. Literature Review</b> .....	<b>3</b>
2.1. Introduction to Sustainability Reporting .....	3
2.2. Historical Context and Evolution of Sustainability Reporting .....	3
2.3. The Role and Impact of ESG in Sustainability Reporting.....	7
2.4. Corporate Social Responsibility (CSR) and Sustainability Reporting .....	7
2.5. The Concept of ‘Double Materiality’ .....	8
2.6. Hypotheses from the Literature .....	9
2.7. Concluding the Literature Review .....	9
<b>3. ESRS in a Nutshell</b> .....	<b>10</b>
3.1. Evolutionary Process and Implementation .....	10
3.2. The Standards .....	11
3.3. Changes with the ESRS.....	11
<b>4. Challenges and Opportunities of Standardised Sustainability Reporting, as found in academic literature</b> .....	<b>12</b>
4.1. Challenges.....	12
4.2. Opportunities .....	14
<b>5. Theoretical Framework</b> .....	<b>15</b>
5.1. Socio-technical transitions theory .....	16
5.2. Understanding Socio-Technical Transitions through MLP .....	18
5.2.1. Niches .....	18
5.2.2. Regimes.....	19
5.2.3. Landscapes.....	20
5.3. Implications of MLP.....	20
5.4. Institutional Theory.....	22

<b>6. Methods.....</b>	<b>24</b>
<b>6.1. Research Design .....</b>	<b>24</b>
<b>6.2. Methodologies .....</b>	<b>24</b>
<b>6.3. Research Steps .....</b>	<b>25</b>
<b>6.4. Data Acquisition.....</b>	<b>26</b>
<b>6.5. Limitations .....</b>	<b>27</b>
<b>7. Case Studies.....</b>	<b>28</b>
<b>7.1. Germany .....</b>	<b>28</b>
<b>7.2. Sector Analysis .....</b>	<b>30</b>
<b>7.3. Chemicals/Lubricant Industry .....</b>	<b>30</b>
7.3.1. Fuchs SE .....	30
7.3.1.1. Fuchs SE Sustainability Reports 2021 and 2022 .....	31
<b>7.4. Automotive Supplier Industry.....</b>	<b>32</b>
7.4.1. ElringKlinger AG.....	33
7.4.1.1. ElringKlinger AG's Sustainability Reports 2021 and 2022.....	34
<b>7.5. Expectations from ESRS Implementation.....</b>	<b>35</b>
<b>7.6. Theoretical Aspects.....</b>	<b>36</b>
<b>7.7. Concluding Remarks on the Case Studies.....</b>	<b>37</b>
<b>8. Findings and Discussion.....</b>	<b>38</b>
<b>8.1. Analytical Discussion.....</b>	<b>41</b>
8.1.1. Hypotheses Analysis .....	42
<b>8.2. Theoretical Integration .....</b>	<b>44</b>
<b>9. Conclusion.....</b>	<b>47</b>
<b>References .....</b>	<b>49</b>
<b>Annex A .....</b>	<b>58</b>
<b>Annex B.....</b>	<b>60</b>

## List of Abbreviations

Abbreviation	Full Text
BaFin	German Federal Financial Supervisory Authority
CxO	Chief Executive Officer or other C-suite executive
CAGR	Compound Annual Growth Rate
CSR	Corporate Social Responsibility
CSRD	Corporate Sustainability Reporting Directive
EV	Electric Vehicle
ESG	Environmental, Social, and Governance
CLEPA	European Association of Automotive Suppliers
EC	European Commission
EFRAG	European Financial Reporting Advisory Group
ESRS	European Sustainability Reporting Standards
EU	European Union
GRI	Global Reporting Initiative
GDP	Gross Domestic Product
KPIs	Key Performance Indicators
IROs	Impacts, Risks, and Opportunities
IFRS	International Financial Reporting Standards
MLP	Multi-Level Perspective
NFRD	Non-Financial Reporting Directive
NGO	Non-Governmental Organisation
NFD	Nonfinancial Disclosure
PRI	Principles for Responsible Investment
PCFs	Product Carbon Footprints
R&D	Research and Development
SMEs	small and medium-sized enterprises
SASB	Sustainability Accounting Standard Board
SRQ	Sustainability Reporting Quality
SDGs	Sustainable Development Goals
TCFD	Task Force on Climate-related Financial Disclosures
TT	Technological Transitions
UK	United Kingdom
UN	United Nations

## List of Figures

Figure 3.1 ESRS Implementation Schedule. Own graphic, based on <a href="https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_4043">https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_4043</a> .....	10
Figure 5.1. Connections between Socio-technical transitions theory and institutional theory .....	15
Figure 6.1. Gioia overarching topics .....	26
Figure 8.1. Gioia Method Levels .....	38
Figure 8.2 ESRS Implementation in MLP .....	44





## **1. Introduction**

The landscape of corporate sustainability reporting has undergone a significant transformation over the past few decades, evolving from voluntary disclosures to more regulated frameworks. This thesis explores the European Sustainability Reporting Standards (ESRS) within the context of corporate sustainability and socio-technical transitions. The ESRS, a component of the Corporate Sustainability Reporting Directive (CSRD), aim to standardise sustainability reporting within the European Union (EU), enhancing transparency and comparability of environmental, social, and governance (ESG) topics across industries (European Commission, 2021). The new standards aim to harmonise sustainability reporting, which has traditionally suffered from inconsistencies, limited comparability, and selective disclosures (Bose, 2020; Darnall et al., 2022). While companies had engaged in sustainability reporting voluntarily to enhance their reputations, meet stakeholder expectations, and address emerging regulatory pressures, the ESRS are now mandatory for various companies to enhance credibility and enable stakeholders to make more informed decisions based on consistent and transparent data (Christensen et al., 2021).

The motivation for this study stems from the increasing emphasis on mandatory sustainability reporting as an essential component of corporate governance, shifting companies from symbolic sustainability initiatives to genuine integration into core business strategies (Adams & Abhayawansa, 2022; Lozano et al., 2016). This expectation is particularly relevant in Germany, where industries such as automotive and chemicals not only play a significant role in the national economy but also contribute substantially to environmental impacts. Such sectors face unique challenges in adapting to new reporting standards due to their complex supply chains, high environmental footprints, and evolving stakeholder demands for transparency (Hahn & Kühnen, 2013; Baumüller & Grbenic, 2021). This analysis is crucial for political economy, examining how regulatory interventions like ESRS shape market dynamics, institutional transformations, and the broader economic system.

This thesis explores how the ESRS influence the sustainability practices of corporations in Germany, focusing on those primary aspects: operational changes, corporate behaviour, the quality of reporting data and stakeholder engagement. Specifically, it aims to answer the following research questions: How do the ESRS influence the sustainability practices of corporations in Germany, specifically regarding operational changes, corporate behaviour, quality of reporting data and stakeholder engagement? What are the key challenges faced by German companies in implementing ESRS, and how do these challenges shape their approach to sustainability?

To address these questions, the research employs a qualitative approach, integrating an extensive literature review, case studies, and semi-structured expert interviews to gather in-depth insights into the real-world application of ESRS and its impact on corporate sustainable practices. The Multi-Level Perspective (MLP) from the socio-technical transitions theory (Geels, 2005) and institutional theory (DiMaggio & Powell, 1983) provide a theoretical framework for analysing the impact of the ESRS on corporate sustainability regimes. This integration allows for a comprehensive understanding of how

regulatory changes, such as the ESRS, drive systemic change within corporate sustainability practices (Schot & Geels, 2007).

The case studies focus on two German companies, which were chosen due to their representative role in sectors with high environmental impacts and regulatory scrutiny. The study examines the operational adjustments required to comply with ESRS, including increased administrative and operational costs and the complexity of aligning with the principle of double materiality. Additionally, the research evaluates the effects on stakeholder engagement, such as increased involvement and improved transparency in ESG reporting. The ESRS standards have encouraged the adoption of proactive sustainability strategies or fostering innovation in environmentally critical sectors.

This thesis thus contributes to the academic discourse on the effectiveness of standardised sustainability frameworks, highlighting both the difficulties and potential benefits of ESRS adoption for companies. It also provides practical insights into how companies can navigate regulatory compliance while leveraging these standards to drive meaningful sustainability outcomes. By focusing on the German automotive and chemical sectors, the research underscores the transformative potential of the ESRS in shaping corporate sustainability practices, thereby potentially promoting a more sustainable and resilient future for European industries.

## **2. Literature Review**

### **2.1. Introduction to Sustainability Reporting**

Scholars have observed that corporate reporting on sustainability policies and actions has become the norm, evolving significantly towards integrated reporting over the last two decades (Tînjălă et al., 2015). International guidelines like the Global Reporting Initiative (GRI) or the United Nations Global Compact (UNGC), along with various national standards, strive to address the issues of missing heterogeneity and comparability of sustainability information in business reports.

The need for sustainability information has increased the volume of sustainability reporting with a noticeable shift towards integrating environmental and social aspects alongside traditional financial reporting. This indicates a move towards more holistic sustainability reporting practices (Hahn & Kühnen, 2013). Akhter et al. (2023) also point to previous lacks in sustainability reporting, where certain critical areas, such as climate change mitigation efforts and carbon management strategies are underreported and highlight the need for broader reporting standards that encompass a wider range of environmental activities.

This literature review investigates the various debates and views that scholars have expressed over the last few years regarding sustainability reporting. It, first, outlines the evolution of global sustainability reporting and gives a historical context that led to the transition from voluntary to mandatory standards and the growing focus on ESG factors. Second, it depicts the role and impact of ESG in Sustainability Reporting. Third, it provides an overview of the connection scholars have drawn between CSR and Sustainability. Finally, this literature review highlights the importance given to the concept of double materiality. This aims to give a broad overview of what the scholarly world has made of the evolution of sustainability reporting and to show that the research gaps this thesis aims to fill lies in exploring the real-world application and effectiveness of mandatory sustainability reporting standards such as the ESRS, specifically examining how these standards influence corporate behaviour, stakeholder decision-making, and the overall quality of sustainability reporting.

### **2.2. Historical Context and Evolution of Sustainability Reporting**

Various scholars have explored the history and evolution of sustainability reporting. The work by Lai and Stacchezzini (2021) describes the transformation of corporate reporting vis-à-vis sustainability, identifying four distinct evolutionary phases: the initial neglect of sustainability in the 1960s and 1970s, the experimental integration of environmental and social concerns into reporting during the 1980s and 1990s, a period of enhanced sustainability reporting from the 2000s to the 2010s driven by increased stakeholder awareness and its impact on business performance, and the current push towards integrating sustainability more holistically with financial reporting starting in the 2020s.

Already in the early 2010s, authors stipulated that internal factors such as corporate size, financial performance, and ownership structure influence sustainability reporting by companies (Hahn & Kühnen, 2013). They found that larger companies and those with better financial performance are more

likely to engage in sustainability reporting, attributed to higher visibility, stakeholder pressure, and resources to bear reporting costs. Additionally, external factors such as corporate visibility, industry affiliation, country of origin, and legal requirements significantly affect sustainability reporting. Companies with higher visibility, belonging to environmentally sensitive industries, or operating in countries with stringent legal requirements are more inclined to report on sustainability (Hahn & Kühnen, 2013).

As the impacts of climate change and societal inequalities became more pronounced, stakeholders, including investors, consumers, and regulatory bodies, began to demand greater accountability and transparency from corporations, as well as the harmonisation and simplification of the assessment methods and reporting frameworks (Christensen et al., 2021). This led to the development of more structured voluntary frameworks, such as the GRI, which provided companies with guidelines for reporting on a range of sustainability indicators (GRI, 2016). Other frameworks, such as the Sustainability Accounting Standards Board (SASB) primarily consider sustainability issues in terms of their impact on enterprise value of just financial materiality. However, the voluntary nature of these early frameworks often resulted in selective and inconsistent reporting practices, limiting the comparability and reliability of disclosed information. The need for standardised and mandatory reporting mechanisms became increasingly evident (Bose, 2020). Regardless, between 1999 and 2016, the adoption of GRI standards grew significantly. While in 2000 there were around 100 major companies using the standards, by 2015, the number of organisations reporting using GRI guidelines surpassed 5,000 (Verdantix, 2017).

Giner and Luque-Vílchez (2022) look at the European Financial Reporting Advisory Group's (EFRAG) proactive stance to align the objectives of the European Green Deal with established sustainability reporting standards and the calls for harmonisation of such. Thus, not only to foster comparability but also to guide companies towards sustainable developments, the European Commission (EC) intervened in financial accounting, directing harmonisation efforts, and mandating the adoption of International Financial Reporting Standards (IFRS). Scholars frame the adoption of Directive 2014/95/EU as part of the EU's broader aim to harmonise accountability practices and create a transparent European economic zone. This directive mandates nonfinancial disclosure (NFD), affecting a significant number of European companies. A study conducted by Mion and Loza Adauí (2019) reveals an increase in the mean Sustainability Reporting Quality (SRQ) scores following the implementation of the directive, with German companies showing high scores compared to their European counterparts. SRQ refers to the overall effectiveness and comprehensiveness of sustainability reports produced by organisations. It encompasses several dimensions, including the accuracy, transparency, completeness, and relevance of the information provided in these reports. Higher SRQ indicates that the reports are more reliable and useful for stakeholders (pp. 4 ff.). This study suggests that the directive has had a strategic impact on the anchorage of sustainability reporting practices,

emphasising its role in strengthening rather than introducing new reporting requirements in countries that already practised some sustainability reporting.

Directive 2014/95/EU, as highlighted by Giner and Luque-Vílchez (2022), mandated non-financial disclosures but fell short in enhancing information quality, prompting a revision with EFRAG's involvement, leading to the creation of a task force for European non-financial reporting standards. This task force, in collaboration with the GRI, brought forward recommendations, out of which the CSRD arose in 2021. The EU has been at the forefront of this regulatory shift, culminating in the adoption of the CSRD, which mandates comprehensive sustainability reporting for all large companies and all companies listed on EU-regulated markets, to enhance the consistency and comparability of sustainability information across the EU (European Commission, 2021).

Tinjalã et al. (2015) conducted an analysis of non-financial reporting trends among European companies which reveals a significant progression in sustainability reporting practices. They found that besides the increased scores of European companies' sustainability ratings, 80 per cent of the analysed companies had published a CSR report in 2010 and 84 per cent in 2014. This uptrend in reporting is further supported by the adoption of national regulations or standards by countries such as the United Kingdom (UK), France, Germany, Denmark, Norway, and the Netherlands since the 1990s.

Scholars, among them Baumüller and Grbenic (2021) and Tettamanzi et al. (2022), have analysed the move from Directive 2014/95/EU, the Non-Financial Reporting Directive (NFRD), towards the CSRD. They highlight that the CSRD is a significant overhaul aiming to expand the scope and depth of sustainability reporting within the EU, seeking to improve transparency, comparability, and reliability of sustainability information. The introduction of the CSRD, along with the development of the ESRS, represents a significant milestone in the evolution of sustainability reporting. These regulatory initiatives signify a move towards integrating sustainability into core strategic and operational frameworks of companies, ensuring that ESG considerations are no longer peripheral but central to corporate governance and accountability (Lai & Stacchezzini, 2021).

There are concerns about the CSRD's alignment with global sustainability reporting standards and frameworks. The divergence between EU standards and international efforts could create complexities, especially for multinational companies subject to multiple requirements (Baumüller & Grbenic, 2021). Further, Tettamanzi et al. (2022) offer a nuanced critique of the evolving dynamics of sustainability within the realm of financial accounting, emphasising the significance of climate urgency and enhanced stakeholder engagement as primary drivers of the current overhaul in corporate reporting standards.

Papoutsis and Sodhi (2020) critically examine the relationship between the disclosure in sustainability reports and the actual sustainability performance of companies. They navigate through the contested perspectives on sustainability reporting, where one view posits such reports as reflective of genuine sustainability efforts, enhancing shareholder awareness and trust, whereas an opposing stance characterises these reports as vehicles for *greenwashing*, used by companies to favourably shape stakeholder perceptions without substantial engagement in sustainability practices. The lack of auditing

akin to financial annual reports lends credence to concerns over the authenticity of disclosed sustainability performances. The authors emphasise the importance of sustainability performance to investors and other stakeholders, who rely on third-party ratings or binary values of inclusion in sustainable portfolios to measure a company's sustainability credentials. They stipulate that despite the mitigative role of disclosure guidelines such as the GRI in curbing greenwashing, the flexibility in guideline adoption allows companies to selectively curate content in their reports, accentuating a strategic approach to disclosure.

The evolution from voluntary to mandatory sustainability reporting standards emphasises a broader societal shift towards sustainability and responsible business practices. It reflects a growing consensus on the importance of corporate contributions to sustainable development goals and the critical need for transparency and accountability in mitigating environmental and social impacts. As companies worldwide adapt to these changing regulatory landscapes, the future of sustainability reporting is likely to be characterised by further standardisation and harmonisation, both at the regional and global levels (Mion & Loza Adaui, 2019).

