Circular economy transition in Denmark

Digital Readiness for CSRD of Danish Textile Companies
As-is assessment, 4 October 2023

Technical Support Instrument
Supporting reforms in 27 Member States

Funded by the European Union

Danish Business Authority

This document was produced with the financial assistance of the European Union. Its content is the sole responsibility of the author(s). The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

The project is funded by the European Union via the Technical Support Instrument, managed by the European Commission Directorate-General for Structural Reform Support.

This report has been delivered in May 2023, under the EC Contract No. SRSS/2018/01/FWC/002. It has been delivered as part of the project "Development of resilient, innovative, and human-centric digital government services - Green and circular economy transition through standardization of product data in digital and automated processes".

Directorate-General for Structural Reform Support
REFORM@ec.europa.eu
+32 2 299 11 11 (Commission switchboard)
European Commission
Rue de la Loi 170 / Wetstraat 170
1049 Brussels, Belgium

Contents

1. Executive Summary

With the Green Deal and related action plans such as the Circular Economy Action Plan (CEAP), the EU has set out ambitious goals and targets to achieve the circular transformation of its economy. To enable this many organisations will have to undertake a strenuous effort to allow for progress and transformation in a number of areas. One key area is the advancement of the creation of digital tools and systems to allow for better, faster and more accurate data sharing across value chains and among stakeholders.

Several factors urge Danish textile companies to get ready for the CSRD requirements, including new data and reporting mandates encompassing a broader sustainability impact (such as human rights, environmental concerns, product durability), a growing demand for supply chain traceability, and the increasing need for precise, efficient, and cost-effective ESG reporting.

The textile sector has a complex, often opaque, supply chain structure, with the majority of textile sector manufacturing taking place outside of Europe, which adds additional complexity to the ESG data gathering process. The sustainability ambitions of the EU expressed through new regulations will place higher demands on companies' reporting practices. Therefore, they must increase the amount and quality of their data. This triggers the questions of how mature and capable companies are today to fulfil these new reporting requirements, how their practices work today and whether they need support and solutions to be able to deliver.

This analysis focuses on EU Corporate Sustainability Reporting Directive (CSRD) and the compliance readiness within the Danish textile sector. The new EU policy and regulatory framework represents a complex challenge to Danish enterprises, auditors and regulators who are gradually becoming acquainted with it. The analysis assesses the potential impact of the new sector agnostic CSRD reporting requirements and the drivers and barriers towards a potential digitalization of the ESG data.

The Directorate General for Structural Reform Support (DG Reform) of the European Commission is funding this study, agreeing to provide technical support to Denmark (through the Danish Business Authority) in the area of standardization and sharing of product data. The general objective of the study is to contribute to institutional, administrative and growth-sustaining structural reforms in Denmark, in line with Article 3 of the TSI Regulation.

As part of the analysis, Deloitte has considered the recently published horizontal, European Sustainability Reporting Standards (ESRS). The specific CSRD requirements for the textile sector (e.g., EFRAG's textile sector ESRS standards) have not yet been drafted and published and are, therefore, excluded from the present analysis. Although the focus has been in the textile sector, some trends and findings will be relevant for other sectors, especially those with similar complex supply structures with manufacturing sites outside of the EU.

The results below are based on data gathered from selected segments within the textile industry following a thorough segmentation analysis. Consequently, not every individual player and perspective has been considered. Moreover, due to the complexity of the CRSD-regulation, it was difficult to recruit survey-participants, and the number of respondents is rather small (246 – response rate 7%). As a result, a large number of the survey-participants, as well as the interviewed companies, did not fulfil the minimum requirements of the current CSRD regulation. This approach was selected with the aim of maximizing the acquisition of insights within the industry and anticipating potential future legislative developments. Furthermore, we assume that changing customer demands may indirectly affect companies, even if they are not directly impacted.

Overall, the assessment finds that there is a large gap between the digital maturity of companies and the expected requirements in terms of data collection and handling resulting from the upcoming legislation – regardless of whether the company will be directly or indirectly affected by CSRD. Further our analysis shows that:

A. Data collection, sharing, and management are generally very manual, as the industry has been slow to adopt digitalization, meaning that data exchange is mostly facilitated by email and handled by Excel.
B. The lack of standardized data formats means additional manual work in data handling when exchanging data with suppliers.
C. There is a tendency for the sustainability data collected on textile products for enterprises in Denmark, to focus on social indicators such as human rights, work environment and conditions, and business ethics.
D. Most respondents said that they did not use any ESG-data from publicly available databases (green databases) to calculate their environmental footprint, with most of these being small companies. That is mainly due to lack of knowledge, technical set-up, and/or financial resources. Especially as some databases require very specialized knowledge and multiple employees.

E. The maturity of ESG-related product data management among Danish textile companies varies significantly between enterprises. One factor that separates the more ESG-mature enterprises from those more immature is whether the enterprise is a producer or a distributor of textiles. The distributor relies heavily on receiving ESG product data from its suppliers and, therefore, has limited data, including limited opportunity to verify data accuracy and validity. Another factor influencing ESG data maturity is whether the enterprise holds a certification. The various types of certifications greatly influence the data points collected by the enterprise. However, our findings suggest that data from certifications tends to be less detailed.

F. There is often a positive correlation between the larger the size of the enterprise and the better the data quality and data maturity. While large companies generally collect ESG data, produce reports that include sustainability aspects, and have employees or departments dedicated to ESG, the SMEs interviewed were in the process of data mapping and figuring out which data points to collect.

This report was produced with the financial support of the European Union. Its content is the sole responsibility of the author(s). The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

2. Reading Guide

The report is divided into three overall parts. The first part serves as an introduction and explains the relevant legislation. Following the introduction, the report presents an analysis of the case study. Finally details on the methodology can be found in the Appendix.

Throughout the report, a number of abbreviations are used, listed below.

Abbreviation	Explanation
API	Application Programming Interface (i.e. software interface)
B2B	Business-to-Business
B2C	Business-to-Consumer
B2G	Business-to-Government
CEAP	Circular Economy Action Plan
C-level	Senior level management (chief officers)
CSRD	Corporate Social Responsibility Directive
DBA	Danish Business Authority (Erhvervsstyrelsen)
EC	European Commission
EFRAG	European Financial Reporting Advisory Group
ESG	Environment, Social and Governance
ESRS	European Sustainability Reporting Standards
LCA	Life Cycle Assessment
PDM	Product Data Management system
PIM	Product Information Management system

3. Introduction

To achieve the ambitious goals that the European Commission (EC) has set out in the EU Green Deal, the Industrial Plan for the Net-Zero Age (EC, 2023) and the updated CEAP (2020), a rethinking of the way we design, produce, consume and dispose of products is required. An absolute core enabler towards this big shift will be to capture, analyse and compare data about these aspects of a product life cycle.

With the Green Deal and related action plans such as the Circular Economy Action Plan (CEAP), the EU has set out ambitious goals and targets to achieve the circular transformation of its economy. To enable this, many stakeholders will have to undertake a strenuous effort to allow for progress and transformation in a number of areas. One key area is the advancement of the creation of digital tools and systems to allow for better, faster and more accurate data sharing across value chains and among stakeholders. Several factors urge Danish textile companies to get ready for the CSRD requirements: demand for traceability and broader applied sustainability impact (including human rights, environment, product durability), the increasing need for accuracy, faster pace and cost-effective ESG reporting.

This analysis focuses on the EU Corporate Sustainability Reporting Directive (CSRD) and its implications for reporting within Denmark's textile sector. Given the sector's extensive overseas manufacturing, characterized by a complex and opaque supply chain, the recently introduced EU sustainability regulations call for elevated data quality. The new EU policy and regulatory framework therefore represents a complex challenge to Danish textile enterprises, auditors and regulators who are in the process of familiarizing themselves with it.