Tettamanzi et al. (2022) advocate for a corporate attitude that aligns with public welfare and the disclosure of quality information that is both retrospective and forward-looking. They emphasise the importance of tailoring reporting levels and boundaries to the unique characteristics of each entity and reiterate the significance of adopting the principles of double materiality and the connectivity of information in the CSRD.

Lozano et al. (2016) point to the fact that the process of developing and publishing sustainability reports catalyses organisational changes, leading to improvements in data collection, strategy, organisational structure, reputation, and stakeholder engagement. The authors argue that initial sustainability reports are primarily driven by internal motivations of companies and that the subsequent reports are influenced by both internal motivations and external pressures. Their survey of 91 companies reveals that the primary motivations by companies for publishing sustainability reports included increasing transparency, assessing sustainability performance, promoting sustainability efforts, fostering stakeholder dialogue, and improving reputation. Thus, they show that sustainability reporting and organisational change management for sustainability (OCMS) inside the organisations have a reciprocal reinforcing relationship.

This study by Lozano et al. (2016) concludes that sustainability reporting is a crucial driver for organisational change towards sustainability. The reciprocal relationship between sustainability reporting and OCMS enhances corporate sustainability performance, reputation, and awareness. The research underscores the importance of a holistic approach to corporate sustainability, integrating technical, managerial, and organisational changes.

### **2.3. The Role and Impact of ESG in Sustainability Reporting**

Li et al. (2021) argue that ESG topics are interrelated and critically influence the assessment of a company's future financial performance and societal impact. They describe ESG as a non-financial investment strategy serving as a crucial risk prevention mechanism. Building on this, MacNeil and Esser (2022) critically analyse the evolution from a financial model of ESG towards a more integrated entity model within corporate and financial law. This new approach signifies a departure from merely considering the external effects of a company's operations to a more nuanced understanding of ESG's impact on risk management and investor returns.

The transition is depicted as a move away from traditional corporate governance and decision-making towards investor-led strategies that prioritise mitigating ESG risks to bolster long-term investment performance. MacNeil and Esser (2022) argue that the prevalent financial model inadequately addresses sustainability, particularly neglecting the roles of corporate boards and direct accountability in sustainability practices. They propose an 'entity model' of ESG investing, which advocates for a comprehensive approach where corporations play a leading role in sustainability efforts, moving beyond the constraints of investor preferences and portfolio management. This critique points to a significant shift in perspective, urging a move towards strategies where companies are not just passive players in sustainability but are actively shaping their ESG agendas.

Recently, Adams and Abhayawansa (2022) specified that the COVID-19 pandemic has brought heightened attention to ESG factors, particularly focussing on the environmental aspect ('E'). The authors highlight that there is concern that amidst the financial strains induced by the pandemic, businesses might deprioritise environmentally sustainable policies. However, according to the authors, environmentally responsible businesses are perceived to be less exposed to systematic risks. This is because, during the pandemic, there was an increase in funds flowing into sustainable investments, correlating with higher stock returns and lower volatility for companies with strong ESG ratings. Adams and Abhayawansa (2022) argue that this shift indicates an altering perception of sustainability as essential rather than optional.

### **2.4. Corporate Social Responsibility (CSR) and Sustainability Reporting**

Scholars have emphasised that the evolution of CSR and sustainability reporting reflects a shifting landscape in corporate governance and accountability (Christensen et al., 2021; Nicolosi et al., 2011). Historically, entities advocated for stakeholder interests, expanding their commitment to align with sustainability objectives. Simultaneously, as argued by Christensen et al. (2021), the surge in sustainable investments has driven a growing demand for CSR and ESG information, prompting increased voluntary reporting. CSR activities, often extending beyond legal compliance, encompass a broad spectrum of ESG topics aimed at enhancing social welfare and sustainability. Christensen et al. (2021) argue that defining the scope of CSR and sustainability reporting poses challenges, with CSR emphasising a normative perspective and sustainability focusing on long-term horizons (p. 1181).

Further, scholars have emphasised that firm-level incentives and institutional complementarities play pivotal roles in shaping reporting practices and regulatory outcomes. Corporate disclosure serves to mitigate information asymmetries, improve investor awareness, and facilitate managerial monitoring. Environment, Community, and Product Quality were also found to be critical discriminant factors that effectively estimate a firm's capability to meet CSR expectations (Christensen et al., 2021; Nicolosi et al., 2011). Christensen et al. (2021) also argue that detailed reporting could prevent firms' innovation incentives, particularly concerning CSR efforts and that firm size correlates with the quantity and quality of CSR disclosures, possibly due to public scrutiny or lower communication costs for larger firms (Baumüller & Sopp, 2022).

### **2.5. The Concept of 'Double Materiality'**

In their exploration of the evolution of sustainability reporting standards within the EU, Baumüller and Sopp (2022) examine the development and implications of the principle of materiality, tracing its journey from the Modernisation Directive through the Non-Financial Reporting Directive (NFRD), and culminating in the proposals for the CSRD. All previous EU sustainability directives have already aimed at integrating environmental and social factors into corporate financial reporting, enhancing transparency and aligning with broader EU sustainability practices. Their analysis reveals a significant transition in the understanding and application of materiality in sustainability reporting, moving from a narrow focus on financial materiality to embracing a broader concept of *double materiality*. This dual approach captures both the impact of company activities on sustainability matters (environmental and social materiality) and the influence of sustainability issues on the company's financial performance.

Scholars, such as Giner and Luque-Vílchez (2022) highlight the shift that already Directive 2014/95/EU brought about as it broadens the scope of sustainability issues to be disclosed, and emphasises the double materiality approach, where companies should simultaneously report: (1) "how sustainability issues affect their performance, position, and development (the "outside-in" perspective); and (2) their impact on people and the environment (the "inside-out" perspective)" (p. 1293). Moreover, the authors say that the EC/EFRA's approach is deemed effective in achieving the Sustainability Development Goals (SDGs) by encouraging sustainable behaviour through the "inside-out" aspects.

Additionally, scholars have found that this brought about a shift towards viewing sustainability reporting as an essential component of corporate reporting, rather than supplementary non-financial information (Baumüller & Sopp, 2022). This shift highlights the need for detailed and reliable sustainability disclosures that cater to a wide array of stakeholders. This dynamic nature of sustainability reporting standards in Europe reflects an increasing acknowledgement of the intertwined nature of financial and non-financial (sustainability) factors in corporate reporting. The evolving sustainability reporting standards within the EU, particularly through the adoption of the double materiality principle, have introduced potential tensions between companies and stakeholders. As sustainability reporting moves beyond traditional financial materiality to encompass broader environmental and social impacts,



companies face increased pressures to meet diverse stakeholder expectations regarding transparency and accountability. This shift requires companies to balance both their internal financial performance and their external impact on society and the environment, potentially leading to conflicting priorities between profitability and sustainable practices (Cupertino, Vitale & Ruggiero, 2022).

## **2.6. Hypotheses from the Literature**

Scholars particularly envision the CSRD as a catalyst for sustainable change within and beyond the European community, by establishing a high benchmark for sustainability reporting that could influence global practices (Baumüller & Grbenic, 2021). The directive's mandate for comprehensive reporting aims to enhance the credibility of sustainability reporting by curtailing selective disclosure, thus providing a more balanced and authentic depiction of companies' sustainability endeavours (Cort & Esty, 2020; Pichler & Lehner, 2017). This literature review reveals the following hypotheses that this thesis aims to test:

H1: The mandatory nature of ESRS will lead to widespread adoption driven by coercive regulatory pressures, resulting in increased standardisation of sustainability reporting across the EU.

H2: The complexity and breadth of ESRS requirements may overwhelm (smaller) firms and sectors, potentially leading to compliance failures or superficial reporting that undermines the intended transparency and effectiveness of the standards.

H3: The ESRS, while promoting standardisation within the EU, may heighten alignment challenges for multinational companies that must navigate conflicting sustainability reporting requirements across different regions, leading to fragmentation and inconsistencies in global ESG reporting.

H4: Compliance with ESRS will result in better stakeholder engagement and improved investor confidence due to enhanced transparency and comparability of ESG disclosures, thus elevating the market perception of compliant companies.

H5: As companies adjust to ESRS requirements, there will be a shift in corporate governance and operational practices, driving long-term systemic change toward more sustainable business models and socio-technical transitions.

## **2.7. Concluding the Literature Review**

This literature review examined the evolution of sustainability reporting, highlighting the shift from voluntary to mandatory standards, such as the CSRD and ESRS, and the growing emphasis on ESG factors and double materiality. It provides a foundation for exploring the real-world application and effectiveness of mandatory standards like the ESRS and their impact on corporate behaviour, stakeholder decisions, and reporting quality. While literature generally supports standardised reporting, the necessity of recent ESRS advancements remains debated, which this thesis investigates through real-world examples.

### 3. ESRS in a Nutshell

#### 3.1. Evolutionary Process and Implementation

The ESRS evolved through regulatory changes, market demands, and advancements in sustainability practices, building on the NFRD's foundation for mandatory EU sustainability disclosures (Mion & Loza Adaui, 2019; Tettamanzi, Venturini & Murgolo, 2022). The rise in ESG investment and consumer pressures drove companies to enhance transparency (KPMG, 2023), while technological improvements made compliance easier (Deloitte, 2021). Global frameworks like GRI, Sustainability Accounting Standard Board (SASB), and the Task Force on Climate-related Financial disclosures (TCFD) shaped the ESRS, promoting standardisation (Adams & Abhayawansa, 2022). EU policies, including the Green Deal and Taxonomy Regulation, further pushed sustainability efforts (European Commission, 2021).

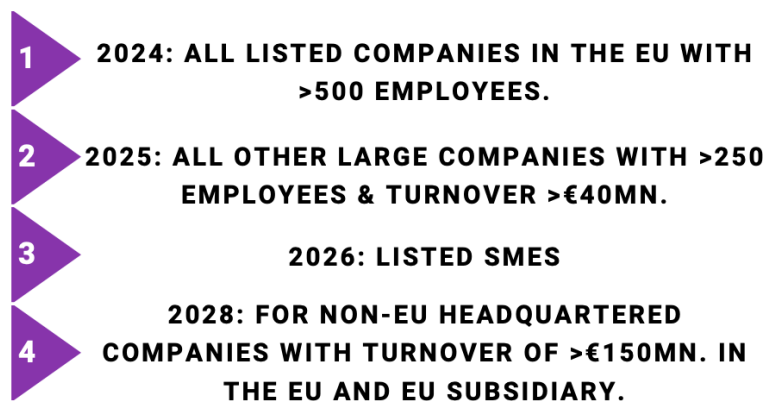
Directive 2014/95/EU was revised and became the CSRD, effective from 21 April 2021. Aligned with EFRAG's recommendations, the CSRD emphasises reporting on SDGs and the economic, social, and environmental dimensions of sustainability (Giner & Luque-Vílchez, 2022). It mandates reporting on environmental, social, employee concerns, human rights, anticorruption, and bribery. While the ESRS require more detailed reporting, separate sustainability reports are not required, as they will integrate into the annual reports.

ESRS reporting involves three data types: numerical, semi-narrative, and narrative information. Despite efforts to simplify, verifying compliance remains time-consuming (Lauzzana, 2023). The materiality assessment, crucial for ESRS-based sustainability reports, follows three steps: company analysis, compiling material topics, and applying double materiality to assess impacts and financial implications, as per ESRS regulations (EFRAG, 2023).

Adopted by the EU Commission in July 2023, the ESRS applies from January 2024 to companies under the NFRD, with their first sustainability report due in 2025. Large companies not under the NFRD will report starting in 2025, listed SMEs in 2026, and non-EU companies covered by the CSRD in 2028.

*Figure 3.1 ESRS Implementation Schedule. Own graphic, based on [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_23\\_4043](https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_4043)*

#### ESRS IMPLEMENTATION TIMELINE



Under the CSRD, approximately 50,000 companies will eventually need to conform their sustainability reports to the ESRS standards. This includes all companies listed on EU-regulated markets, small and medium-sized enterprises (SMEs) (excluding micro-enterprises), and large companies meeting at least two of these criteria: a balance sheet over €25 million, turnover above €50 million, or more than 250 employees. Non-EU companies with EU turnover exceeding €150 million must also comply if they have a qualifying subsidiary or branch. Non-compliance can lead to substantial penalties, varying by country, and may result in legal actions from shareholders (Brennan & Puzniak-Holford, 2023; Pike, 2023; Christensen, n.d.).

### **3.2. The Standards**

The CSRD framework requires specific reporting standards, provided by the ESRS, to ensure relevant, reliable, and comparable sustainability information across companies and sectors (Eklund & Askevold Vaaler, 2023). The standards, essential for CSRD compliance, are divided into *cross-cutting*, *topical*, and *sector-specific* categories. ESRS 1 outlines the general requirements and foundational concepts for sustainability reporting, while ESRS 2 details general disclosure requirements covering Governance, Strategy, Management of IROs, and Metrics and Targets (European Commission, 2023).

The topical standards address ESG aspects and specify criteria for identifying and managing material IROs, as well as related metrics and targets. Currently, five environmental, four social, and one governance standards are included. Additionally, simplified standards for SMEs oriented towards capital markets and voluntary standards for non-listed SMEs are in progress. Furthermore, technical guidelines for machine-readable ESRS statements (XBRL Taxonomy) and specific guidance for supply chain activities and materiality analyses are also being drafted.

### **3.3. Changes with the ESRS**

The implementation of the ESRS shall significantly transform existing sustainability reporting practices to align with enhanced requirements. This is done by the introduction of a unified framework with standardised metrics to ensure consistency, comparability, and reliability (KPMG, 2023). Previously, companies used fragmented frameworks like the GRI, SASB, or TCFD, leading to incoherent and burdensome reporting. ESRS aim to streamline this process and mandate comprehensive ESG reporting (Deloitte, 2021). Unlike the qualitative, reactive disclosures of the past, ESRS emphasise quantitative data and key performance indicators (KPIs) for better assessment and comparison (IFRS Foundation, 2021). It also fosters proactive strategies, enhanced stakeholder engagement, and requires third-party assurance to improve credibility and trust (PwC, 2021; KPMG, 2023). Additionally, ESRS substantiate CSR efforts and enhance stakeholder trust, by pushing companies to evaluate the outcomes of their CSR initiatives quantitatively with CSR goals (MacNeil & Esser, 2022).

#### **4. Challenges and Opportunities of Standardised Sustainability Reporting, as found in academic literature**

The advent of the CSRD and ESRS declares a significant shift towards more comprehensive sustainability reporting, introducing both opportunities and challenges for corporations. This critical examination synthesises the perspectives and findings of various scholars on the complexities and hurdles associated with sustainability reporting and implementing the CSRD and ESRS. These are later tested with real-life examples through case studies and expert interviews.

##### **4.1. Challenges**

Baumüller and Grbenic (2021) underscore the substantial implementation hurdles posed by the CSRD, especially for entities inexperienced with sustainability disclosures. The directive's broad scope and intricate requirements potentially exacerbate administrative and financial burdens (Amel-Zadeh & Serafeim, 2018). Furthermore, the directive's incorporation of the principle of double materiality demands additional clarification and guidance to facilitate effective operationalisation by companies, a nuance that could hinder the practical application of these concepts as achieving consensus on these aspects poses a great challenge (Cort & Esty, 2020).

Despite Giner and Luque-Vilchez (2022) acknowledging the benefits of a unified reporting standard, they caution against the unintended consequences stemming from the coexistence of different global reporting frameworks. Specifically, the CSRD and ESRS are posited to be more demanding than their counterparts, potentially engendering competitive disadvantages.

Cort and Esty (2020) highlight a surge in investor interest towards corporate responsibility, which amplifies the demand for refined sustainability information articulated through ESG metrics. However, these authors also question the direct correlation between robust ESG performance and high-quality management, advocating for the establishment of well-constructed ESG data standards to bolster reliability and investor confidence. The validation and verification of ESG data emerge as critical, with government regulations, third-party auditing, and data vendors playing pivotal roles in enhancing data integrity (Bernow et al., 2019; Cort & Esty, 2020; Lai & Stacchezzini, 2021). Additionally, it is pointed out that the wide range of CSR and sustainability topics complicate the standardisation of reporting and makes comparability difficult (Amel-Zadeh & Serafeim, 2018; Christensen et al., 2021). Welch and Yates (2018) and Lai and Stacchezzini (2021) add that identifying relevant data sources and developing metrics that accurately reflect the contributions of various collectives to sustainability goals can pose major challenges to companies.

The quest for standardisation, however, encounters obstacles such as ensuring truth and accuracy in ESG reporting and addressing investors' challenges in processing vast data volumes. Cort and Esty (2020) suggest prioritising the definition of materiality, the specification of risk assessment processes, and the development of consistent ESG data standards to navigate these challenges. Despite the potential of ESG reporting guidelines to enhance disclosure credibility, Darnall et al. (2022) and Akhter et al.