Deloitte has considered the recently published horizontal, sector-agnostic European Sustainability Reporting Standards (ESRS). The specific CSRD requirements for the textile sector (e.g., EFRAG's textile sector ESRS standards) have not yet been drafted and published and are, therefore, excluded from the present analysis.

3.1 The Corporate Sustainability Directive

The Corporate Sustainability Reporting Directive (CSRD) is a new EU legislation that requires all large companies and certain SMEs to publish regular reports on their environmental, social and governance impact (ESG) activities. The first companies covered by the directive need to report on their data in January 2025, which means that they need to start data collection as soon as 2024.

The directive applies to all EU companies of public interest and all large companies that fit two of the three criteria below – and, importantly, companies are also responsible for assessing the information at the level of their subsidiaries.

- Balance sheet total: EUR 20 million/DKK 156 million
- Net turnover: EUR 40 million/DKK 313 million
- Minimum number of employees in the year: 250

For many companies, the CSRD will require a fundamental shift in measurement and reporting, as it will no longer be sufficient to only disclose how sustainability issues affect the company, but also how the company impacts society and the environment – the so-called ‘double materiality’ perspective. This means that companies will have to describe and disclose, e.g.:

- Business model and strategy, incl. resilience to sustainability risks
- The sustainability/ESG targets set and the progress made towards achieving them
- Main sustainability risks and impacts related to own operations, products and supply chain
- Information about processes for ESG due diligence
- The way in which the company has identified the ESG/sustainability information on which they report

In addition, limited assurance of sustainability/ESG data and reporting will become mandatory.

In total, 2300 Danish companies are expected to be directly covered by the CSRD. In addition, many companies not covered by the CSRD will be required to provide certain information by companies (in their value chain) that are covered by the CSRD.

Figure 1 (below) provides an overview of the value chain considered in this case study. The value chain emphasizes the sector's complexity and underscores the significance of non-EU-based companies within the supply chain.

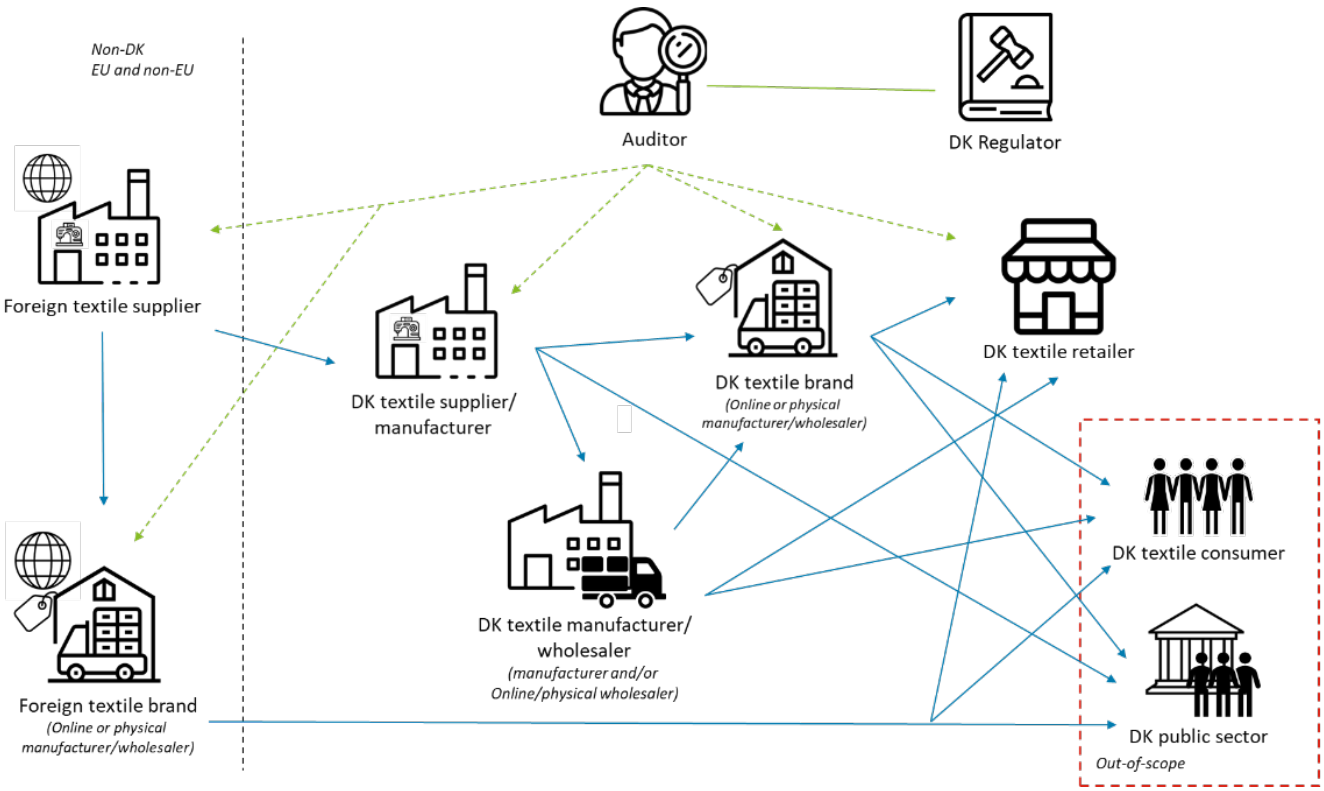


Figure 1. Textile value chain for case study. Source: Deloitte

About the report

On behalf of the European Commission (EC)[1] and the Danish Business Authority (DBA)[2] Deloitte has undertaken an assessment on the feasibility of laying the digital foundations to support the green transition by eventually building a collective and trusted framework that can accelerate the standardisation and optimisation of the product (impact) data in Denmark and across the wider EU. More specifically, this groundwork involves assessing companies' maturity in terms of their data collection and data handling procedures, as well as their capacity to report the required data points. The report is part of a project called *"Circular economy transition through standardization of product data in automated processes in Denmark"*[3].

The Directorate General for Structural Reform Support (DG REFORM) of the European Commission is funding this study via the Technical Support Instrument, agreeing to provide technical support to Denmark (through the Danish Business Authority) in the area of standardization and sharing of product data. The general objective of the study is to contribute to institutional, administrative and growth-sustaining structural reforms in Denmark, in line with Article 3 of the TSI Regulation.

[1] DG REFORM, https://commission.europa.eu/about-european-commission/departments-and-executive-agencies/structural-reform-support_en
[2] Danish Business Authority, https://danishbusinessauthority.dk/
[3] https://reform-support.ec.europa.eu/what-we-do/digital-transition/circular-economy-transition-through-standardization-product-data-automated-processes-denmark_en

4. Analysis

This study focuses on the fashion/clothing industry (i.e., textiles for clothing) based in Denmark. From the existing Danish textile supply chain, we decided to focus on manufacturers, wholesalers, and retailers. The study covers the B2C (business-to-consumer) clothing sector. Traceability of ESG data across the relevant textile supply chain has also been considered, as have any interesting observations relevant to the B2G (business-to-government) clothing sector. However, B2G textiles are not the focus of this analysis. The following analysis of the case study on textiles is based on the following:

A. Survey responses from 246 enterprises (response rate: 7%).
B. Nineteen interviews.
C. One observation.
D. Desktop research.
E. One workshop (with four organisations).