(2023) acknowledge persistent difficulties in maintaining data quality and consistency across sectors, because sustainability guidelines tend to rely on voluntary reporting. Additionally, ensuring the credibility and timeliness of data remains a challenge for many firms (Cort & Esty, 2020; Darnall et al., 2022). This scenario is further complicated by the risk of greenwashing and the reluctance towards third-party verification due to cost implications (Amel-Zadeh & Serafeim, 2018; Baumüller & Grbenic, 2021; Luo & Tang, 2023).

Scholars also highlight the lack of standardisation in sustainability reporting, which skews professional investors' preferences and undermines comparability and credibility (Bernow et al., 2019; Cohen et al., 2015; Hahn & Kühnen, 2013; Tînjălă et al., 2015). Bernow et al. (2019) highlight that investors are increasingly calling for sustainability disclosures that are (1) financially material; (2) consistent; and (3) reliable. The emerging trend of "blended reporting", as noted by Goswami et al. (2023), further confounds stakeholders by integrating diverse reporting frameworks, thus complicating report comparison across companies and industries.

Other challenges that prevail with the embedding of sustainability information within corporate reporting include the definition of new spaces for such sustainability reporting, the incorporation of new actors and enterprises, the establishment of new professional jurisdictions, and generating and reproducing professional capital related to sustainability (Akhter et al., 2023; Lai & Stacchezzini, 2021).

In exploring the transition towards the CSRD, Baumüller and Sopp (2022) discuss the difficulties related to reporting scope, information overload, materiality determination, and integration with financial reporting. These challenges accentuate the need for clearer guidelines and standardisation, particularly in applying the principle of materiality to ensure sector-wide comparability and reliability. The legal and regulatory uncertainties accompanying the shift to an entity model alongside potential resistance from financial sectors accustomed to prioritising financial returns, highlight the complexities of integrating ESG factors into corporate governance and reporting standards (MacNeil & Esser, 2022).

Lastly, the phenomenon of greenwashing, exacerbated by high-profile scandals, raises concerns about the authenticity of sustainability reporting. Luo and Tang (2023) argue that voluntary and selective ESG reporting thus helps concealing poor performance, undermining the credibility of sustainability efforts (Papoutsis & Sodhi, 2020; Pichler & Lehner, 2017). Pichler and Lehner (2017) critique companies' strategies to legitimise their operations by projecting an overly positive sustainability image, thereby diluting the effectiveness of sustainability reports as genuine tools for sustainability communication.

In summary, while the shift towards comprehensive sustainability reporting presents a step forward in aligning corporate actions with broader societal and environmental goals, it also introduces a myriad of challenges. These encompass the operationalisation of complex reporting requirements, the reconciliation of diverse global standards, the assurance of data quality and integrity, and the mitigation of greenwashing risks. Addressing these challenges necessitates a collaborative effort among

corporations, regulatory bodies, and stakeholders to refine and standardise sustainability reporting practices, thereby enhancing their credibility, comparability, and utility for informed decision-making.

#### **4.2. Opportunities**

The evolving landscape of corporate sustainability reporting presents significant opportunities for both corporations and stakeholders. Luo and Tang (2023), along with Akhter et al. (2023), emphasise the critical role of standardised ESG reporting in the wake of the Paris Agreement and the COP 26 Glasgow Climate Pact. These initiatives have magnified the imperative for climate action, positioning ESG reporting as a tool for heightened stakeholder awareness, facilitating informed decision-making, and encouraging corporate engagement in carbon mitigation strategies. Adopting standards such as the GRI not only facilitates comparative analysis but also signals firms' earnest commitment to carbon reduction, thus potentially enhancing their competitive edge (Amel-Zadeh & Serafeim, 2018; Luo & Tang, 2023). Moreover, standardised ESG reporting is recognised for fostering organisational learning, accelerating the adoption of best practices, and intensifying stakeholder engagement. Such engagement is instrumental in diminishing information asymmetry and augmenting stakeholders' comprehension of companies' carbon risk profiles, thereby influencing corporate resource allocation towards improved carbon performance (Akhter et al., 2023; Luo & Tang, 2023).

Wollmert and Hobbs (2022) analyse the CSRD within the context of the European Green Deal, highlighting the alignment to achieve carbon neutrality by 2050. The CSRD aims to ensure comprehensive disclosure of sustainability risks, opportunities, and impacts, thereby promoting the principle of double materiality. This approach not only streamlines reporting processes but also enhances transparency and comparability, potentially leading to long-term cost savings and operational efficiencies despite initial increased costs due to expanded reporting requirements (Baumüller & Grbenic, 2021).

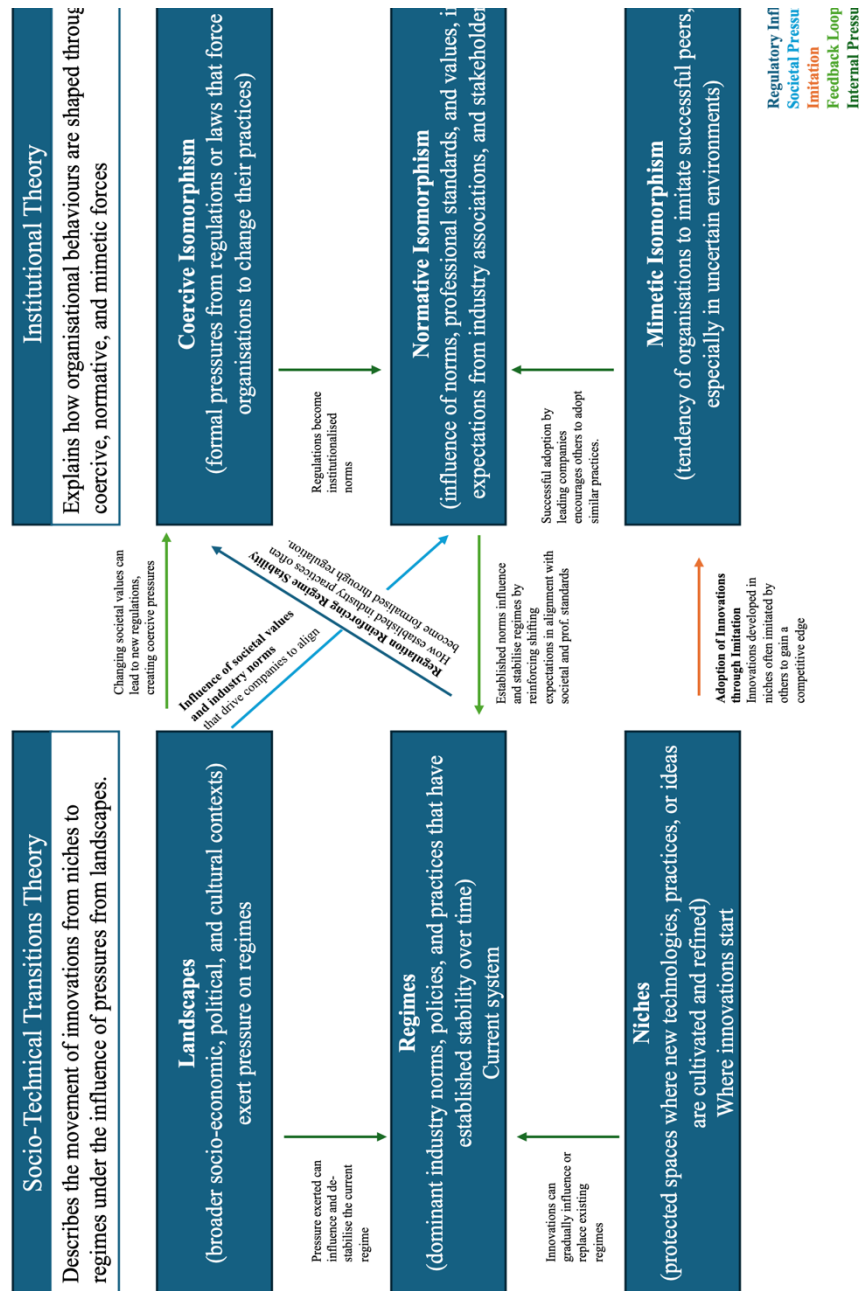
Several scholars argue that standardised reporting could homogenise the reporting landscape, easing the burden on companies by simplifying the reporting process. This, in turn, increases transparency and accountability, leading to improved decision-making by investors and other stakeholders based on comparable data (Baumüller & Sopp, 2022; Bernow et al., 2019; Christensen et al., 2021; Cohen et al., 2015; Goswami et al., 2023; Lai & Stacchezzini, 2021; Papoutsis & Sodhi, 2020). Furthermore, standardised reporting is posited to level the playing field for companies, particularly in attracting sustainability-conscious investors, by reducing information asymmetries and potentially enhancing firm value through increased visibility and comparability of CSR efforts (Baumüller & Grbenic, 2021; Christensen et al., 2021).

Finally, Bernow et al. (2019) note that corporate executives and investors recognise the benefits of improved sustainability reporting, including better capital allocation, enhanced engagement, and effective impact management, advocating for standardised reporting to enhance clarity and comparability.

## 5. Theoretical Framework

To get a comprehensive understanding of the potential implications of the ESRS on corporate sustainability practices, this thesis integrates two primary theoretical lenses: socio-technical transitions theory and institutional theory. These frameworks provide an exploration of how regulatory changes like the ESRS influence operational adjustments, stakeholder engagement, and systemic transformations in corporate sustainability.

Figure 5.1 Connections between Socio-technical transitions theory and institutional theory



### **5.1. Socio-technical transitions theory**

The socio-technical transitions theory provides a comprehensive framework for understanding the multifaceted processes through which societal systems undergo significant change towards sustainability, particularly in response to regulatory interventions, technological changes, and market dynamics (Geels, 2005). Geels (2002) argues that, in the field of socio-technical transitions, which focuses on long-term shifts that occur when innovations lead to fundamental changes in societal systems (Geels, 2005), transitions occur through interactions across three levels: niches, regimes, and landscapes, which will be discussed in more detail in [Chapter 5.2](#). This theory is particularly relevant for analysing the impact of ESRS on corporate sustainability practices, as it highlights the role of regulatory changes in driving systemic transitions towards (corporate) sustainability. The ESRS, as a new regulatory framework, aims to transform corporate sustainability practices by creating new dynamics at each of the levels. By establishing standardised reporting requirements, ESRS facilitates learning and innovation within niches, promoting the accumulation and dissemination of knowledge on sustainability (Schot & Geels, 2007).

In addressing the complexities inherent in socio-technical transitions, scholars have illuminated the intricate co-evolutionary processes that govern systemic change, emphasising the interplay between technological innovation and societal dynamics. This nuanced perspective, championed by researchers such as Schot and Geels (2007), underscores the multi-dimensional nature of transitions, involving not only technological advancements but also organisational restructuring, shifts in social practices, regulatory evolution, and economic transformations.

Central to the socio-technical transitions theory is the concept of system innovation and regime shifts, which elucidate how accumulations of incremental changes and the introduction of innovations can catalyse the displacement of established socio-technical systems with new ones (Geels, 2005, 2012, 2018).

The role of governance in steering these transitions is vital, with strategic niche management emerging as a pivotal approach for nurturing radical innovations. This approach, as articulated by Smith and Raven (2012), advocates for establishing protected spaces for innovation, fostering cross-sectoral networks, and promoting reflexive learning practices, thereby enabling nascent technologies and practices to reach maturity and viability. Gerwing et al. (2022) explore the connection between various mechanisms of sustainable corporate governance and the quality of mandatory sustainability reporting. By providing regulations, governance can provide the room for ideas to nurture in niches. They argue that implementing sustainable corporate governance mechanisms significantly enhances the quality of mandatory sustainability reporting. Moreover, they find a positive association between the quality of mandatory sustainability reporting and several sustainable corporate governance mechanisms such as sustainable remuneration for executives, gender diversity in supervisory boards, the presence of CSR committees, participation in CSR initiatives, and external assurance. Further, the study underscores the



crucial role of effective corporate governance in ensuring high-quality sustainability reports, such as aligning management actions with long-term sustainability goals and stakeholder expectations.

Despite its comprehensive framework, socio-technical transitions theory faces challenges in complexity and predictability (Markard et al., 2012). Its ability to account for unpredictable co-evolutionary processes questions its planning and governance applicability. Power dynamics and political struggles, highlighted by Sovacool and Hess (2017), necessitate deeper political engagement in transitions. Concerns about equity and justice, as noted by Sovacool (2016), call for re-evaluating transitions to ensure social equity and environmental justice.

The socio-technical regime under examination in the context of the ESRS implementation involves the established systems, structures, and practices related to corporate sustainability reporting within the EU. This regime encompasses a variety of interconnected elements, including regulatory frameworks, market norms, industry standards, organisational practices, and broader societal expectations (Geels, 2004). Moreover, social policies within the EU emphasise social inclusion, labour rights, and equal opportunities, ensuring that the socio-technical transition towards sustainability is inclusive and equitable.

The socio-technical regime is defined by established routines that provide stability but resist radical changes, creating a path dependency that hinders the adoption of new practices (Geels, 2004). Historical investments in infrastructure, regulatory frameworks, and institutional practices shape the EU's regime, facilitating incremental innovations while making large-scale changes challenging (Geels, 2002; Accountancy Europe, 2019). The ESRS aim to align with existing practices and leverage these strengths for gradual shifts toward sustainability (European Commission, 2021).

The EU regime is influenced by regulations like the CSRD and ESRS, as well as established standards, such as GRI and TCFD; which shape corporate expectations for ESG reporting (KPMG, 2023). Corporate sustainability practices, including data collection, management, and reporting, form core elements of the regime (Eccles, Ioannou & Serafeim, 2012). Institutions, industry associations, and standard-setting bodies play a critical role in supporting and enforcing these standards (Ioannou & Serafeim, 2017).

Market mechanisms, such as investor demands for ESG information and societal expectations for transparency, further drive sustainability reporting (Clar, Feiner & Viehs, 2015; Bansal & DesJardine, 2014). Innovations in technology and reporting platforms facilitate compliance with ESRS, pushing companies to meet new standards (Hahn & Kühnen, 2013).

While the socio-technical transitions theory provides a robust framework for understanding systemic changes, its application in practice is not without challenges. The unpredictability of co-evolutionary processes—where regulatory, technological, and market changes evolve in tandem—poses significant barriers to planning and governance (Markard et al., 2012). In the context of the ESRS, these challenges manifest as companies struggle with evolving compliance requirements and the associated

costs. Smaller firms, in particular, may find it difficult to absorb the additional administrative and operational costs associated with adapting to these new standards (Baumüller & Grbenic, 2021).

However, the socio-technical transitions framework also highlights opportunities for companies willing to adapt and innovate. The ESRS compels corporations to engage more deeply with sustainability issues, encouraging organisational learning and innovation. For example, one of the studied companies, Fuchs SE, has reported improvements in operational efficiency and product innovation as a direct result of efforts to meet sustainability reporting requirements. These adaptations benefit the environment and enhance the company's competitive position by improving efficiency and aligning with growing consumer preferences for sustainable products and services (Schot & Geels, 2007).

The ESRS framework aims to introduce comprehensive sustainability standards that destabilise existing reporting regimes, encouraging companies to integrate sustainability into core operations. This regulatory shift is expected to drive changes in corporate behaviour, fostering innovation while reducing uncertainties about compliance, thus transforming broader industry norms and practices (Lozano et al., 2016). If the ESRS provided clear, structured guidelines that helped companies align their sustainability efforts with regulatory expectations, they would create a form of protected space for niches. This would allow companies to innovate while reducing uncertainties about compliance, helping them navigate market pressures and focus on developing sustainable practices that would then help transform regime and landscape levels. However, the applicability of such goals remains to be tested.

## **5.2. Understanding Socio-Technical Transitions through MLP**

The Multi-Level Perspective (MLP) conceptualises socio-technical transitions as the interplay between three analytical and societal levels: niches, regimes, and landscapes. This tripartite structure offers a nuanced understanding of how innovations emerge, scale, and eventually lead to systemic change.

Frank W. Geels (2002) introduces the MLP to analyse technological transitions (TT), emphasising the interplay among the three societal levels: niches, regimes, and landscapes. Innovations originate in niches, but their success depends on alignment with broader regime practices and landscape pressures. In 2005, Geels further highlights the MLP's applicability by integrating insights from economics, sociology, and innovation studies. Niches serve as breeding grounds for innovation, regimes represent established practices, and landscapes provide the broader context that influences both. Each level plays a crucial role in fostering or hindering transitions.

### **5.2.1. Niches**

Niches are protected spaces where novel innovations can develop without immediate market pressures, crucial for sustainability transitions (Geels, 2002; El Bilali, 2019). They facilitate learning and experimentation, allowing for trial-and-error processes to refine technologies, develop user practices, and build supportive infrastructures (El Bilali, 2019). Niches also support network building among

diverse actors such as innovators, users, investors, and advocates, enabling the maturation and scaling of innovations. This aligns with the ESRS, which create a breeding ground for companies to refine sustainability practices, even if initially driven by regulatory obligations rather than voluntary efforts (Raven, 2007).

By establishing regulatory demands, the ESRS foster niche environments that allow for experimentation with new sustainability approaches, thus supporting innovation and refining standards. This niche management is essential for nurturing innovations capable of challenging and transforming existing corporate regimes, ultimately institutionalising sustainable practices across industries (Smith et al., 2005). Thus, the ESRS create a regulatory environment that encourages companies to experiment with new sustainability practices. These spaces allow for the trial and error necessary to refine reporting practices and standards. Companies might develop more innovative approaches to sustainability reporting leading to more robust and effective practices, resulting in sustainable business strategies (El Bilali, 2019).

### **5.2.2. Regimes**

Regimes represent the meso-level and dominant systems that define rules and norms for technological and societal practices, stabilising current socio-technical configurations (Geels, 2005). These regimes are characterised by stability, rooted in established infrastructures, regulatory frameworks, and cultural norms. Regimes encompass a complex web of technologies, user practices, rules, norms, and institutions that provide societal structure. This stability creates path dependency, where past decisions lock in certain technological paths, making alternatives harder to pursue (Geels, 2005). However, incremental innovations can still occur within regimes, evolving systems without fundamentally altering them. Transitions happen when regimes face pressures from internal inconsistencies or external forces, allowing new technologies to emerge (Geels, 2005, 2007).

The ESRS, by embedding sustainability considerations into corporate reporting, can exert significant pressure on existing socio-technical regimes, i.e., current sustainability reporting frameworks. This is aligned with Schot and Geels' (2007) discussion on how changes at the regime level necessitate alignment across various dimensions, including technology, industry practices, and policy frameworks. The ESRS can act as a catalyst for such alignment, pushing firms to adapt their strategies and operations in line with sustainability criteria.

As companies integrate sustainability more into their core processes, the dominant regime shifts from prioritising short-term financial performance to valuing environmental and social responsibility (Poutanen, 2021). Given the context of the ESRS and their implications for regime-level changes, the transformation pathway is most relevant. According to Geels (2024), this pathway occurs when landscape pressures cause actors to incrementally adjust regime rules, institutions, and practices, fostering changes in performance and system alignment. The ESRS, in this sense, drive companies to integrate sustainable practices as they align with the evolving regulatory landscape.

### **5.2.3. Landscapes**

Landscapes encompass the broader socio-economic, cultural, and environmental context influencing both niches and regimes. Geels (2012) emphasises the role of landscape pressures, such as macroeconomic trends, global environmental crises, and shifts in societal values, in facilitating systemic transitions. Landscapes consist of broad socio-economic, political, cultural, and environmental trends that, while beyond the direct control of niche and regime actors, significantly impact the direction and pace of transitions.

Key aspects include exogenous pressures like global environmental crises, economic shifts, and broad cultural movements, which can either constrain or enable transitions by destabilising regimes and making them more receptive to niche innovations. Landscape changes typically occur over long timeframes, but rapid shifts, such as economic recessions or geopolitical events, can catalyse transitions by altering the conditions in which regimes operate. Increasing public and policy awareness of global challenges, such as climate change, also contribute to shifts in values and policy orientations, creating opportunities for niche innovations to challenge established regimes.

The ESRS both respond to and amplify these landscape pressures for sustainability. Global environmental challenges, evolving societal expectation for corporate accountability, and investor demand for transparency are all elements of the landscape that shape the ESRS. By embedding these pressures into organisational practices, the ESRS facilitate a transition towards sustainability, encouraging firms to integrate these principles into their core business operations. This supports a broader shift towards environmental responsibility in line with international commitments like the Paris Agreement and COP26.

The interaction between these three levels helps explain how the ESRS might bring about shifts in corporate sustainability practices by reshaping existing reporting norms, fostering innovation, and enabling niche-level experiments that may ultimately lead to broader systemic transformations within the regime (Geels, 2004).

### **5.3. Implications of MLP**

Geels (2024) introduces a dynamic, phase-based framework to describe how innovations transition from niches to become regime-altering forces. The phases are the following:

1. Experimentation occurs in protected niches where radical innovations are tested and refined, shielded from mainstream market pressures,
2. Stabilisation involves the gradual improvement and standardisation of niche innovations, forming a stable design that increases its credibility within the regime.
3. Diffusion sees niche innovations spreading more widely, as they begin to compete with established systems and gain market traction.

4. Reconfiguration and regime transformation occur as niche innovations are incorporated into the regime, triggering broader system changes and shifts in socio-technical configurations (pp. 29 ff).
5. Additionally, Geels adds that destabilisation and decline can happen when established regimes face increasing pressures from external landscape developments and internal tensions. This might create opportunities for niche innovations to further penetrate the market (pp. 59 ff).

This phased approach highlights the evolutionary nature of system innovations, emphasising the importance of linkages between different technologies and the co-evolutionary dynamics at play across multiple levels. The transition process is characterised by gradual linkage and reinforcement among developments at the niche, regime, and landscape levels, underscoring the complexity and non-linearity of socio-technical transitions. For the ESRS implementation, evidence suggests that we are currently in phase two.

In the context of ESRS, it is important to recognise its ongoing development and the influence of other policies on this directive. Developments in various sustainability policies, such as the EU Taxonomy or the LkSG (Lieferkettensorgfaltspflichtgesetz / Supply Chain Due Diligence Act) in Germany, also impact the evolution of ESRS and CSRD. And as Geels (2018) explains, the interaction of multiple innovations can drive system change.

As highlighted by Johnstone and Newell (2018), the state also plays a significant role in facilitating or hindering transitions, underscoring the importance of policy interventions and regulatory frameworks in shaping the trajectory of socio-technical systems. Geels (2018) and Edmondson et al. (2019) discuss the role of policy and political negotiations in shaping socio-technical systems and transitions. Edmondson et al. (2019) emphasise the co-evolutionary relationship between policy instruments and the development of socio-technical systems, highlighting the pivotal role of political negotiations, policy stability, and the adaptability of policy instruments over time to foster transitions towards more sustainable systems. While ESRS is a political regulation, the companies and markets implementing them need to have a say in the further development of the standards as well for them to be a success. In the process of developing the standards, feedback could be given to the drafts to be considered for the final version. This is, for example, how the number of mandatory standards reduced in the development of the drafts (European Commission, 2023).

Accordingly, the implementation of the ESRS requires a holistic policy approach that aligns with multi-level dynamics and supports the scaling of sustainable innovations while facilitating regime and landscape shifts towards sustainability. A holistic policy approach to implementing ESRS involves clear regulations, financial incentives, and technological support, along with capacity building, robust governance, stakeholder collaboration, and considerations for social equity (Lozano et al., 2016). This comprehensive strategy would ensure effective adoption, driving meaningful improvements in corporate sustainability practices, and aligning with broader environmental and social goals.

The implementation of the ESRS also touches upon the critical aspects of power dynamics and equity in transitions, as highlighted by Sovacool (2016). By mandating standardised sustainability reporting, the ESRS has the potential to democratise information on corporate sustainability performance, enabling stakeholders to make informed decisions and exert influence over corporate practices. This could shift power dynamics in favour of stakeholders demanding greater sustainability, thereby contributing to a more equitable transition process.

Thus, the MLP serves as a methodological framework that facilitates a comprehensive analysis of transitions. It allows researchers and practitioners to identify the multi-dimensional interactions between different levels of analysis and the various actors involved. This framework emphasises the non-linear nature of transitions, recognising the importance of feedback loops, co-evolutionary processes, and the alignment of changes across levels. It further provides useful analytical tools to identify the drivers and obstacles to the institutionalisation of sustainability reporting through ESRS (Geels, 2002).

#### **5.4. Institutional Theory**

Institutional theory, as articulated by Scott (2014), examines how organisations are influenced by their environments, particularly through norms, rules, and cultural beliefs. This perspective is instrumental in analysing the adoption and institutionalisation of the ESRS within corporate practices (Fuenfschilling & Truffer, 2019). It highlights the processes of *coercive*, *mimetic*, and *normative isomorphism*, which collectively drive organisations to align with emerging norms and practices (DiMaggio & Powell, 1983). ESRS can thus be viewed as a catalyst for institutional change, promoting the adoption of standardised sustainability reporting across the EU.

Institutional theory provides insights into how external pressures, both formal and informal, shape organisational behaviour and contribute to the institutionalisation of new norms. It helps explain how regulations such as ESRS influence corporations to adopt standardised sustainability practices, thereby driving changes in corporate conduct and governance (DiMaggio & Powell, 1983). This theory is particularly useful in understanding the process by which sustainability reporting, initially voluntary and diverse, becomes a standardised and ingrained component of corporate governance (Scott, 2014). This complements socio-technical transition theory by providing a more micro-level perspective.

Institutional pressures shaping corporate behaviour are multifaceted. Coercive isomorphism, stemming from formal regulations, is exemplified by the ESRS, which legally obliges companies to disclose specific ESG data in a standardised format. This includes requirements for integrating double materiality into reporting, involving assessing both how sustainability issues impact the company and how the company impacts society and the environment (Giner & Luque-Vílchez, 2022). Such coercive pressures drive operational changes, necessitating enhanced data collection, monitoring systems, and reporting structures.

In addition to coercive pressures, normative isomorphism arises from industry norms and stakeholder expectations. The growing emphasis on ESG factors among investors, consumers, and

business partners intensifies these pressures, compelling companies to adopt transparent reporting practices. ESRS strengthens normative isomorphism by setting a consistent standard for ESG disclosures, raising expectations regarding corporate responsibility and accountability across industries (MacNeil & Esser, 2022).

Mimetic isomorphism, another driver of change under institutional theory, occurs when companies imitate successful peers to remain competitive. In the German automotive and chemical sectors, firms face significant mimetic pressure to align their sustainability practices with those of adopters of ESRS compliance, with industry leaders setting benchmarks for others to follow (Baumüller & Sopp, 2022).

ESRS can also be understood through the concept of institutional isomorphism, a process by which organisations within the same field become increasingly similar due to shared pressures (DiMaggio & Powell, 1983). ESRS facilitates coercive isomorphism through regulatory mandates, leading organisations to adopt similar reporting structures and thereby fostering comparability across sectors. Normative isomorphism arises as ESRS aligns with established professional standards in ESG reporting, reinforcing expectations for transparency in corporate sustainability impacts. Mimetic isomorphism contributes to the diffusion of best practices as firms emulate industry leaders, furthering sustainability innovations across the corporate landscape.

The ESRS plays a crucial role in institutionalising sustainability within corporate governance frameworks. The move toward standardised ESG reporting encourages the adoption of new practices and fosters a culture where sustainability becomes integral to corporate operations (Scott, 2014; Giner & Luque-Vílchez, 2022).

However, achieving genuine institutional change through ESRS poses challenges. The complexity of aligning diverse internal processes with ESRS requirements, coupled with the administrative burden of compliance, often hinders smooth adoption. Smaller firms or those with limited resources may struggle more than larger, well-established organisations. Nevertheless, ESRS presents an opportunity for companies to engage in proactive change, build internal capacity, and enhance sustainability performance (Baumüller & Grbenic, 2021). Firms that successfully adapt to ESRS are likely to benefit from improved stakeholder trust, enhanced market reputation, and greater alignment with long-term sustainability goals, contributing to more resilient and forward-looking corporate strategies.

In conclusion, both socio-technical transition theory and institutional theory provide valuable lenses to understand the impact of ESRS. While the former emphasises the dynamics of systemic change and innovation, the latter focuses on the pressures that drive organisational behaviour towards standardised practices. Together, these theories offer a comprehensive view of how ESRS not only influences operational changes within corporations but also reshapes the broader institutional landscape of corporate sustainability.

## **6. Methods**

Given the rich and diverse nature of available information on reporting standards in general, this thesis uses a qualitative research methodology. As proposed by Gerring (2017), qualitative methodology is an approach to research involving the collection and analysis of non-numerical data, often expressed in natural language, and based on small, purposively selected samples. This thesis investigates a specific phenomenon to uncover underlying mechanisms and relationships, using interviews, content analysis, and observations from case studies, exploring sustainability and its implications for corporate behaviour and stakeholder interests (Farooq & De Villiers, 2019).

### **6.1. Research Design**

The research design used in this thesis is centred on understanding how the ESRS influence corporate sustainability practices and stakeholder decision-making. To achieve this, the research operationalises the following questions by examining specific indicators of sustainability reporting quality and stakeholder engagement as outlined by the ESRS. The primary research questions are:

1. How do the ESRS influence the sustainability practices of corporations in Germany, specifically regarding operational changes, corporate behaviour, quality of reporting data and stakeholder engagement?
2. What are the key challenges faced by German companies in implementing ESRS, and how do these challenges shape their approach to sustainability?

The research employs a qualitative methodology, integrating case studies and semi-structured interviews to gather comprehensive data. This approach allows for a detailed examination of real-world applications of the ESRS, capturing the nuanced experiences of companies navigating these new standards.

### **6.2. Methodologies**

The primary methodology employed is the Gioia method, which involves systematic data collection and analysis to develop concepts and theories grounded in empirical data (Gioia, Corley & Hamilton, 2013). This method is particularly suitable for exploring complex phenomena like sustainability reporting as it allows for the emergence of new insights and theories from the data itself. The Gioia method was used for analysing the interview data. It is a qualitative method that involves a systematic approach, including open coding and the construction of structures of the acquired data (Gioia et al., 2013). This highlights the importance of qualitative attention, a crucial element for ensuring credibility and trustworthiness of results. This method was selected due to its usefulness when a study involves the exploration and development of new concepts within a research domain (Gioia, et al., 2013). The approach offers distinct advantages through its disciplined methodology for gathering and coding data, which aligns with established quantitative research standards (Magnani & Gioia, 2023). It offers rich insights into ESRS implementation and its impact on corporate sustainability.



### 6.3. Research Steps

The [literature review](#) aimed to provide a foundational understanding of the current state of sustainability reporting, the theoretical frameworks relevant to the ESRS, and the existing challenges and opportunities in the field. This involved a comprehensive search of academic journals, industry, reports, regulatory documents, and other relevant sources. Key themes and trends were identified and synthesised to provide context for the empirical analysis (Hahn & Kühnen, 2013; Lozano et al., 2016).

The selection of case studies is crucial to provide a comprehensive understanding of the ESRS implementation across sectors and fields. To explore the influence of ESRS across various sectors, the research focuses on the chemicals/lubricant and the automotive supplier industry. These sectors were selected due to their significant environmental impacts and varying sustainability challenges. The selected companies, Fuchs SE and ElringKlinger AG vary in size and operational scope, but are both influential within their respective industries. Moreover, both companies are based in Germany. Focusing on German companies provides insights into how companies in a leading EU member state respond to the ESRS, benefitting from a context where regulatory compliance and sustainability practices are more highly prioritised than in some other European countries. Additionally, their publicly available sustainability reports provide a solid foundation for analysing how the companies have previously conducted their sustainability reporting.

Data collection involves content analysis as well as semi-structured expert interviews. The content analysis includes a thorough analysis of the companies' sustainability reports, public disclosures, and relevant documents to understand their current reporting practices and alignment with ESRS requirements. The analysis focuses on identifying how each company's reporting practices align with the ESRS and the challenges they identified during the process.

This content analysis, an empirically grounded method defined by Krippendorff (2018), systematically examines communications to identify meaningful patterns and themes. By analysing recent sustainability reports, this method provides insights into what the companies consider important and how their reporting practices evolve, aiding in understanding the challenges and opportunities the implementation of ESRS might bring.

Semi-structured interviews are conducted with key personnel responsible for sustainability reporting in the selected companies as well as sustainability consultants who work with a variety of companies implementing the ESRS, and a sustainability auditor (find details in [Annex B](#)). The interviews are designed to gather detailed insights into the implementation process, challenges, opportunities, and perceived impacts of the ESRS.

The data analysis involves coding and categorisation of the interview data, thematic analysis, and a comparative analysis. Using the Gioia method, the interview transcripts were systematically coded and categorised. The coding process involved multiple rounds to refine categories and ensure reliability. Initial open coding identified broad themes, which were then narrowed down to establish relationships between concepts (Gioia, et al., 2013). Themes and patterns were identified and analysed to draw

meaningful insights. The thematic analysis was used to explore how the ESRS influence corporate sustainability practices, the challenges and opportunities encountered, and the overall impact on stakeholder engagement and decision-making (Braun & Clarke, 2006). The findings from the case studies were compared to identify convergences and divergences. This provides insights into sector-specific issues and the broader applicability of the ESRS across different industries.