4.1 Data production and collection

The interviews revealed that the maturity of ESG-related data management in Danish textile companies varies significantly between companies. One factor that separates the more ESG-mature enterprises from those more immature is whether the enterprise is a producer or a distributor of textiles. The distributor relies heavily on receiving ESG data from its suppliers and, therefore, has limited data, including limited opportunity to verify data accuracy and validity. These enterprises explained the complex challenge ahead of complying with CSRD:

> "*We are the type of company that buys the finished products, but the new legislation requires that we understand the different components of our products (…) that is difficult because we might have the weight of the finished products, but we don't know each component.*" Large enterprise

The differentiation between production and distribution impacts how enterprises work with sustainability, including the processes and systems they manage, which kind of data they store, and their data governance. Another factor influencing ESG data maturity is whether the enterprise holds a certification such as OEKO-TEX, GOTS, GRC or ISO. The various types of certifications influence the data points collected by the enterprise. However, our findings suggest that data from certifications tend to be less detailed, as stated by one interviewee:

> *"We also get some data with the material certifications, but that's very general. It's not specific for our products and materials."* SME.

Finally, we found the size of the company to be a significant factor in data maturity. While larger companies (50 employees or more) generally collect ESG data, produce reports that include sustainability aspects, and have employees or departments dedicated to ESG, the SMEs interviewed were in the process of data mapping and figuring out which data points to collect.

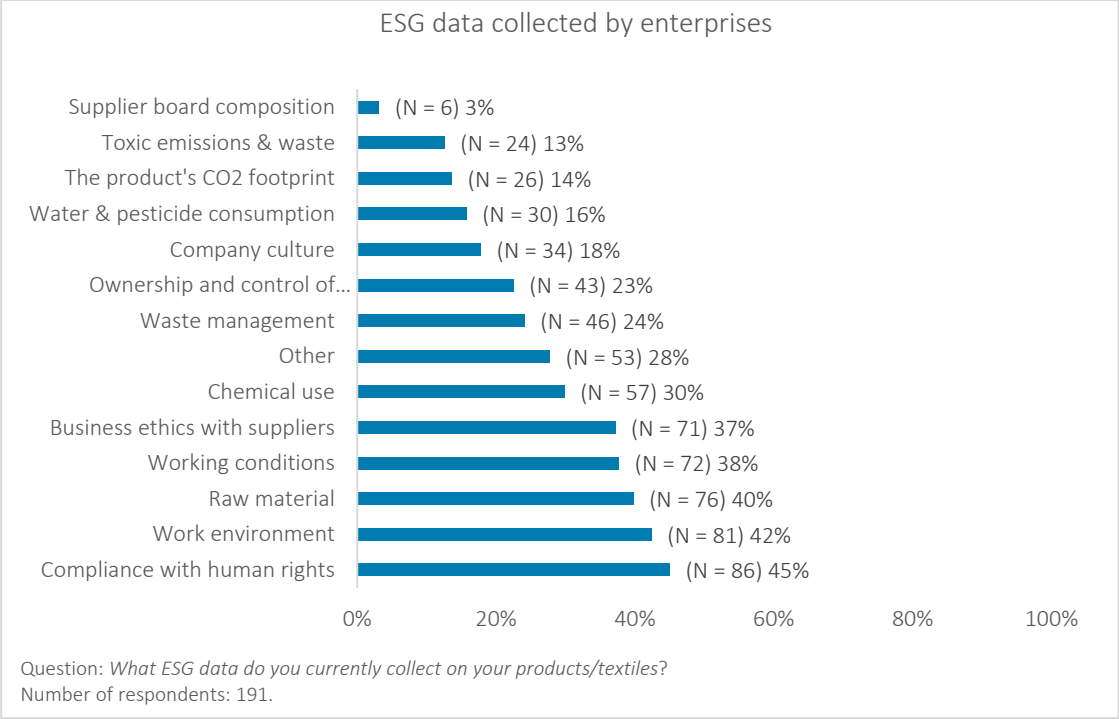


Figure 2. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

As for the specific types of sustainability data collected on textile products for enterprises in Denmark, the above figure displays a clear focus on social indicators such as human rights, work environment and conditions, and business ethics. It suggests that the textile enterprises in our sample are concerned with their suppliers living up to certain social requirements, likely due to the numerous human rights scandals within the textile industry. Additionally, the data points collected by the enterprises include more product-specific data such as *raw material* (40%) and *chemical use* (30%). A sizeable portion of respondents also indicated "*Other*" (28%), with the large majority stating they did not collect any data and some detailing they collected data on textile certificates. Several interviewees also stated that they collected certificates from their suppliers which could entail multiple ESG data points.

Interviewees further mentioned that there are various methods of data collection, which means that, in theory, collecting the same data with different methods can lead to different results, limiting the use of the data. All enterprises noted that a standardised system was needed for ESG data collection:

> "*One of the things I would like is for there to be a standardised system, where you must do it exactly like this and put it into this template. Right now, there isn't [and therefore] you can't compare to other companies because everyone is doing it in different ways and using the different CO_2 emissions equivalents.*" SME

4.2 Data handling

Large enterprises mentioned that multiple departments might be involved in the data collection, such as the finance, procurement, and sustainability departments. While some data is obtained through the supplier, several interviewees also noted using databases to retrieve information, e.g., on raw materials, as well as getting data through auditors and external consultants. Several interviewees also mentioned collecting data through questionnaires. Data collection and management is generally a very manual process. As one enterprise explained, the industry has been slow to adopt digitalisation, which means that the data exchange is facilitated mostly by email and handled by Excel:

> "*COVID-19 enabled a lot of digitalisation in terms of sales, customer engagements, and online sales, so that part has definitely developed in the past few years. But internal process systems and performance data have not.*" Business Association

From the interviews, systems mentioned by enterprises for ESG-data management are ERP systems, Power BI, email, PDM, PIM, cloud systems such as Dropbox and SharePoint, and various traceability software/systems; the latter implemented mostly by large companies.

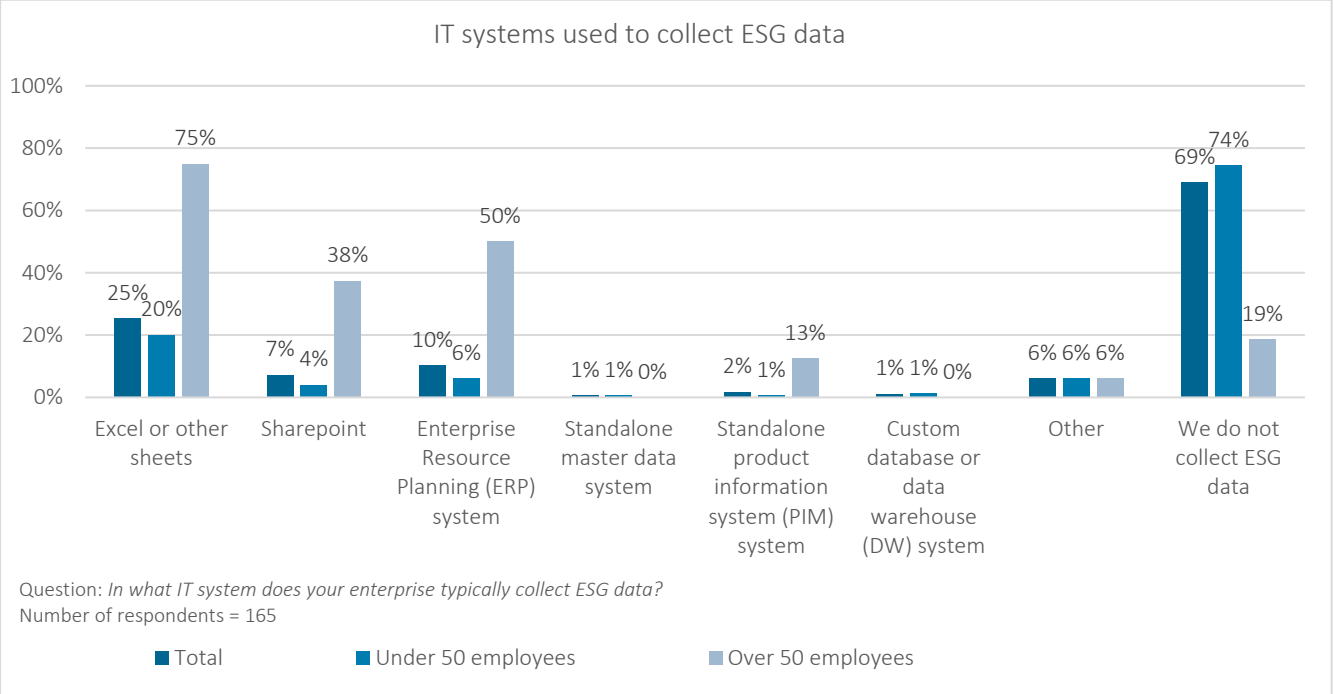


Figure 3. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

According to the survey, regardless of company size, the most used system or software for data management was *Excel*, with 25% of respondents indicating using the software. All surveyed medium-sized or large enterprises (50 employees or more)[4] indicated collecting or registering some type of data. 75 % of these enterprises indicated using *Excel*, while 38% also indicated using *SharePoint*, and/or 50% their *ERP systems* to register data. 74 % of enterprises with less than 50 employees noted that they did not record or collect any ESG data, while 20% indicated using *Excel*. From the survey, we found that almost 44% of enterprises are using 1-2 Excel sheets to manage this data, while 27% are using ten sheets or more; the latter almost exclusively being medium-sized or large enterprises, i.e., 50 employees or more.

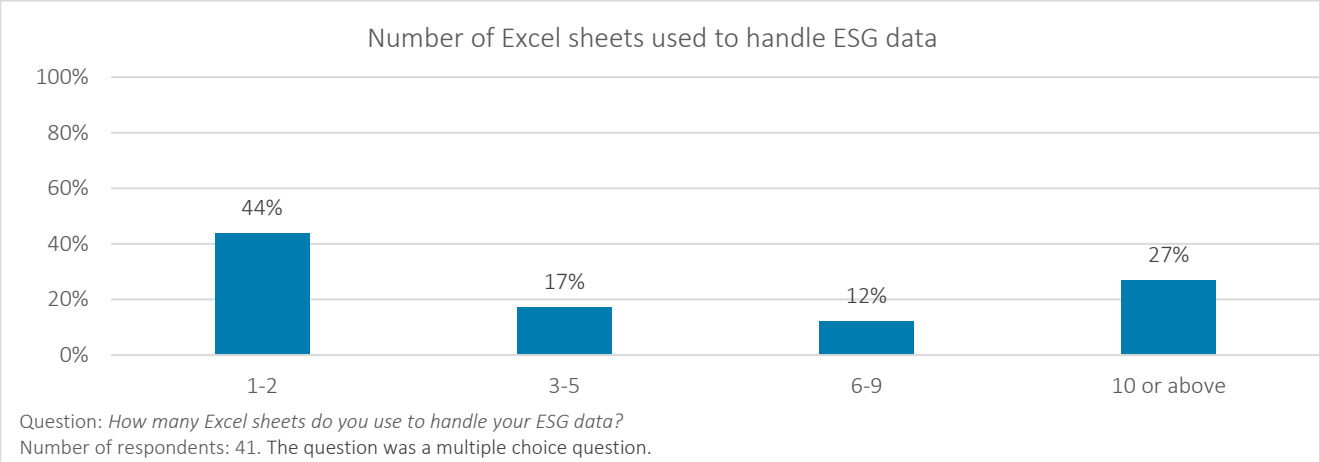


Figure 4. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

[4] Note, that for the analysis of CSRD, we are comparing micro- and small enterprises (<50) towards medium and large enterprises (>=50).

When looking at the IT systems enterprises use for sharing data with their suppliers or customers, 56% noted that they did not share data across the supply chain. Respondents indicated *email* as the most used IT system for exchanging data (28%), followed by *cloud-based systems such as SharePoint and Dropbox* (6%).

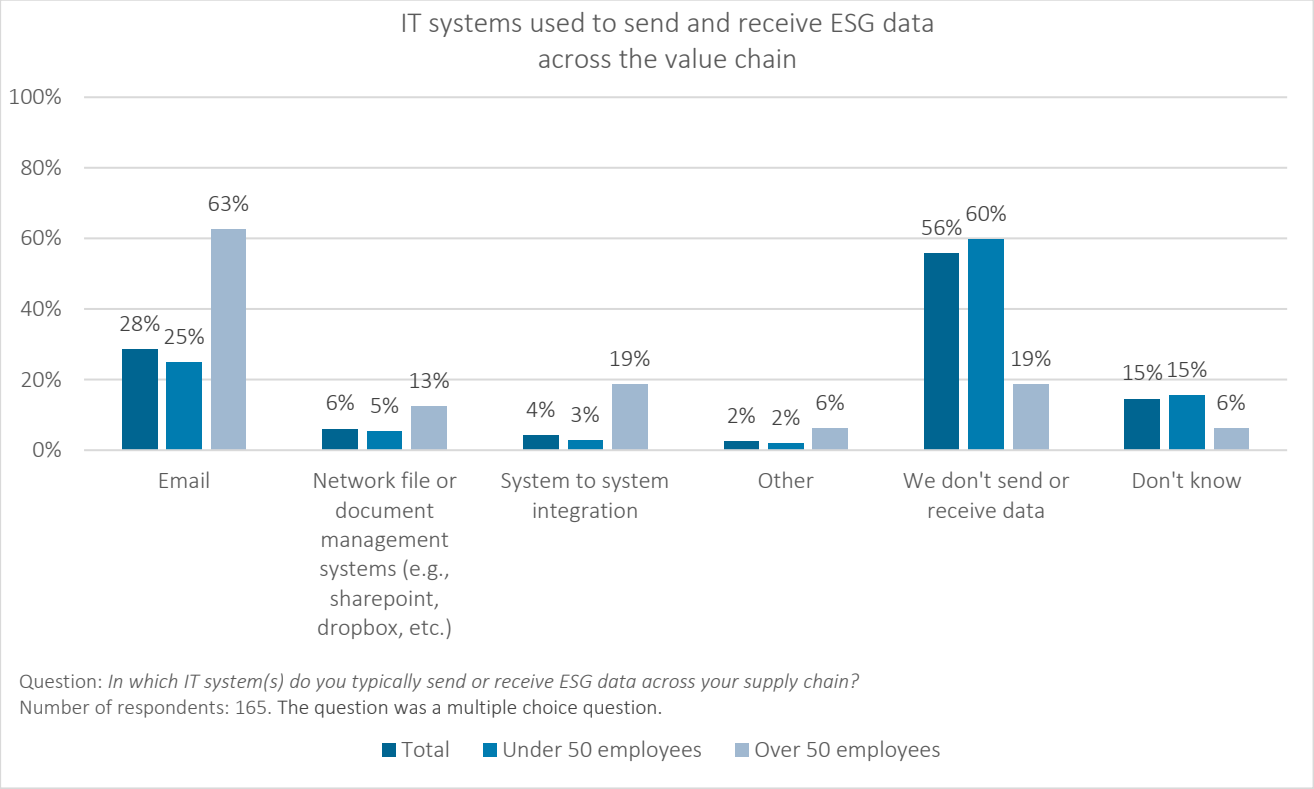


Figure 5. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

Similar results were noted in the interviews, as enterprises mentioned email, cloud systems such as Dropbox and SharePoint, APIs, and various supply chain management/traceability systems/software. Some interviewees further remarked how their partners in the supply chain were located in countries where digitalisation is limited:

> *"Turkey and Ukraine are quite manual compared to Denmark. They are countries with lower technology levels. Ukraine is a little bit more automated than Turkey; Turkey still uses pen and paper for many things. They have computers, but some reports are written by hand and faxed to us"* Large enterprise

When data is received from suppliers, it may undergo multiple steps before being entered into a system and distributed, which increases the likelihood of errors and limits data traceability and reliability, ultimately decreasing its usability.