## 6.4. Data Acquisition

Figure 6.1. - Gioia overarching topics

First Order Concepts - Challenges				
Resource Allocation	Legal Framework & Guidance	Management & Training	Tools	Competitive Advantage / Level the playing field
System Setup	(Initial) Burdens	International	Data Quality, Transparency & Comparability	Compliance
Operational Efficiency	Strategic Benefits	Competitive Advantage	Materiality	Advantages from prev. frameworks & reports
Data Quality, Transparency & Comparability	Mandatory Reporting	International	Positive Effects	
Second Order Themes				
Resource Allocation & Management	Data Quality, Transparency & Comparability	Compliance and Competitive Landscape	Enhanced Data Quality, Transparency & Comparability	Mandatory Reporting & Standardisation
System & Process Setup	Management Involvement & Training	International Challenges	Operational Efficiency	Materiality & Risk Identification
Regulatory Frameworks & Guidance	Financial & Administrative Burdens	Strategic and Competitive Advantages	Global Influence & Standardisation	Leveraging Existing Frameworks
Technological Tools and Data Collection	Positive Externalities			
Aggregate Dimensions				
Resource & Structural Challenges	Enhanced Transparency & Reporting Standards	Management & Training Needs	Promotion of Sustainability & Innovation	Framework Integration & Risk Management
Regulatory & Compliance Complexities	Technological and Data Management Issues	Operational & Strategic Benefits	Global Influence & Standardisation	Competitive & international pressures

Data were acquired from multiple sources to ensure everything was included and to enhance the validity and reliability of the findings. Firstly, the latest sustainability reports from Fuchs SE and ElringKlinger AG were analysed to understand their previous sustainability reporting efforts and how an alignment with ESRS would look (Fuchs SE, 2022; ElringKlinger AG, 2022). Additional data were gathered from public disclosures, including financial statements, corporate websites, and press releases. Semi-structured interviews with stakeholders, auditors and experts offer valuable perspectives on the new reporting standards. Such interviews allow for a flexible, yet guided approach to participants' perspectives, experiences, and insights (Ahlin, 2019). By asking open questions, the interviews provide

insights into how and why organisations respond to the implementation of ESRS, the challenges they face, and the opportunities they identify. Hence, it can provide in-depth data that supports a greater understanding of the impact of ESRS and the factors that influence its implementation and effectiveness and, at the same time, contribute to the robustness of the research findings.

The selection of Germany as a case study is due to its status as Europe's largest economy, its diverse industrial sectors, and its pivotal role in implementing sustainability reporting standards. The focus is on the chemicals (lubricants) and automotive supplier sectors, as they are integral to Germany's industrial landscape, with the chemicals sector being moderately consolidated and heavily influenced by ESG laws, and the automotive sector undergoing significant transformation due to the shift toward electric vehicles. Fuchs SE and ElringKlinger AG were chosen as representative leaders in these sectors, providing valuable insights into how these industries navigate sustainability challenges and regulatory pressures.

### **6.5. Limitations**

While this qualitative approach offers valuable in-depth insights, it has some limitations, such as the potential lack of generalisability to all companies or industries and the reliance on self-reported data, which may introduce bias. To counter these limitations, strategies were developed, including interviewing people in similar positions in different sectors as well as external consultants and auditors that have a broader view on the issue.

## **7. Case Studies**

This academic work aims to answer the research puzzle by conducting a double case study and analysing two companies of two distinct sectors in Germany to assess the challenges and opportunities of the new ESRS standards. A case study is an attempt to systematically investigate an event with the specific aim of describing and explaining the phenomenon (Zainal, 2007). This project is, as Lune (2017) argues, an intrinsic case study. Such a case study is conducted when a researcher wants to understand a particular case and to recognise its individuality or ordinariness that a case becomes interesting.

By analysing the case of an organisation's experience with sustainability reporting, and the ESRS in particular, this project aims to identify the challenges organisations, and industries, face, the strategies they employ, as well as the opportunities they pursue concerning ESRS and CSR. The evidence gathered from the case studies will complement the findings obtained through the other research methods by providing contextualised information.

For this thesis, I look at two companies in Germany that are currently subject to the first round of ESRS implementation. The following chapter is structured as follows: first, the relevance of Germany is presented, then the lubricant and automotive industries and finally the companies of analysis – Fuchs SE and ElringKlinger AG. Their relevance as well as their aspects are explored in this chapter.

The selection of cases was based on their industry relevance and the representativeness of their sustainability practices. As a leading company in the chemical/lubricant industry, Fuchs SE faces unique sustainability challenges related to chemical safety, environmental impact, and regulatory compliance. This makes it a suitable case for examining the ESRS's impact on sustainability reporting in a highly regulated sector (Fuchs SE, 2022). Additionally, ElringKlinger AG, as a major player in the automotive supplier industry, has experience in sustainability reporting. This diversity allows for a comparative analysis that can highlight sector-specific issues and broader trends (ElringKlinger AG, 2022).

### **7.1. Germany**

Germany, recognised as one of Europe's largest and most influential economies and fourth largest globally, offers a diverse industrial landscape and thus becomes an exemplary case study for evaluating the challenges and applicability of implementing sustainability reporting standards (Glunz & von Prittwitz, 2024). In 2022, the German economy accounted for about 24.9% of the EU's Gross Domestic Product (GDP) and offers the largest consumer market in the EU with a population of 84.3 million; thus, Germany plays a crucial role in the region's economic dynamics (International Trade Administration, 2023).

Germany's commitment to transitioning to a social-ecological market economy reflects its dedication to sustainability goals (Orth, 2023). The coalition government, including the Green party, aims to generate 80% of power from renewables by 2030, requiring infrastructural improvements and streamlined processes where ESRS could play a role. This approach combines economic governance

with climate neutrality and biodiversity preservation, aiming to maintain competitiveness through ecological and social innovation (Giegold, 2021).

Germany's efforts towards sustainability and ESG standards are substantial and evolving. In 2023, Germany ranked fourth out of 166 countries with an SDG score of 83,36/100, reflecting steady progress (SDG Transformation Center, n.d.). The updated 2021 Sustainable Development Strategy aligns with the United Nations (UN) SDGs and the Paris Agreement, focusing on renewable energy, gender quality, and ecological sustainability, requiring transformations across key sectors (European Environment Agency, 2020; The Federal Government of Germany, 2022). Germany's leadership within the EU and international groups like the G7 and G20 further highlight its global influence on sustainability policies (OECD, n.d.).

Furthermore, Germany leverages its economic and political influence to promote sustainable practices globally, showcasing a strong commitment to multilateralism and global partnerships. In terms of ESG laws, Germany is enhancing its framework in anticipation of the EU's CSRD implementation, which will require more comprehensive sustainability reporting and due diligence from companies (Ipsen et al., 2024).

BaFin, the German Federal Financial Supervisory Authority, plays an essential role in enforcing ESG regulations in Germany by supervising the implementation of ESG transparency requirements for companies and financial products, acting as an additional third-party check for sustainability compliance (Branson, 2023; Ipsen et al., 2024). Many German companies are proactively adopting sustainable practices, such as investing in renewable energy and committing to carbon neutrality, even without legal obligations, aligning with the country's strong regulatory framework and societal values that prioritise environmental stewardship and social responsibility. This is further supported by Germany's leadership in developing green technologies and ambitious national and EU-level sustainability goals. Additionally, German companies' mature approach to CSR, emphasising environmental responsibility, social equity, and economic sustainability, provides a solid foundation for adapting to new sustainability reporting standards (Wojtaszek et al., 2023)

Interestingly, the Deloitte 2023 CxO (Chief Executive Officers or other C-suite executives) Sustainability Report, highlights that while German executives believe economic growth can align with climate goals, there is still a gap between actions and impact. In 2022, 76% of German organisations increased sustainability investments, with 20% reporting significant rises. Climate change is expected to heavily impact strategies, with 60% of executives anticipating high effects in the coming years. Challenges include resource scarcity, regulatory pressures, and difficulties in measuring environmental impact. Despite these, so the report, companies are making strides, although transformative actions like linking executive compensation to sustainability are less common. The reports concludes that German CxOs remain cautiously optimistic about global climate efforts (Deloitte, 2023).

## **7.2. Sector Analysis**

Four key sectors dominate the German industry: automotive, mechanical engineering, chemical, and electrical. For this thesis, two of them, the chemicals (lubricants) sector as well as the automotive industry will be examined in more detail by examining one company each. This analysis aims to show how companies cope with sustainability reporting requirements. Respective interviewees were then chosen to gain deeper insights into the current ESRS implementation and its challenges and opportunities.

## **7.3. Chemicals/Lubricant Industry**

Germany's chemical sector, including pharmaceuticals, ranks as the third-largest industry, with a turnover of €227.1 billion in 2021. It is diverse, covering segments such as petrochemicals and agrochemicals, and employs around 473,000 across 2,230 companies, demonstrating its economic significance (Große Entrup, 2023). In 2022, geopolitical instability and the energy crisis led to a 6% production decline, reminiscent of the 2009 global economic crisis. Nevertheless, the sector remains committed to sustainability, investing €13.2 billion in research and development (R&D), focusing on areas like biotechnology, hydrogen economy, and digitisation, with the goal of achieving greenhouse gas neutrality by 2050 (Große Entrup, 2023).

More specifically, the German Lubricants Market size is estimated at 928.87 million litres in 2024, growing at a Compound Annual Growth Rate (CAGR) of 1.66% during the forecast period 2024-2026 (Mordor Intelligence, n.d.). The German Lubricants Market exhibits a moderate level of consolidation, with the foremost five enterprises holding a 56.10% market share. Leading the sector are prominent entities such as BP Plc (Castrol), ExxonMobil Corporation, Fuchs SE, Royal Dutch Shell Plc, and Total Energies, listed in no specific order, but Fuchs SE being the only one headquartered in Germany (Mordor Intelligence, n.d.). The market is shifting towards bio-based and synthetic lubricants, driven by sustainability and innovation, though it faces challenges from environmental regulations and fluctuating costs (Mordor Intelligence, n.d.; Expert Market Research, n.d.).

### **7.3.1. Fuchs SE**

Fuchs SE, headquartered in Mannheim, Germany, is a leading independent lubricant manufacturer, established in 1931. It specialises in a wide range of lubricants, including automotive and industrial products, and has expanded into sustainable solutions with its *Planto* line of biodegradable products and electrolyte offerings for lithium-ion batteries (Fuchs SE, n.d.). In 2022, Fuchs generated €3.41 billion in revenue, with a global workforce of over 6,100 employees, operating 34 production sites and 56 subsidiaries in more than 50 countries. Financially, Fuchs SE has shown robust performance, with earnings forecasted to growth by 8.74% per year and recent earnings growth of 8.9% over the year 2022 (Fuchs SE, n.d.).

Fuchs SE's growth has been shaped by key milestones, including its international expansion in 1968 and significant investment programmes between 2016 and 2018 for new global production facilities. Its global presence, spanning Europe, the Americas, Asia-Pacific, and the Middle East, allows Fuchs SE to capitalise on diverse market opportunities while staying attuned to regional market dynamics (Fuchs SE, n.d.). Its FUCHS2025 vision outlines plans for growth, focusing on customer proximity, R&D innovation, and enhancing its manufacturing and distribution network, aiming to become a technology leader in targeted segments (Fuchs SE, n.d.).

The company has made notable strides in sustainability, reflected in its “Medium Risk” ESG rating of 27.3 from Sustainalytics Rating, ranking 118<sup>th</sup> out of 577 in the chemicals sector, thus being in the upper third compared to its peers. However, DZ Bank AG, Germany's second-largest bank by asset size, did not grant Fuchs SE its Seal of Approval for Sustainability, citing that it violated ESG score sustainability limits (DZ Bank AG, 2024). As one of the largest players in the environmentally sensitive lubricant sector, and as a listed company subject to ESRS compliance, Fuchs SE is an important case for understanding the challenges, opportunities and processes that are involved in implementing new sustainability reporting standards like ESRS.

#### **7.3.1.1. Fuchs SE Sustainability Reports 2021 and 2022**

To analyse how the company has previously dealt with sustainability reporting, this part of the case study examines the sustainability reports of the company of 2021 and 2022 and assesses the factors it has particularly paid attention to. Thus, all the information for the following section was taken from the 2021 and 2022 Sustainability Reports published online by Fuchs SE.

The *2021 Sustainability Report*<sup>1</sup> from Fuchs SE highlights the company's commitment to sustainability, focusing on developing lubricants and solutions that drive customer efficiency and sustainability. It emphasises conserving resources like earth, water, and air, while promoting socially responsible practices to maintain humane living standards. The report also addresses challenges such as the COVID-19 pandemic and supply chain disruptions, highlighting the need for resilient, sustainable practices in a fragile global system. The report introduces Fuchs SE's integration of sustainability into its business model and management practices, anchored in the ambition to achieve CO<sub>2</sub> neutrality in operations (“gate-to-gate”) since 2020 and extending to upstream processes (“cradle-to-gate”) by 2025. It highlights the company's commitment to circular economy principles and a holistic view of sustainability, addressing environmental, social, and economic dimensions.

The report also discusses the role of leadership, corporate culture, innovation, and digitisation in driving sustainability at Fuchs SE. It highlights the company's commitment to customer orientation, working closely with clients to provide solutions that help conserve resources and reduce environmental

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<sup>1</sup> Fuchs SE Sustainability Report 2021, retrieved from [https://fuchs.azureedge.net/fileadmin/Home/Nachhaltigkeit/Nachhaltigkeitsbericht/FPL\\_CSRBericht21\\_englischv2.pdf](https://fuchs.azureedge.net/fileadmin/Home/Nachhaltigkeit/Nachhaltigkeitsbericht/FPL_CSRBericht21_englischv2.pdf)

impact. Key sustainability dimensions addressed include strategy, emissions, energy, waste, water management, anti-corruption, human rights, and equal opportunities, all measured by specific key performance indicators (KPIs) to ensure transparency and continuous improvement. Fuchs SE integrates risk management to mitigate potential risks and maintains open communication with authorities, reflecting its commitment to transparency and legal certainty in tax matters.

The *2022 Sustainability Report*<sup>2</sup> advances Fuchs SE's sustainability goals, aiming for net-zero emissions by 2040, making it the first lubricant company to set this target. The report emphasises the company's strategic actions to navigate 2022's global disruptions while reinforcing its commitment to sustainability. Fuchs SE's comprehensive strategy focuses on economic, ecological, and social pillars, with key initiatives in energy, waste, water management, and the circular economy. Concretely, Fuchs SE communicated specific targets for sustainability aspects, including an EBIT of €500 million in 2025 and announcing the Net Zero ambition for 2040. Moreover, the company is working intensively with interdisciplinary teams to define initial measures to achieve ambitious targets, such as reducing CO<sub>2</sub> emissions by at least 42% (Scope 1 and 2) and 25% (Scope 3) by 2030, and by at least 90% by 2040 compared to the base year 2021. Additionally, Fuchs SE focuses on increasing its data quality and leveraging emissions-related KPIs in operational units to optimise and reduce emissions further, while at the same time developing a longer-term sustainability strategy with science-based targets to guide its actions and initiatives.

Within the realm of the report, Fuchs SE outlines its strategic response to the challenges encountered in 2022, such as supply chain disruptions and the prevailing energy crisis, emphasising its resilience and commitment to sustainability. The company's framework focuses on creating enduring value, reducing its ecological footprint, and fostering corporate responsibility. A key innovation is the development of the Product Carbon Footprint (PCF) methodologies, enhancing transparency in environmental impact assessment. Fuchs SE's leadership in promoting industry-wide sustainability standards is also highlighted. Compared to 2021, the 2022 report shows deeper sustainability commitments, clearer strategies, and ambitious carbon reduction targets. Both reports follow globally recognised frameworks like the GRI and UNGC, ensuring comprehensive and transparent reporting.

#### **7.4. Automotive Supplier Industry**

The global automotive supplier industry is undergoing significant transformation due to regulatory, consumer, and technological shifts. Accenture (2022) identifies regulatory pressures, particularly CO<sub>2</sub> standards, pushing suppliers towards sustainable practices. Evolving consumer preferences for software-defined vehicles and sustainable mobility are prompting a shift from traditional parts to

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<sup>2</sup> Fuchs SE Sustainability Report 2022, retrieved from [https://fuchs.azureedge.net/fileadmin/Home/Nachhaltigkeit/Nachhaltigkeitsbericht/FPL\\_CSRBericht22\\_EN.pdf](https://fuchs.azureedge.net/fileadmin/Home/Nachhaltigkeit/Nachhaltigkeitsbericht/FPL_CSRBericht22_EN.pdf)



advanced systems aligned with trends like electrification and autonomous driving (Heineke, Kampshoff & Möller, 2024).

The pandemic has further influenced market dynamics, leading to a downturn in light-vehicle sales and pushing suppliers to diversify revenue streams. Digital transformation and consolidation, particularly in electrification and software, are reshaping the industry. The automotive supplier industry in Germany and the EU is a significant contributor to the region's economy and industrial landscape. As Europe's leading automotive market, Germany accounted for approximately 25% of all passenger cars manufactured in Europe. In Germany, the sector generated €410.9 billion in 2021, with a projected €280 billion investment in R&D from 2024 to 2028, affirming its commitment to climate-neutral mobility (GTAI, n.d.; Deloitte, 2023).

However, suppliers face challenges like supply chain disruptions, rising energy costs, and shifts in government policies, including reduced electric vehicle (EV) subsidies. Additionally, meeting climate targets remains a concern (Kaufmann, 2023; VDA, 2023). The European automotive supplier industry, heavily invested in R&D, contributes significantly to the region's innovation but grapples with high energy costs and competition from China and Korea (CLEPA, n.d.; Ulrich, 2023).

#### **7.4.1. ElringKlinger AG**

ElringKlinger AG, based in Dettingen an der Ems, Germany, is an important player in the automotive industry, specialising in lightweight solutions, e-mobility components, and sealing and shielding technology. Established in 1879, the company has become a major supplier for global automobile manufacturers, indicating its market presence and commitment to innovation and sustainability (Businesswire, 2020). ElringKlinger AG's product portfolio includes gaskets, plastic housing modules, and advanced battery and fuel cell systems, all designed to reduce emissions and enhance vehicle performance (ElringKlinger AG, n.d.).

In 2022, the company generated €1.68 billion in revenue, with a workforce of around 9,600 employees. By 2023, revenue increased to €1.85 billion, with 62.4% growth in the e-mobility segment (ElringKlinger AG, 2024). Strategic investments, including €96 million in R&D, have driven the company's transformation, particularly in e-mobility and non-asbestos gasket materials. ElringKlinger AG's global presence, with over 45 production sites, allows it to tap into diverse markets and respond to regional trends (ElringKlinger AG, n.d.).

According to the Systainalytics Ratings, ElringKlinger AG has an ESG Risk Rating of 8.6, which puts it in the negligible risk group. Within its industry group, which encompasses auto components, ElringKlinger ranks 5<sup>th</sup> out of 252, demonstrating its positive standing in managing ESG risks compared to its peers. This ranking reflects ElringKlinger's great efforts in addressing sustainability and governance challenges within its operational scope. Additionally, other than Fuchs SE, did ElringKlinger AG receive the DZ Bank Seal of Approval for Sustainability, and it shows that ElringKlinger did not violate the ESG score sustainability limits (DZ Bank AG, 2024).

ElringKlinger has reduced both direct and indirect emissions, aligning with its broader environmental goals, and continues to innovate in sustainable mobility solutions (ElringKlinger AG, n.d.).

#### **7.4.1.1. ElringKlinger AG's Sustainability Reports 2021 and 2022**

To analyse how the company has previously dealt with sustainability reporting, this chapter examines two recently published sustainability reports of ElringKlinger AG and assesses the factors it has particularly paid attention to.

The *2021 Sustainability Report*<sup>3</sup> of ElringKlinger AG highlights key aspects of the company's sustainability performance and commitment to responsible business practices. The report emphasises the company's achievement of CO<sub>2</sub> neutrality for all products manufactured in Germany in 2021, showcasing ElringKlinger AG's dedication to reducing its carbon footprint and mitigating climate change. Key initiatives include transitioning to green electricity at all German production sites and compensating for 22,000 tons of CO<sub>2</sub> emissions. Additionally, CO<sub>2</sub> emissions per €1 million in sales decreased by 13.2% (measured before compensation), reflecting significant environmental progress. ElringKlinger AG implements a certified environmental and energy management system across its operations, focussing on reducing resource consumption and developing innovative, sustainable mobility solutions.

The report also highlights initiatives to enhance occupational safety with ISO 45001 certification and efforts to promote diversity and flexible work models. The company focuses on stakeholder engagement, transparency, and addressing key sustainability issues through materiality analysis. Continuous improvements in ESG practices aim to create long-term value.

Progressing to the *2022 Sustainability Report*<sup>4</sup>, it furnishes insights into the furtherance of its environmental objectives, integrating sustainability into ElringKlinger AG's core operations. A materiality analysis is outlined that help to focus efforts on ecological, social, and economic sustainability, emphasising resilience amid global disruptions. Key initiatives include strengthening the supply chain by integrating sustainable practices and setting a target to reduce energy consumption per unit of revenue by 9% in 2023. The company advanced its efforts in waste and water management, promoting a circular economy by increasing recyclability of materials and reducing lifecycle impacts.

ElringKlinger AG has implemented a certified environmental and energy management system across its operations, investing in emission reduction and energy efficiency measures. This includes building energy-efficient facilities, using renewable energy, and switching to green electricity for all

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<sup>3</sup> ElringKlinger AG 2021 Sustainability Report, retrieved from [https://elringklinger.de/fileadmin/data/pdf/04-nachhaltigkeit/publikationen/Nachhaltigkeitsberichte/en/elk\\_csr2021\\_en.pdf](https://elringklinger.de/fileadmin/data/pdf/04-nachhaltigkeit/publikationen/Nachhaltigkeitsberichte/en/elk_csr2021_en.pdf)

<sup>4</sup> ElringKlinger AG 2022 Sustainability Report, retrieved from [https://elringklinger.de/fileadmin/data/pdf/04-nachhaltigkeit/publikationen/Nachhaltigkeitsberichte/en/elk\\_csr2021\\_en.pdf](https://elringklinger.de/fileadmin/data/pdf/04-nachhaltigkeit/publikationen/Nachhaltigkeitsberichte/en/elk_csr2021_en.pdf)

sites in Germany. The company's focus on sustainability mobility goes beyond the legal requirements, with innovations in zero-emission technologies like batteries and fuel cells.

Across the years, ElringKlinger AG has shown a strategic progression towards deeper and more comprehensive sustainability commitments. From achieving significant milestones like CO2 neutrality in its German manufacturing operations to enhancing global energy efficiency, the company's sustainability goals demonstrate an awareness of its role in the larger environmental context and willingness to adopt and implement sustainable solutions. The distinct goals of each year, while specific in their focus, contribute cumulatively to ElringKlinger AG's overarching ambition of sustainable development, reflecting a corporate philosophy that is adaptive, responsible, and future-oriented.

ElringKlinger AG's commitment to the GRI standards shows how the company prioritises sustainability issues most significant to its business and stakeholders to ensure focused and effective sustainability efforts. The company thus shows a consistent emphasis on sustainability.

### **7.5. Expectations from ESRS Implementation**

The implementation of the ESRS is expected to bring both challenges and opportunities for Fuchs SE. The extensive and detailed reporting requirements of ESRS will increase complexity and compliance costs, necessitating significant changes in existing processes and systems (Deloitte, 2023). Integrating data from various sources and ensuring its quality will also be challenging, particularly when aligning the new requirements with existing frameworks such as the GRI and UNGC (KPMG, 2023).

Despite these challenges, the ESRS also presents substantial opportunities for Fuchs SE. The standardised reporting can improve transparency, boost stakeholder trust, and facilitate benchmarking against peers. This transparency can lead to deeper strategic insights, ultimately aiding in more effective decision-making and risk management (European Commission, 2023). Early adoption of ESRS can position Fuchs SE as a leader in sustainability, potentially attracting environmentally conscious investors and customers while driving innovation and operational efficiency by focusing on sustainability metrics (Pizzi, Venturelli & Caputo, 2024).

Similarly, for ElringKlinger AG, the implementation of ESRS is accompanied by both significant challenges and opportunities. The detailed reporting requirements will necessitate substantial changes in the company's existing processes and systems. However, this increased transparency can also foster trust among stakeholders, strengthen its corporate image, and facilitate the communication of the company's sustainability commitment. ESRS provide insights that can aid in strategic decision-making, risk management, and alignment with evolving regulatory requirements and market demands. These aspects are crucial for ElringKlinger's ongoing efforts towards climate change mitigation, contributing to a more sustainable and resilient business model.

## 7.6. Theoretical Aspects

Fuchs SE's approach to ESRS implementation can be understood through institutional theory, particularly within an organisational field that comprises regulators, industry associates, standard-setting bodies, and market participants. The shared belief system within this field, often referred to as institutional logics, influences Fuchs SE's strategies towards sustainability. These logics are driven by regulatory expectations, market demands, and societal norms, and adopting sustainability practices enhances Fuchs SE's legitimacy and stakeholder trust (Fuenfschilling, 2019).

Following Tolbert and Zucker's (1999) stages of institutionalisation, Fuchs SE is in the process of embedding sustainability practices through ESRS compliance. Initially, these practices meet external demands (habitualisation), which are then accepted by decision-makers and framed as integral to corporate strategy (objectification). Over time, these practices become deeply embedded within the organisation, ensuring long-term commitment to sustainability goals (sedimentation).

In addition, Fuchs SE demonstrates a positive link between high-quality mandatory sustainability reporting and robust corporate governance mechanisms, as highlighted by Gerwing et al. (2022). The company incorporates sustainable executive remuneration, ensures gender diversity in its supervisory board, and has established a CSR committee that oversees sustainability initiatives. Fuchs SE's sustainability practices, such as linking executive pay to ESG targets and external auditing of annual reports, underscore its commitment to social responsibility and transparency (BCG, 2023; Fuchs, 2023).

ElringKlinger AG's adoption of ESRS can also be examined through the lens of institutional theory. The company operates within a complex organisational field influenced by regulators, industry associations, and other stakeholders. Institutional logics, shaped by regulatory, market, and societal expectations, influence ElringKlinger's sustainability strategies. By adopting ESRS, the company aligns with these logics, which bolsters legitimacy and stakeholder trust.

Applying Tolbert and Zucker's stages of institutionalisation, ElringKlinger AG's initial ESRS practices are implemented to meet external demands (habitualisation), followed by their acceptance as integral to corporate strategy (objectification), and ultimately becoming ingrained in corporate practices (sedimentation). Research by Gerwing et al. (2022) further supports the link between sustainability reporting and robust corporate governance mechanisms, which ElringKlinger also integrates. This includes tying executive remuneration to sustainability targets and enhancing gender diversity on the supervisory board (ElringKlinger AG, n.d.).

ElringKlinger has established CSR committees responsible for integrating sustainability into the company's strategic framework. These committees set and oversee CSR policies, ensuring ESG compliance. Additionally, the company focuses on innovation, such as lightweight components and advanced e-mobility solutions, to reduce environmental impact. External assurance of sustainability practices further enhances stakeholder trust and demonstrates a commitment to transparency. For ElringKlinger AG, the ESRS framework offers an opportunity to refine technologies and practices, fostering the institutionalisation of best practices through niche innovations.

### **7.7. Concluding Remarks on the Case Studies**

These case studies explored the sustainability practices of two German companies in the chemicals/lubricant and automotive supplier sectors – Fuchs SE and ElringKlinger AG. Germany, with its robust commitment to transitioning to a socio-ecological market economy, provides a fertile ground for this analysis, given its significant influence within the EU and globally.

It must be noted that analyses of the companies and their sustainability reports serves as a frame for the findings of the interviews to feed into. Neither of the reports was done with ESRS and only through the interviews was I able to find concrete aspects the companies might be able to change through the ESRS implementation.

Fuchs SE, a leader in the lubricant industry, integrates ESG principles into its operations and aiming for net-zero emissions by 2040. The company's focus on innovation, customer engagement, and detailed sustainability reporting reflects its proactive stance in aligning with sustainability reporting requirements. However, the transition to ESRS presents challenges, including the complexity of compliance and the integration of accurate data. Nonetheless, the potential benefits underscore the value of adopting these standards.

Similarly, ElringKlinger AG has established CSR committees tasked with integrating sustainability into its strategic framework, developing and overseeing CSR policies, and ensuring compliance with ESG standards. These committees play a role in promoting sustainable practices across the organisation. While the complexity of compliance and the integration of accurate data are significant hurdles, the potential benefits of enhanced transparency, stakeholder trust, and long-term sustainability make the adoption of these standards a valuable endeavour.

The case studies illustrate that companies in different sectors have made great leaps with their sustainability reporting and how the previous standards have managed to create some sort of comparability between companies and industries. However, there remains a lack of quantifiable data that leads to greater comparability and responsiveness of the companies. The following part will present the findings from the interviews that act as the source for the findings on the real-world application of ESRS implementation.

8. Findings and Discussion

Figure 8.1. Gioia Method Levels



Conducting the expert interviews highlighted what challenges and opportunities the ESRS implementation entails. This part summarises the findings of the interviews and thus the main findings on what experts, here the company employees, sustainability consultants, and the auditor, find to be the major challenges and opportunities of ESRS.

The Gioia method yields rich insights into data collection and empirical evidence. The systematic presentation of ‘first order’ analysis (representing the informants’ perspectives) and ‘second order’ analysis (integrating researcher-centred concepts) forms a robust foundation for substantiating the empirical evidence supporting this analysis. The aggregate dimensions reveal the overarching challenges and opportunities companies face when implementing the ESRS for the first time. Main challenges come in the form of resource and structural challenges; regulatory and compliance complexities; technological and data management issues; management and training needs; as well as competitive and international pressures. On the other hand, opportunities are enhanced transparency and reporting standards; operational and strategic benefits; framework integration and risk management; promotion of sustainability and innovation; and global standardisation and influences. The extensive Gioia levels and the interview inputs they entail can be found in [Annex A](#).

The interviews reveal that implementing ESRS involves significant resource allocation, even more so than with previous sustainability frameworks, and system setup demands, necessitating an interdisciplinary approach. As Governance Employee 1 said “purely setting up this organisational reporting system, bearing in mind the scope of the CSRD and the ESRS - these were some of the biggest challenges [...] setting up the project has cost a lot of resources, be it time resources, be it financial resources when you hire consulting firms or software solutions”. Smaller companies face challenges due to a lack of infrastructure, while the broad scope of reporting requirements adds complexity. Sustainability consultant 2 argues that “especially in smaller companies, there are simply not yet these positions and infrastructures that deal with the introduction of the ESRS”. Extensive data needs, precise definitions, and translations from existing standards like GRI make the initial implementation especially demanding. To this, sustainability consultant 1 points out that “one cannot adopt the data collected so far from previous standards like the GRI on a one-to-one basis but must actually generate translations again or consider how to actually apply these new definitions in the ESRS”. Robust data management systems and comprehensive training programmes are essential, which “can only be addressed organically by training and preparing the relevant capacities, resources and employees in these topics”, so sustainability consultant 1. Management prioritisation is crucial for driving cultural and procedural changes in the long term. Auditor 1 argues that CSRD introduces clear responsibilities for management and supervisory bodies to oversee sustainability reporting, including internal controls, compliance with EU taxonomy, and specific governance-related disclosure requirements on skills, information, and risk management. Aligning ESRS with other international standards is challenging, particularly for multinational companies as they must comply with various standards, leading to increased administrative and operational costs. Sustainability consultant 2 even states that some companies might

refrain from ESRS as long as possible because ESRS “is initially a very large administrative burden that paralyses companies”.

Despite these challenges, experts agree that ESRS offer significant opportunities by enhancing data quality, promoting comprehensive reporting through the idea of double materiality, and improving transparency and comparability among peers and industries. While both sustainability consultants agreed that “Data quality really is a big issue. I assume that the quality of the individual data sets will not yet be very high, especially given the large amount of data”, governance employee 2 argues that “The quality of the data will improve”, due to “greater depth of scrutiny”. While it poses a challenge for companies to also report on all supply chain matters, “you have to create a certain level of transparency where there hasn't been any so far”, so governance employee 1, which would then create greater comparability. Mandatory reporting and data auditing are expected to deter greenwashing and foster stakeholder trust. While auditor 1 believes this to happen over the long-term, she expects a learning curve from the companies over the next few years. Integrating sustainability into core business strategies due to the sensitisation through ESRS can lead to operational efficiencies and even strategic advantages, improving social practices, accountability, and communication with stakeholders, as sustainability consultant 1 highlights. Preliminary evidence suggests that the adoption of ESRS improves the confidence of investors in companies and market perceptions, something auditor 1 pointed out in her interview answers.

Experts confirmed the anticipated resource demands, complexity, extensive data requirements, and the need for robust data management and training, as “for many companies, is completely new territory and therefore not only the content alone is complex, but also the data requirements”, so sustainability consultant 1. Difficulties in aligning ESRS with international guidelines due to different requirements and the associated costs were also confirmed by the experts: “setting up the project has cost a lot of resources, be it time resources, be it financial resources [...] to align ESRS with own structures and other international guidelines”, so governance employee 1. Even though the interviewees agreed that the data quality will improve over the years and with that comprehensive and transparent reporting, they expressed that the costs and burdens to set this up are substantial – at least for the first years of implementation. Moreover, they voiced uncertainty about the ESRS setting a global benchmark (“So I don't know whether the ESRS will be a global blueprint, but I imagine not”, governance employee 2) and sustainability consultant 1 stressed “I believe that we can only improve this if the EU and EFRAG provide substantial guidance and specific requirements” to ensure consistent and comparable reporting.