4.3 Data formats

Enterprises mentioned sending and receiving data in multiple formats, from PDF and Excel to Text, as there were no standard formats. These findings correspond with the three most used data formats according to the survey, *PDF* (15%), *TXT* (14%), and *CSV* (8%).

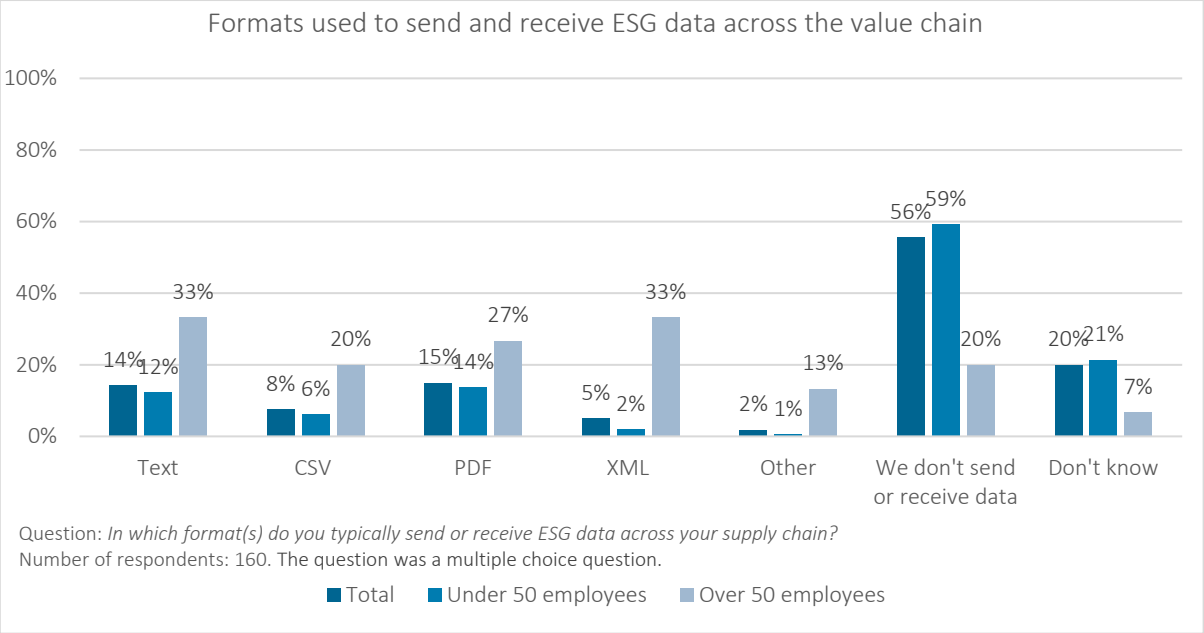


Figure 6. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

Multiple interviewees noted that large platforms such as Boozt, AboutYou, and Zalando would send out Excel files for the enterprises to fill in:

> *"We send a lot of data through API, not a lot of sustainable data yet, but competition data, for instance, that could be transferred through API (…) It's still some of the biggest customers [that are] requesting manual Excel sheets because they don't have a match between their system and ours."* Large enterprise

Enterprises that received data from suppliers additionally said there were several manual steps in the process of obtaining and transforming data to fit their systems or software:

> *"We will always have to adapt. I would say the only place where we don't have to adapt is for certificates because that format is set by the [certification body]."* SME

Even for enterprises that had system integration in place to exchange data, the process of transferring data from one system to another involved a combination of manual and automatic data integration, meaning certain aspects of the data transfer still required human input. However, enterprises also acknowledged that the reliance on manual work is not ideal and that they would like to change this in the future by finding ways to automate more of the data transfer process. It would, in their view, reduce the amount of time and effort required to transfer data between systems, increase the accuracy and reliability of the transferred data, and improve overall efficiency in data management.

4.4 Use of ESG product data

At present, enterprises in the textile sector are using the ESG data they can collect from their own operations and their supply chain for a wide variety of uses, internal (e.g., strategy, decision-making, risk assessment, and mitigation) and external (e.g., marketing, branding, customer engagement, sales). These enterprises are also increasingly receiving questions from their customers (e.g., B2B customers, B2C customers) about their ESG performance, and are, in turn, sharing ESG data externally with their customers. However, given recent increasing regulatory and customer scrutiny of "green claims", textile enterprises have become more reticent regarding making green product claims to end-customers without being able to substantiate such claims fully with suitable evidence and documentation:

> *"The digitalization process is rapidly expanding, but it's new to the business, and it's also really new to this industry. It's not a data-driven industry. It's slowly becoming that, but it's five years later than other industries."* Large enterprise

Generally, the enterprises mentioned the possible advantages of using ESG-data within future strategies for moving to data-based decision-making; however, most of them noted that they were still in the process of becoming data-driven. A business association within the industry spoke about their members' use of data:

> "*They are just trying to get the data - good enough data and get it verified, and that, in itself... It's very hard for many of them to get data of the right quality and to map their supply chain; it's a very complex supply chain for many companies, but especially within fashion.*" Business association

A number of interviewees further expressed having difficulties in obtaining data which subsequently limited the possibilities for data usage:

> "*We have our strategy, and we're trying to set up the reporting around our strategy. But there is also a lack of data there, so we can't measure all of it yet.*" Large enterprise.

While most interviewed enterprises were not required to report on ESG measures to public authorities, several noted using ESG data in financial or sustainability reports to communicate to stakeholders and give insights into how the business is managing environmental, social, and governance responsibilities. Many interviewees considered these reports to be merely compliance documents that equated to a 'licence to operate'. Enterprises that held certifications also used the data to comply with standards, and several mentioned using the data to prepare for the upcoming legislation. Furthermore, enterprises voiced using ESG data to aid risk management and identify opportunities. For example, one interviewee explained how the enterprise uses historical data to identify their most effective suppliers, as well as identify areas of risk:

> "*We keep manual lists that allow us to see that a certain supplier carries, for example, 16% of our production volume, meaning that's a really important supplier, so we make sure to collect audit reports and simple compliance documents to get an understanding of if we have a supplier without any compliance documents, that's really a risk and then that's something we factor in.*" Large enterprise

Similarly, a system provider shared how its customers were using data to identify and control various risks within their supply chain, such as operational, reputational, and financial risks:

> "*There are huge risks in the textile sector. Once you start to increase your understanding of not only your emissions but also the social [factors] in your value chain, that helps you to understand your risks and opportunities.*" IT vendor

According to our interviewees, the recording of ESG data further supports the enterprises' in-house strategic decision-making, enables KPI reporting (e.g. energy level consumptions), and backs up financial investments (e.g. for further digitalisation or renewable energy). In addition, several enterprises were also using the data as a part of their sustainability and business strategy:

> "*Our entire business strategy is tied to sustainability and social responsibility. We have people, planet, and prosperity as our three main areas, and a strategy within each; how we treat people, how we treat the planet, and then, of course, that we have to make a profit. From a C-level, we're not only interested in environmental certifications but also ISO certifications. It's what our entire strategy is built around.*" SME