The interviews revealed that ongoing monitoring and continuous improvement of ESRS guidelines are necessary to combat issues such as greenwashing, as “the materiality analysis does not currently contribute to the creation of transparency or the containment of greenwashing to the extent that it perhaps should. We simply need more guidance for this” (sustainability consultant 1). Only the long-term real-world application will reveal more areas for improvement. The interviews indicate that while ESRS represents progress in standardising sustainability reporting, greenwashing remains a complex



issue; flexibility in the materiality analysis and potential creative interpretation pose risks, but measures like mandatory reporting, auditing, and standardisation of metrics are positive steps. Continuous improvements and clearer regulatory guidance are essential to ensure transparency, enabling regime changes.

### **8.1. Analytical Discussion**

The implementation of ESRS presents a multifaceted landscape of challenges and opportunities. The initial phase of ESRS implementation is marked by considerable resource allocation and system setup demands. Experts unanimously stressed the necessity of an interdisciplinary approach due to the multifaceted nature of sustainability reporting and the ESRS, as “not one department can deal with it exclusively, but it has to be answered in an interdisciplinary way” (governance employee 2), underscoring the complexity and need for cross-department coordination (Accountancy Europe, 2019). Smaller companies face significant hurdles as they often lack the infrastructure present in larger corporations, “there are simply not yet these positions that deal with the introduction of the ESRS”, so sustainability consultant 2. Establishing systems and processes to comply with the ESRS for the first time is particularly challenging for these smaller entities. Experts noted that many small companies had not previously engaged in sustainability reporting, which exacerbates their struggle to implement the necessary systems (Giner & Luque-Vílchez, 2022).

The scope and breadth of ESRS reporting requirements pose a substantial challenge. Experts highlight the extensive data requirements and the need for precise definitions and translations from existing standards like the GRI, as “for many companies, this is completely new territory and therefore not only the content alone is complex, but also the data requirements, and the translation of previous sustainability reporting frameworks” (sustainability consultant 2). The broad range of required data adds to the complexity, making the initial implementation stage particularly demanding (European Commission, 2021). Implementing the ESRS necessitates robust data management systems capable of handling extensive and varied data points. This requirement poses technological challenges, especially for companies without advanced data systems in place. Sustainability consultant 2 points out that due to the complexity of the standards, “it no longer works to collect data using an Excel spreadsheet; instead, software solutions should be used to improve organisation”. Effective ESRS implementation requires comprehensive training programmes to ensure all employees understand and can contribute to the reporting process. Experts agree that management must lead these efforts, establishing ESRS as a top priority to drive the necessary cultural and procedural changes across the organisation. If the management does not set the tone from the top, experts agree that a successful ESRS implementation will not be possible. Auditor 1 pointed out that “if the management does not drive it into the organisation and does not represent it credibly, the whole thing will fail”. Aligning ESRS with other international reporting standards remains challenging due to differing regional demands. Multinational companies, in particular, face alignment issues that complicate compliance efforts, “because the larger the company

becomes and the more international it acts, the more data points come from supply chain companies, and it gets increasingly difficult to get this into one report [...] and the different international standards come into play” (sustainability consultant 2). Additionally, experts stress that while ESRS can foster the EU’s development into a resource-efficient and competitive economy, it will probably not level the playing field within industries or set a global benchmark due to the great complexity of the standards.

Despite these challenges, experts agree that the ESRS offers several significant opportunities. The ESRS aim to standardise sustainability reporting, enhancing transparency and comparability across companies. The mandatory nature of ESRS reporting and the requirement for data auditing are critical factors expected to improve data reliability and transparency, acting as deterrents against greenwashing (PwC, 2021). Integrating sustainability into core business strategies can lead to significant operational efficiencies and strategic advantages. Reporting on sustainability metrics drives improvements in social practices, such as addressing pay gaps and promoting equality, which experts assume to result in greater accountability and transparency.

#### **8.1.1. Hypotheses Analysis**

This part of the thesis analyses the hypotheses that stemmed from the academic literature based on the insights revealed in the expert interviews.

*H1: The mandatory nature of ESRS will lead to widespread adoption driven by coercive regulatory pressures, resulting in increased standardization of sustainability reporting across the EU.*

The expert interviews indicate strong alliance with the hypothesis that coercive regulatory pressures from ESRS will drive standardisation. The experts acknowledge that mandatory requirements would enforce a more uniform adoption across industries, thereby improving the comparability of sustainability data and reducing selective disclosure, which previously undermined reliability. This regulatory push could enhance overall data quality and reliability compared to the voluntary frameworks, marking a significant step towards standardising reporting across the EU.

*H2: The complexity and breadth of ESRS requirements may overwhelm (smaller) firms and sectors, potentially leading to compliance failures or superficial reporting that undermines the intended transparency and effectiveness of the standards.*

Especially the interviews revealed that the complexity and comprehensiveness of ESRS present significant challenges, particularly for smaller companies lacking the infrastructure to support such reporting requirements. The need for extensive data collection, new definitions, and translations from existing standards like GRI has been describes as “completely new territory” (Sustainability Consultant 1) for many. This lack of resources and expertise is likely to lead to superficial reporting practices, which can undermine the intended transparency. Both sustainability consultants pointed out that smaller firms often struggle with data collection and the integration of robust data management systems, further complicating compliance.

*H3: The ESRS, while promoting standardisation within the EU, may heighten alignment challenges for multinational companies that must navigate conflicting sustainability reporting requirements across different regions, leading to fragmentation and inconsistencies in global ESG reporting.*

The expert interviews support this hypothesis, highlighting the alignment challenges multinational companies face when trying to comply with various reporting standards, including ESRS, GRI and SASB. Experts mentioned that the complexity of integrating multiple regional requirements leads to significant operational and administrative burdens. These alignment issues make it difficult for companies to provide a consistent and harmonised global ESG report, thus potentially resulting in fragmentation across regions. Experts expressed concern that the ESRS may not become a global benchmark, and this complicates alignment efforts rather than simplifying them.

*H4: Compliance with ESRS will result in better stakeholder engagement and improved investor confidence due to enhanced transparency and comparability of ESG disclosures, thus elevating the market perception of compliant companies.*

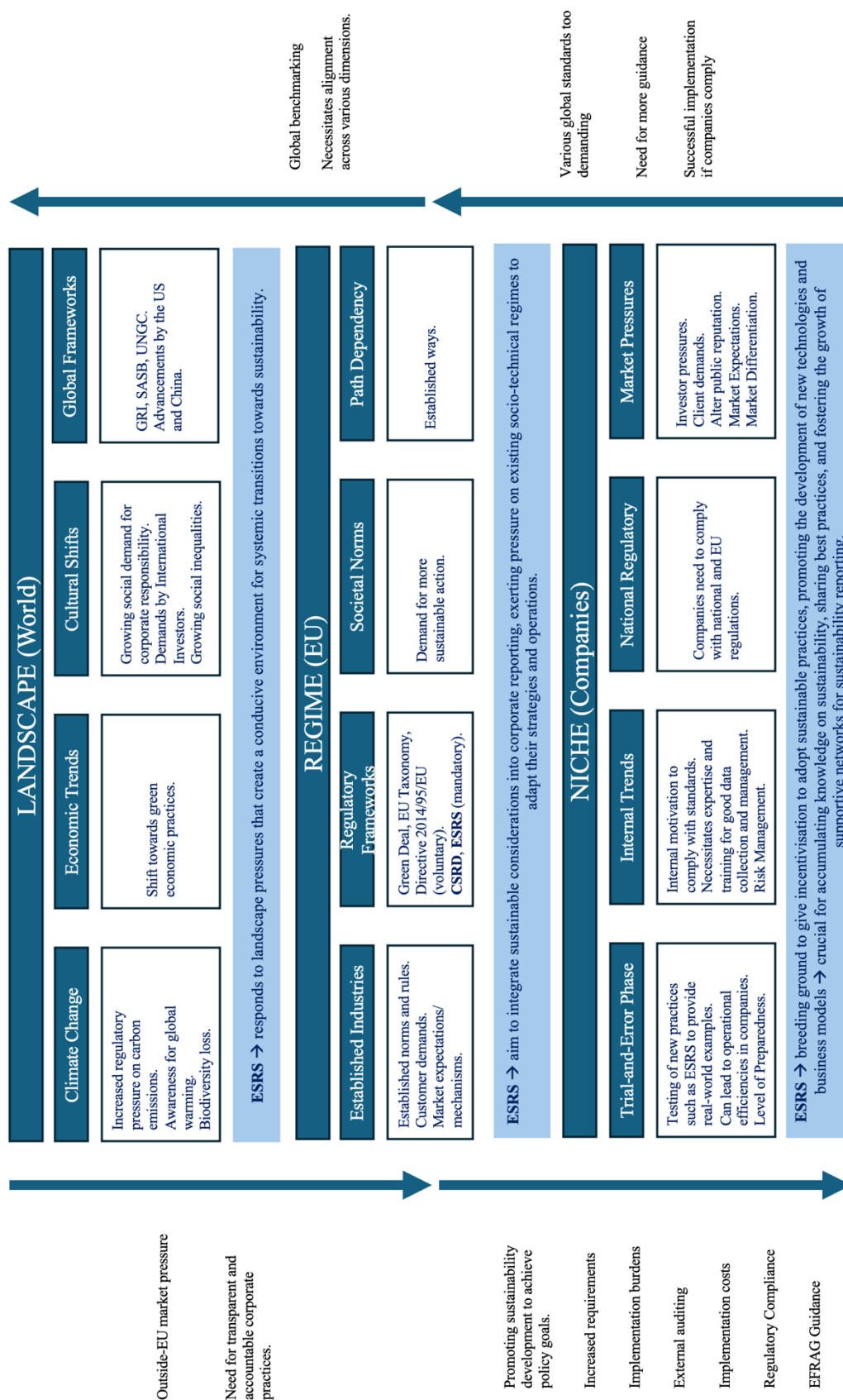
The interviewees suggested that ESRS could indeed lead to enhanced transparency and comparability, fostering better stakeholder engagement and improved investor confidence. Mandatory reporting and third-party audits were seen as measures that could help deter greenwashing in the long-run and ensure the credibility of disclosures, thus building trust among investors. Early indications from stakeholders and investors point to improved confidence, suggesting that ESRS-compliant companies may be viewed more favourably in the market. However, the experts cautioned that this impact would unfold gradually as companies navigate the learning curve of implementation.

*H5: As companies adjust to ESRS requirements, there will be a shift in corporate governance and operational practices, driving long-term systemic change toward more sustainable business models and socio-technical transitions.*

The interviews indicated that the ESRS has the potential to be a significant catalyst for change within corporate governance and operations. Experts emphasised that aligning corporate strategies with ESRS requires interdisciplinary cooperation and sustained management involvement. This shift is expected to influence both governance structures and business processes, promoting innovation and alignment with sustainability goals. The ESRS may lead to systemic changes by embedding sustainability into core business practices of companies, with improved stakeholder engagement and operational efficiency serving as potential outcomes. However, this shift requires a comprehensive effort from management and clear guidance from regulatory bodies to ensure successful adoption.

## 8.2. Theoretical Integration

Figure 8.2 ESRS Implementation in MLP



Given these insights, the analysis of ESRS through the lens of the institutional theory reveals the evolving dynamics of organisational fields and field logics within the socio-technical transitions framework. Organisational fields encompass a collective of organisations that share meanings and practices within a specific institutional context, including regulators, standard-setting bodies, and stakeholders like NGOs and investors (DiMaggio & Powell, 1983). The implementation of ESRS, influenced by the interactions among these actors, can be understood as a process of both coercion and voluntary alignment across field logics.

Field logics, representing belief systems and organisational practices, are crucial in structuring these fields and shaping their evolution (Scott, 2017). The ESRS framework, as introduced within the EU, is indicative of the EU's regulatory push to embed sustainability logics into corporate practices, aiming to enhance standardisation and comparability in sustainability disclosures. However, the coherence and stability of these socio-technical regimes largely depend on dominant logics, which, in this context, align with emerging EU sustainability goals. The partial alignment of ESRS with global standards indicates potential limitations in achieving full international institutionalisation, thereby impacting the scope and pace of these transitions (Baumüller & Grbenic, 2011).

The implementation of ESRS involves coercive, mimetic, and normative isomorphism. Coercive isomorphism arises from regulatory mandates compelling companies to comply with the ESRS framework, driven by EU directives such as the CSRD. However, as the interviews revealed, global alignment remains partial, limiting coercive reach beyond the EU. Mimetic isomorphism, wherein firms emulate peers perceived as successful in sustainability practices, may also be restrained if ESRS fails to achieve recognition as a global benchmark. Similarly, normative isomorphism, facilitated by networks of sustainability professionals and industry associations, could face challenges due to regional specificity, potentially limiting broader uptake and reducing comparability across jurisdictions (Tolbert & Zucker, 1999).

Integrating institutional theory with the MLP provides a richer understanding of the dynamics involved at different levels of sustainability transitions. In the first phase of ESRS implementation, firms engage in institutional work by integrating new sustainability logics into their core operations even before these practices become formal mandates (Scott, 2014). These efforts reflect institutional entrepreneurship, wherein companies actively shape new norms within their respective fields.

The EU formalisation of these practices through the ESRS establishes it as a central regime actor that aims to consolidate niche-level sustainability innovations, fostering their diffusion into broader socio-technical systems (Geels, 2005). At the landscape level, the pressures of global climate policies, investor demand, and shifting societal values continue to exert influence, aligning the broader environment with these emerging sustainability norms (Adams & Abhayawansa, 2022). If executed well, the ESRS framework may serve as a bridge, translating the niche sustainability practices and the learnings from the companies implementing the standards for the first time into regime-wide standards, thereby embedding them institutionally.

At the niche level, the ESRS serve as a breeding ground for firms to innovate their sustainability practices within “protected spaces”, allowing the refinement of sustainability practices before they are scaled up or mandated across the broader regime (Smith & Raven, 2012). These dynamics affirm the interconnectedness of niches, regimes, and landscapes in socio-technical transitions and emphasise that alignment across these levels is crucial for successful long-term transitions.

At the regime level, the ESRS impose regulatory requirements, which are expected to integrate sustainability considerations into corporate strategies and operational practices, thus challenging existing socio-technical norms. Changes in industry practices, policy frameworks, and market expectations reflect the interaction between regime-level adjustments and ongoing pressures and the landscape level (Schot & Geels, 2007). Moreover, the implementation of the ESRS necessitates new reporting technologies, aligns corporate reporting structures, and adapts regulatory requirements – all of which are essential for facilitating sustainability transitions within the regime (Brennan & Puzniak-Holford, 2023).

At the landscape level, broad societal and environmental shifts, such as growing concerns about climate change, market demands for sustainability, and global frameworks (e.g., GRI, UNGC), exert pressure on socio-technical regimes to evolve (Geels, 2022). The ESRS respond to these pressures by creating structures that transform these broad demands into concrete corporate actions. While the regional specificity of ESRS may limit its global influence, within the EU, it provides a significant step towards embedding sustainability into corporate practices, promoting transparency, and aligning business strategies with societal expectations (Baumüller & Sopp, 2022).

However, recent developments indicate challenges to the broader adoption of ESRS. The incomplete guidance from the EFRAG leaves significant room for interpretation, making it difficult for firms, particularly those without prior experience in sustainability reporting, to comply effectively. Additionally, market incentives for sustainable investments appear to be decreasing, potentially reducing the motivation for companies to adopt these standards comprehensively (Bryan & Mooney, 2024). Effective management support and internal mechanisms are thus critical for successful implementation, highlighting the importance of commitment from top management and sufficient organisational capabilities (Poutanen, 2021; sustainability officer 1).

Overall, the adoption and institutionalisation of ESRS within the EU reflect a complex interplay of institutional dynamics that may foster the sedimentation of sustainable practices over time. While the initial implementation faces challenges, such as cost, complexity, scalability, and alignment with international standards, the potential long-term benefits in terms of enhanced transparency, stakeholder engagement, and operational efficiency suggest a promising path for corporate sustainability within the EU context.

## 9. Conclusion

This thesis analysed the ESRS, examining their implementation, implications, and the broader context within which they operate. The ESRS represent a pivotal step in the standardisation and enhancement of sustainability reporting across the EU, with the objective of improving the quality, transparency, and comparability of corporate sustainability disclosures. This research focused on understanding how the ESRS influence corporate sustainability practices in Germany, specifically in terms of operational changes, corporate behaviour, quality of reporting data, and stakeholder engagement, while also investigating the challenges companies face during implementation.

The analysis of the two German companies, supported by expert interviews, demonstrated that ESRS have necessitated substantial operational changes, including the reconfiguration of data management systems and processes to meet the new requirements. Companies need to adapt their internal procedures, improve data collection, and standardise their sustainability metrics, which collectively enhance the reliability and transparency of the reported data. As such, ESRS have elevated corporate sustainability reporting by driving a shift towards more precise and consistent ESG data, thereby increasing comparability and credibility across industries.

Corporate behaviour is also impacted, as the adoption of ESRS fosters a culture of increased accountability and transparency. The mandate for comprehensive reporting has led to an integration of sustainability into core business operations, encouraging more proactive corporate governance that aligns with sustainability goals. Enhanced reporting requirements have also strengthened stakeholder engagement by providing the various stakeholders, including investors, consumers, and regulators, with standardised and comparable data, allowing for informed decision-making and enhanced trust in corporate sustainability efforts.