Some enterprises were using the data to communicate with consumers, such as answering questions from B2B or B2C customers, as well as using it to target specific customer segments in marketing material. However, a few interviewees further noted that they were specifically careful to communicate ESG targets and commitments as it is difficult to compare between enterprises. They remarked how "the fear of greenwashing" has affected external communication:

> "*There's no point in us communicating ESG measures just because we think it's fun and possible. What we put in the annual report must be documentable, and if we could end up getting caught not meeting some requirements – therefore, we're reluctant to communicate these sorts of things. I would prefer to wait until we're completely ready, but it's also difficult to be proactive and do something if you don't dare to jump over the edge.*" SME

Similarly, another enterprise expressed:

> *"Some companies took the approach to sustainability, that the first [step] was to communicate about it. Where I would say, start differently. Start with having a vision, prioritise it, and then you can go and talk about it - and with the greenwashing, it's now also more important that you not only communicate, but you underline it with some facts. Also, for the consumers and everybody to follow and see if there's any progress."* Large enterprise

4.5 Green databases

Most of the ESG data collection software systems that we identified or discussed with enterprises as part of this research are designed to collect ESG data and we did not identify an ESG data collection software system focusing on collecting social data. Our research identified that the following public platforms/databases (e.g., Transparency International5 and ITUC6) and private platform/database (Maplecroft[7]) could be useful for assessing potential social/human rights and governance risks in the textile supply chain. The following ESG sectoral standards also have social element (labour welfare and rights) considerations for the textile supply chain: Sustainability Accounting Standards Board (SASB) sectoral standards[8] and Global Reporting Initiative (GRI) sector standard for textiles.[9]

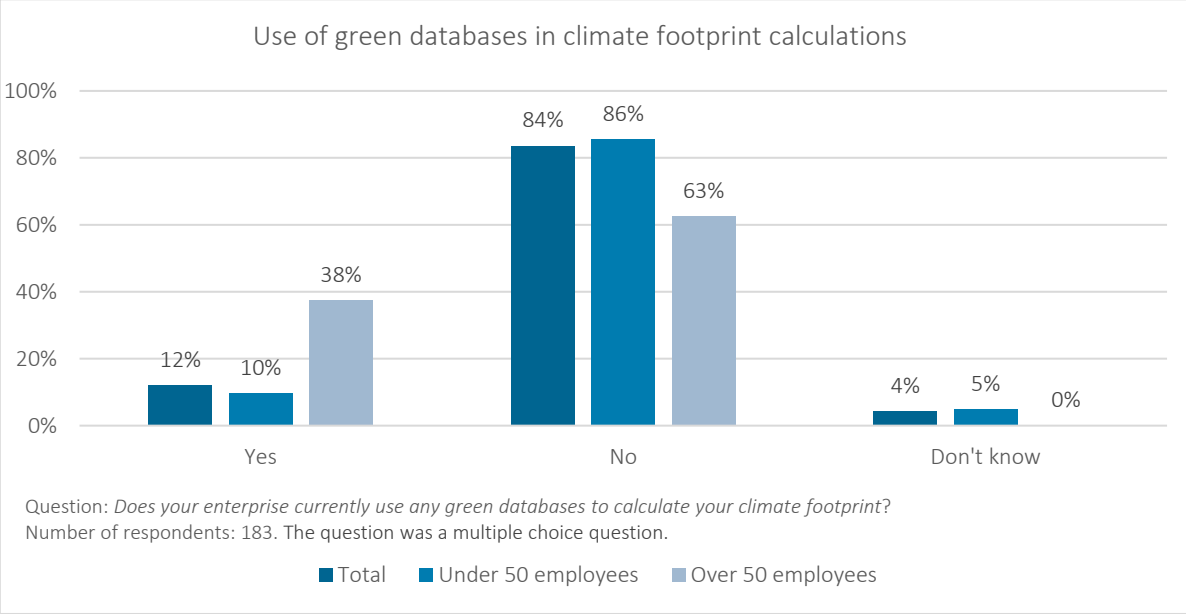
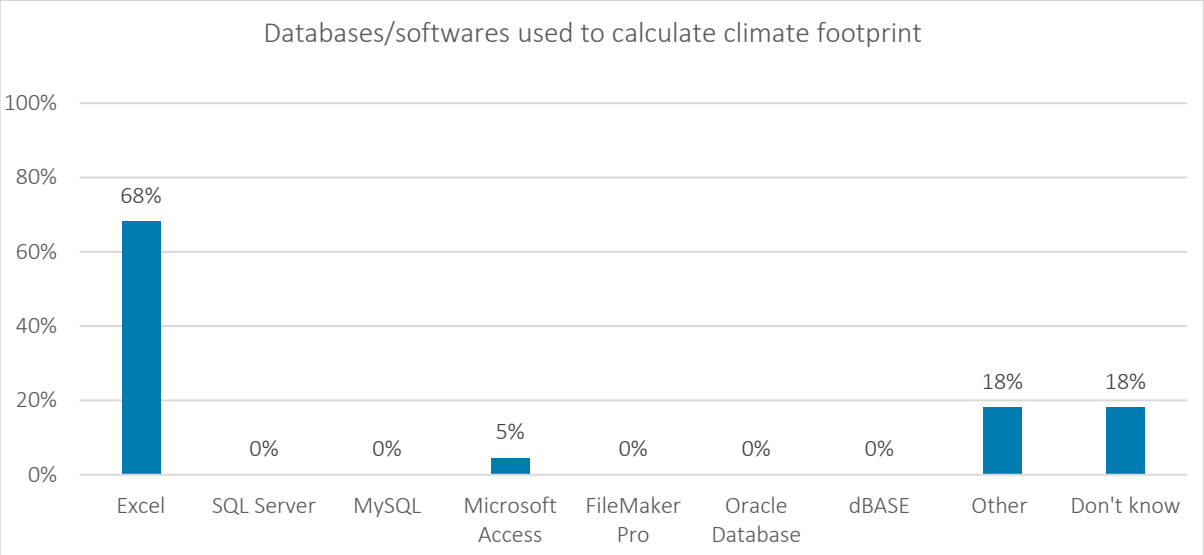


Figure 7. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

According to the survey, 84% of respondents, predominantly small companies, do not utilize databases for calculating their environmental footprint. Of the companies who indicated having 50 employees or more, around 38% stated that they use databases for their calculations.