Despite these benefits, significant challenges remain, particularly regarding the complexity of compliance and the administrative burden of implementing these new standards. Smaller firms, in particular, who have not previously had to report on their sustainability efforts, face difficulties due to limited resources and expertise. The principle of double materiality, which requires companies to report on both the impact of sustainability issues on their business and their own impacts on the environment and society, has proven challenging to operationalise and adds to the reporting burden. These challenges have prompted companies to seek more efficient data management solutions and foster internal learning to navigate compliance more effectively, ultimately influencing how they integrate sustainability into their strategies.

The ESRS have the potential to act as a breeding ground for innovation. Companies that adapt their practices can identify new opportunities for operational efficiency, reduce risks, and align more closely with the SDGs. By embedding sustainability into their core practices, companies not only comply with regulatory requirements but also position themselves more favourably in the eyes of stakeholders and investors that prioritise sustainability.

The theoretical integration of the MLP in the socio-technical transitions theory and the institutional theory provides a comprehensive understanding of how the ESRS drive systemic changes at both the corporate and institutional levels. The ESRS serve as a catalyst for socio-technical transitions towards sustainability by influencing corporate regimes and fostering niche innovations that eventually reshape industry norms. Institutional pressures, including regulatory mandates (coercive isomorphism), stakeholder expectations (normative isomorphism), and industry benchmarking (mimetic isomorphism), collectively push companies towards sustainable practices.

This analysis is particularly relevant to the field of Political Economy, as it intersects regulatory frameworks, market dynamics, and institutional transformations. The ESRS implementation provides a rich case study on how policy interventions can shape corporate behaviour and drive systemic changes within an economic and political context. Understanding these dynamics is crucial for political economists who study the interplay between economic policies and societal outcomes. The topic's relevance is underscored by the increasing importance of sustainability in the global economic discourse and the role of the EU as a leader in setting regulatory standards that influence global practices.

The findings highlight the need for a strategic approach to ESRS implementation. Companies should invest in infrastructure, training, and processes to comply with the standards, while collaborating with stakeholders and engaging with regulators. Policymakers should simplify guidance on complex regulations like ESRS to ensure broader acceptance and implementation.

In conclusion, the ESRS mark a substantial progression towards a standardised and transparent sustainability landscape in Germany, and Europe. While the challenges of compliance are significant, the benefits of increased transparency, stakeholder engagement, and alignment with broader sustainability goals seem to outweigh these obstacles – at least in the long-run. It remains to be seen what the long-term implications of ESRS will be and whether it can set a great example for it to become a global benchmark in sustainability reporting. This thesis contributes to the academic discourse by empirically demonstrating the transformative potential of standardised sustainability reporting frameworks, emphasising the critical role of regulatory standards in shaping corporate sustainability behaviour and advancing socio-technical transitions. Future research should explore the long-term impacts of ESRS on corporate sustainability, particularly through comparative studies involving companies from different sectors and regions, as well as the role of technological innovations in easing compliance and enhancing reporting quality.

While this qualitative approach provided in-depth insights, it has limitations. The two case studies may not be generalisable across all companies or industries, as contexts vary. Future research could expand the sample size to include diverse industries. Additionally, relying on self-reported interview data could introduce bias, as participant perspectives may vary. The study's specific timeframe also limits its ability to capture long-term trends. Future research could explore the longitudinal effects of ESRS implementation for a more comprehensive understanding.



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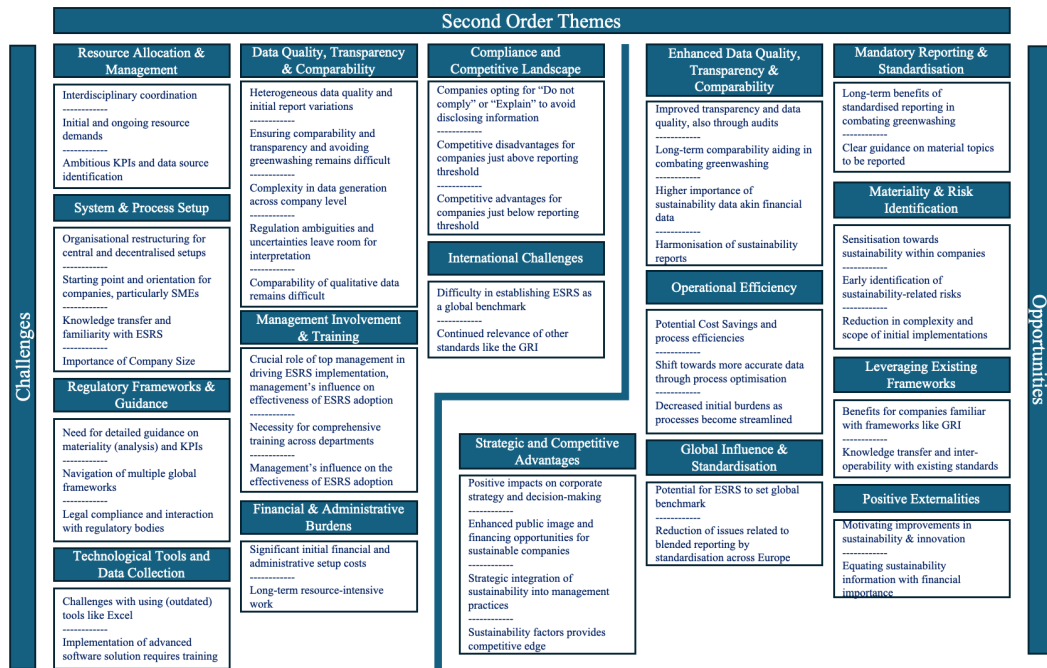
## Annex A

### First Order Concepts Gioia Method – retrieved from interviews

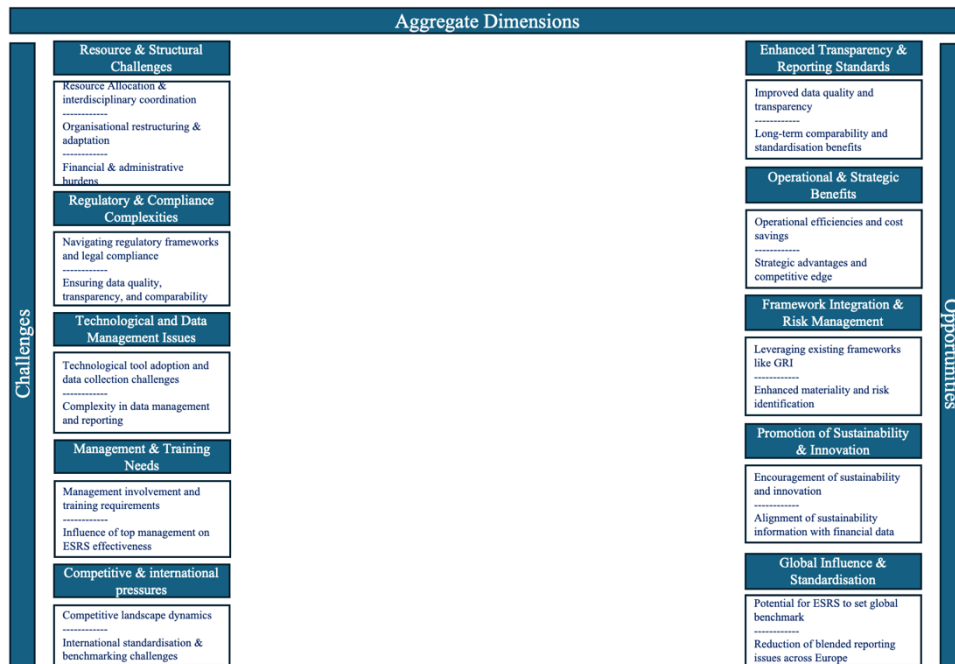
First Order Concepts - Challenges				
Resource Allocation	Legal Framework & Guidance	Management & Training	Tools	Competitive Advantage / Level the playing field
<p>Interdisciplinary requirements make ESRs challenging since not one department can handle it alone.</p> <p>Initial resource setup is critical, but ongoing costs depend on market and investor demands.</p> <p>Certain KPIs are too ambitious for the first implementations. Previously, there were rather loose guidelines.</p> <p>Identifying relevant data sources remains challenging</p>	<p>Companies require more guidance on materiality analysis and specificities from the EU/EFRA, especially about scale and scope measures.</p> <p>Too little guidance on materiality analysis.</p> <p>More interaction and involvement with companies is required in the decision-making process.</p> <p>ESRS is a legal obligation, companies need to be compliant.</p> <p>ESRS stands above national acts.</p> <p>Different global frameworks and regulations.</p>	<p>Strong Management Involvement and training are crucial for effective ESRs implementation.</p> <p>Management must provide a 'tone from the top' to show that it supports the ESRs implementation. Otherwise, it will fail.</p> <p>Companies will not turn their entire product portfolio green just because they must report according to ESRs. Prices and Demand remain the main drivers for product development.</p>	<p>If the company uses Excel for their data collection, they will very likely run into complications.</p> <p><b>Compliance</b></p> <p>Before companies reveal internal innovation and possibly non-sustainable information, they will use the options "do not comply" or "explain"</p> <p><b>International</b></p> <p>ESRS will not set a global benchmark. The other global areas (US, China) are much stronger economically and thus, the EU will probably have to adjust.</p> <p>GRI will continue to play a relatively large role and probably will exist in parallel. Many international investors still expect GRI standards.</p> <p>Global comparability will stay difficult, because there are many national endeavours in relations to sustainability reporting.</p>	<p>Smaller companies that do not yet report under ESRs have a competitive advantage compared to those that are just above the company size threshold.</p> <p>Can decrease/increase public image.</p> <p><b>Data Quality, Transparency &amp; Comparability</b></p> <p>Initial years are expected to have varying data quality and heterogeneous reports.</p> <p>Ensuring comparability and avoiding greenwashing with ESRs are significant concerns.</p> <p>ESRS only leads to overarching transparency if everyone complies.</p> <p>(Double) Materiality Analysis does not contribute to creating transparency and containment of greenwashing.</p> <p>Too little guidance on materiality analysis leaves room for standards to be intentionally excluded.</p> <p>Regulatory ambiguities and uncertainties leave room for interpretation.</p> <p>Main complexity is the data generation and obtaining data across company levels.</p> <p>Comparability of qualitative data remains difficult.</p>
System Setup	(Initial) Burdens			
<p>Organising the scope and structure of ESRs is a major challenge, including the division of which functions answers to what.</p> <p>Central and decentralised organisations need to be setup differently.</p> <p>Smaller companies face significant challenges as they lack existing systems and processes.</p> <p>Familiarity of departments with ESRs/sustainability reporting.</p> <p>Process-related improvements are needed. Many companies do not have a sustainability department.</p> <p>ESRS is a new territory and little to no knowledge available to (smaller) firms.</p> <p>Lack of a starting point/initial orientation of status quo</p> <p>Difficulty of staying up to date with developments. EU posts too little updates.</p> <p>Expanded scope and how definitions of ESRs are not directly compatible with previous frameworks.</p> <p>Organising the transfer of knowledge possibly already available in the company</p>	<p>Financial and Administrative Burdens to set up the process.</p> <p>The financial (and administrative) burdens will only level off slightly after the first years. Companies have to spend a lot of money on reports in the future. There will always be a certain amount of resource-intensive work involved.</p> <p>Some companies are forced to set up a system just to get the figures but will not use it for anything else – resource waste.</p>			

First Order Concepts - Opportunities				
Operational Efficiency	Strategic Benefits	Competitive Advantage	Materiality	Advantages from prev. frameworks & reports
<p>Potential for long-term cost savings and process efficiencies if implemented strategically.</p> <p>Shift from somewhat less accurate/calculated data to ever more accuracy in data because of process optimisation within the company.</p> <p>Initial burdens will decrease depending on how companies implement it as it is clear what data needs to be collected.</p>	<p>Positive Impact on corporate strategy and potential integration of sustainability into management practices.</p> <p>Transparency about company data enables them to make more efficient, strategic, managerial, and business decisions.</p> <p>Positive impact on business practices in various departments.</p> <p>Social practices improve because of raised awareness through ESRs.</p> <p>Supply chain will be looked at in more detail and be linked to the company.</p>	<p>Sustainable companies may gain a competitive edge, particularly in securing financing.</p> <p>Sustainable behaviour can increase the public image.</p>	<p>With the materiality analysis comes sensitisation for the topic of sustainability within a company as many more aspects need to be looked at.</p> <p>With the materiality analysis, companies are already identifying sustainability-related risks while implementing ESRs.</p> <p>Materiality analysis allows companies to reduce the complexity and scope of (first) ESRs implementation.</p>	<p>If the company has already dealt with GRI, it provides them with a good basis and some knowledge about sustainability reporting.</p> <p>Interoperability Statement.</p> <p>Knowledge Transfer.</p> <p>Especially larger companies that had to report prior to ESRs can potentially use their already collected data.</p>
Data Quality, Transparency & Comparability	International		Positive Effects	Mandatory Reporting
<p>Enhanced transparency, reliability, and data quality through mandatory audits (incl. reasonable assurance).</p> <p>Long-term positive effects on comparability between companies.</p> <p>Framework – it now has been established, what companies need to report on.</p> <p>Long-term comparability might help to combat greenwashing.</p> <p>Quantitative data and the ESEF tagging of qualitative data will increase the degree of comparability and accuracy.</p> <p>Harmonisation of sustainability reports. Even if companies do not collect the data, they need to report on why.</p> <p>Expectation of increased data quality due to intrinsic and extrinsic expectations.</p> <p>More quantitative data required by ESRs leads to higher comparability between companies.</p> <p>Sustainability data is set to have the same importance as financial data.</p> <p>Reasonable assurance affirms the correctness of data by the auditor.</p> <p>ESRS is a yearly requirement which will improve the timeliness and accuracy of data.</p>	<p>ESRS could set a global benchmark for sustainability reporting standards. Other regions will see how successful it is and how companies want to comply because of the advantages.</p> <p>ESRS are the most advanced standards internationally.</p> <p>There will probably be parallelisation of different reporting standards.</p> <p>Introduction of ESRs will help to reduce problems associated with blended reporting as European companies will mostly focus on ESRs.</p>		<p>Motivation for companies to improve in terms of sustainability and innovation.</p> <p>Sustainability information receives same importance as financial information</p>	<p>The standardisation that comes with the mandatory reporting under ESRs should help combat greenwashing.</p> <p>An over-emphasis on comparatively immaterial topics compared to material topics is contained by the ESRs, which specify which topics are to be reported.</p>

## Second Order Themes Gioia Method – retrieved from interviews



## Aggregate Dimensions Gioia Method – retrieved from interviews



## Annex B

The interview partners were chosen based on their job descriptions. I decided to interview two sustainability consultants because of their expertise in the topic as well as their knowledge about ESRS implementation and their work with various companies that are currently implementing the standards. Furthermore, I interviewed two employees from Fuchs SE and ElringKlinger AG, each part of the ESRS implementation team, to get a deeper insight into their experience with the standards. Additionally, one sustainability auditor was interviewed to offer additional insights. I sent the interviewees the questionnaire before the set interview date, leaving them time to voice concerns about the questions and to prepare and gather the relevant information<sup>5</sup>. With them accepting the interview, they agreed that the interviews would be recorded, and their data would be analysed for this thesis. Their names and answers remain anonymous. The interviews themselves were conducted via Microsoft Teams and each lasted around 45 minutes. Each interviewee had the chance to leave out any question they did not want to answer. After the interviews, the transcripts were sent to the interviewees for approval. All interviewees gave their consent. The transcripts were then fed into maxQDA and coded with various codes<sup>6</sup>.

Interviewee	Company	Sector	Position	Date of Interview	Duration	Method of conduction
Sustainability Consultant 1	Envoria	Sustainability Consultancy	Consultant	31 May 2024	1 hour	Teams Online Call

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<sup>5</sup> Interview Questionnaire available upon request: [clara\\_wangenheim@iscte-iul.pt](mailto:clara_wangenheim@iscte-iul.pt)

<sup>6</sup> Code Book with coded segments available upon request: [clara\\_wangenheim@iscte-iul.pt](mailto:clara_wangenheim@iscte-iul.pt)

Sustainability Consultant 2	Envoria	Sustainability Consultancy	Consultant	28 May 2024	45 mins	Teams Online Call
Governance Employee 1	Fuchs SE	Chemicals (Lubricants)	Governance Employee	27 May 2024	1 hour	Teams Online Call
Governance Employee 2	ElringKlinger AG	Automotive (Supplier)	Governance Employee	4 June 2024	1 hour 10 mins	Teams Online Call
Auditor	Forvis Mazars GmbH & Co. KG	Auditing	Economic auditor	24 July 2024	40 mins	Phone Call