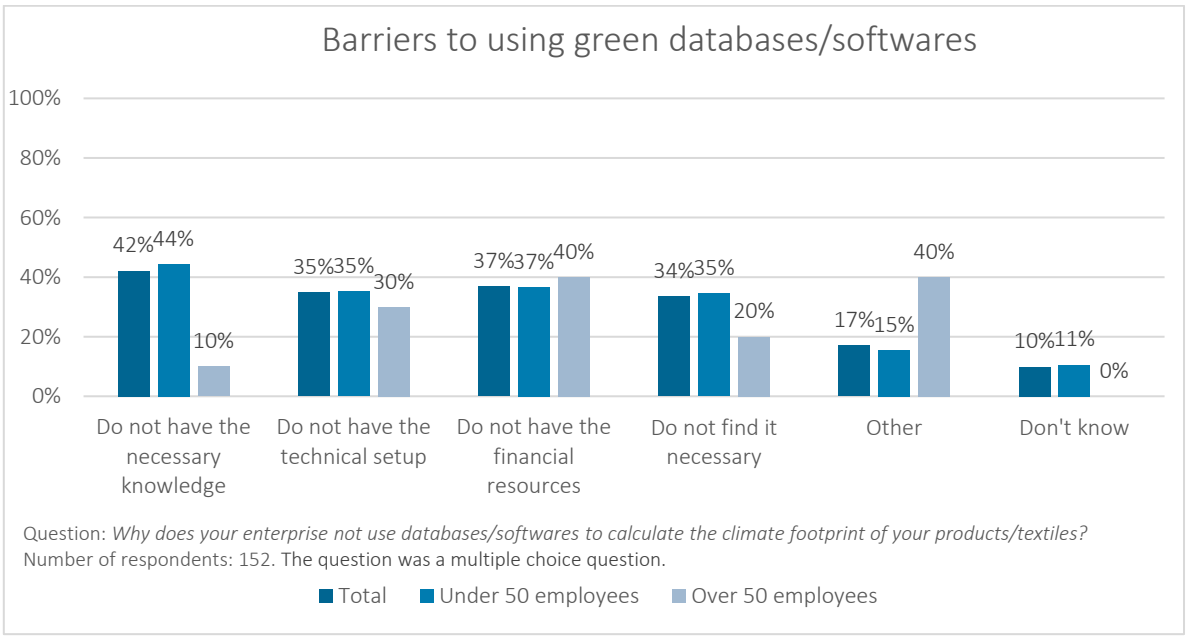
[5] https://www.transparency.org/en/
[6] https://www.ituc-csi.org/
[7] https://www.maplecroft.com/
[8] SASB sectoral standards: https://www.sasb.org/standards/
[9] GRI sector standard for textiles: https://www.globalreporting.org/standards/standards-development/sector-standard-project-for-textiles-and-apparel/



Question: *Which databases/softwares do you use to calculate the climate footprint of your products/textiles*?
Number of respondents: 22. The question was a multiple choice question.

Figure 8. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

In the interviews, enterprises especially noted using databases to collect data on raw materials or when conducting CO_2 calculations. From interviews and surveys, tools mentioned included Excel, Green House Gas (GHG) Protocol, PowerBI, Slimoffice, MÅLBAR, SimaPro, Ecoinvent, Klimakompasset, and HIGG Index. In the survey, 68% of respondents indicated using Excel. From the interviews, we found that of enterprises using databases, large enterprises were more likely to use more advanced databases and/or climate calculation tools such as HIGG Index, Ecoinvent, and CEMAsys, whereas SMEs were more likely to use free climate calculators/emission factor databases such as Klimakompasset.



Question: *Why does your enterprise not use databases/softwares to calculate the climate footprint of your products/textiles?*
Number of respondents: 152. The question was a multiple choice question.

Figure 9. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

Among barriers for enterprises not to use databases are the *lack of knowledge* (42%), *financial resources* (37%), *technical setup* (35%), and/or that they *do not find it necessary* (34%). Among the 99% of the enterprises answering that they did not find it

necessary were enterprises with less than 50 employees[10]. Similarly, 96% of the enterprises that stated *'lack of financial resources'* had less than 50 employees. Additionally, only enterprises with less than 50 employees indicated *"Do not know"* (10% of total responses).

Among enterprises with 50 employees or more, the most frequent reasons for not using databases to collect or register ESG data were *'lack of financial resources'* (40%), or *'Other'* (40%). All respondents answering 'Other' further indicated in their comments that they were on the way of doing so or had it done by external consultants. One enterprise explained how the fast-paced industry severely raised the cost of making such calculations:

"*The problem with textiles is that they are fashion products that are maybe sold for a three-month period. So, if it costs DKK 30,000 to do a climate calculation on a product, then that product must sell numerous times during those three months. But some of our customers who sell the same product all year round, are willing to spend the money, and here we have made some climate calculations in German databases in collaboration with the customer.*" SME

Numerous enterprises noted that many databases required specific knowledge and methodological understanding before use. An enterprise commented that the resources required to utilise databases efficiently exceeded what was possible for a medium-sized company. There were also concerns about the data accuracy and validity of a database that they had considered using:

"*There has been a lot of scrutiny around the database; where is it coming from? How valid is it? Who is verifying this? (…) There is also a huge cost involved, so it needs to make sense for us to keep using it. And for us to get good data from the index, we need to input a lot of data manually. So, we have a system in which we can input data, but we still need to find really, really complex, detailed data across the entire supply chain. And for a company our size, that is not possible."* Large enterprise

"Another company shared similar concerns regarding the data, emphasizing that the absence of standardized systems and quantifiable data reduces its internal and external usability and comparability:

"*Knowing the different boundaries you can set to an LCA, you understand that none of it can be compared. So, it's a very expensive database and project to onboard without getting any tangible results (…). To be fair, I think [databases] have been a good working tool, but everything is just developing so rapidly that this approach is already a little bit outdated. It's an assessment that is extremely qualitative. We understand that everything can be quantified. But we need to ask our suppliers questions they can document because we can't conduct any risk assessment or intelligence otherwise."* Large enterprise

Due to the high implementation costs, enterprises further stated that once they had gotten acquainted with a database, they would be reluctant to change it. In this regard, interviewees also expressed concerns about the upcoming CSR directive and what the specific requirements would mean to their existing methods of calculating and gathering data. They feared they would need additional resources to comply with the requirements:

"*I know, because we work with CO_2, that it's just a matter of where you get your data from and which factors you multiply, then you get all sorts of different results. So, I'm quite interested in seeing how they're going to standardise and how it'll accommodate the fact that some methods lead to more accurate calculations than others, and some companies are further ahead than others. I find it difficult to see that they can achieve standardisation (…). We've spent a lot of money on making analyses and maintaining them, and I think we'll all have to redo everything soon due to EU standardization.*" SME

A business organisation further expressed a willingness from Danish clothing companies to incorporate the use of databases:

"*There is a growing recognition that they need to work with the data more professionally - also that they need to tap into a system that can help them*" Business association.

[10] 37% of the total number of respondents from enterprises with less than 50 employees

Similarly, an organisation for Danish SMEs said:

> "*There is an openness to use public sector platforms in this regard. The platforms just have to work*" Business association.

4.6 The perspective of business leaders

Some interviewed business leaders voiced that before trying to digitalise, their current prioritisation was data mapping and creating processes for collecting and verifying data. A number of interviewees working with ESG-data management and sustainability measures mentioned that digitalisation was an important factor in facilitating compliance with future legislation and boosting company performance. Still, most of these interviewees further stated that while ESG data and compliance with upcoming legislation was a prioritisation on the C-level, digitalisation was not. One interviewee explained how management was too far removed from data management to understand what exactly it required:

> *"I don't think they realise the importance yet because they're not sitting with their hands in it."* Large enterprise

While several interviewees mentioned having tried to push digital transformation to their superiors within the respective enterprises, there remained a lack of understanding of digitalisation from upper management. An IT system provider seconded this statement while sharing common barriers met when discussing supply chain digitalisation with customers:

> "*(…) not everybody in the top management understands that it should be a priority - and getting the budget for doing these things is difficult (…). The resourcing is not quite there from the board and the management, [the responsibilities are not clear, and the incentive is lacking]; they're not rewarded for following up on these things."* IT vendor

A few enterprises did characterise digitalisation of ESG data as a C-level strategic prioritisation. Still, these enterprises also marked digitalisation a large and complex task, meaning several considerations had to be made before actions could be taken:

> *"It's taking some time for us because explaining what it means to the business is quite difficult. It's a whole new way of thinking about products…. For a company of our size, it's also important to understand what it means for the day-to-day work of the individual buyers, designers, and constructors - what is it they have to do differently? How do we communicate this internally? How do we change procedures? There's a lot of work to it. But we prioritise it. And especially because our customers are asking for it. It's kind of a licence to operate."* Large enterprise

Besides being a large complex task, enterprises also stated that multiple business needs and limited resources made digitalisation of ESG data just one of many priorities:

> *"I think it's an investment, and it requires resources. They understand that the information is needed - and we have a large process in front of us. But it's also difficult to balance; how to have the right resources focusing on the right things. Besides ESG data that needs to be solved, our business must also run right."* Large enterprise

4.7 Barriers to digitalisation

In the survey and interviews, we identified the following barriers to the digitalisation of collecting ESG data: fragmentation/lack of external and internal IT systems, lack of processes, lack of resources or prioritised resources, lack of skills, data quality or data gaps, as well as lack of standards and definitions.

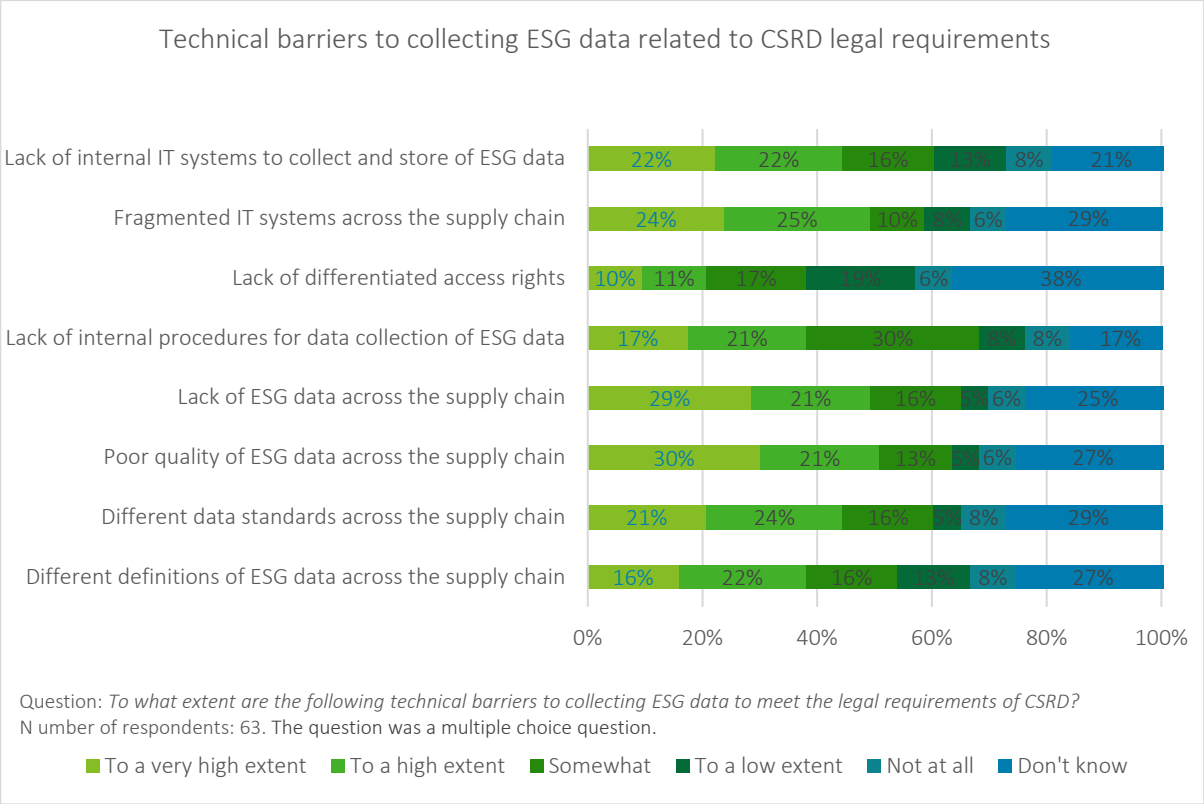


Figure 10. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

The interviews portrayed the textile supply chain as a large, complex, and highly fragmented network of several players spanning from the raw material supplier, manufacturers, and distributors to the retailer. Each player may be in its own country and use its own systems, software, and technology platforms, which challenges the standardisation and integration of data and processes. Moreover, textile suppliers are in countries such as China, India, and Pakistan, where digital resources may be limited. This IT fragmentation was revealed as a major barrier to digitalisation, creating information silos and fragmented information throughout the supply chain that cannot be easily shared. A business association voiced:

> *"One of the key reasons it's difficult for companies to digitalise, is that the textile supply chain is extremely non-digital. The brand in Denmark or Europe can be digital and have data platform systems, but it doesn't work at all if the suppliers and the supply chain aren't digitalised as well, so the whole transformation process isn't only transforming the individual brands in Denmark, it's actually the whole supply chain, and that's where the hard work is."* Business association

In the survey, almost 49% of respondents answered that fragmented IT systems were a barrier to the digitalisation of ESG data to a high or very high extent. The lack of data, IT systems, and software standardisation complicate data sharing throughout the supply chain, creating inefficiencies, duplicate efforts, and increased costs as each player may manually have to enter received data into their own systems. One enterprise voiced:

"There are many online providers that offer systems in which everyone can report. We're also part of those via our customers. It's a good idea that we have a system in which everyone can report but there are eight of these systems, so we end up having to report in and collect data for all eight systems. So, the idea of harmonising everything, and making it easy… the reality is, it's a market with a lot of suppliers who all want their solution to be THE solution" SME

:

With numerous supply chain players, each with their own business interests and priorities, and often working with several enterprises around the world simultaneously, implementing and adopting standard technical solutions can become a cumbersome process. One interviewee detailed how their enterprise had attempted to implement blockchain throughout its supply chain, as suppliers lacked the incentive to complete the additional task of entering data about the products into a system:

"The whole industry lacks IT systems, but even if the IT systems were there…I tried to experiment with blockchain and get people in the textile industry to enter extra data into the blockchain for my sake. I think digitalisation will be very, very difficult" Business association

Furthermore, the many IT solutions and standards available on the market, each with different features, integrations, and pricing models, make it more difficult for enterprises to navigate, compare, and evaluate which system or standard is best suitable for them. In the survey, 44% of interviewees indicated that the lack of internal IT-systems was a high or very high barrier to the digitalisation of ESG data. A few interviewees further mentioned how the lack of an industry-tailored solution hindered their adoption of systems.

Additionally, some enterprises also mentioned being reluctant to invest in digitalisation of processes from fear of having to change everything once it becomes standardised. Like other industries, the textile industry encompasses its own complex processes and requirements that a system should accommodate for the IT investment to be optimal. For a few large enterprises, the lack of tailored systems led to building their own systems. For some, the custom system enabled greater control over the features and functionality of the system, addressing business needs as they evolved. However, for others, the custom system had become too complex and costly, leading to integrating a new, external system.

Building a reliable, secure, and scalable IT system is a comprehensive task that requires a variety of technical skills, including software development, database management, and cybersecurity, in addition to the substantial investments required in each phase of the system development life cycle. For smaller textile enterprises, building customised IT systems is likely not an option or a priority due to limited financial resources or lack of technical expertise. As a result, SMEs will generally turn to off-the-shelf IT solutions, which are cost-effective, reliable, and can meet basic business needs.

Additionally, C-level executives play a critical role in driving digital transformation, meaning that if digitalisation is not prioritised, it may not be given the necessary resources and attention to be effectively implemented. Companies often have competing priorities and limited resources, and digital transformation initiatives can be costly and time-consuming. Executives that lack an understanding of ESG data management may, therefore, prioritise other areas of the business that they deem more critical to overall financial performance. As a result, digitalisation of ESG data may not be given the necessary attention and investment. For the SMEs, while the business owner may see the need or benefits of digitalisation, the company's resources may be too limited:

"If we had to hire one or two people to do this tomorrow it will steal directly from our bottom line." SME

SMEs do not have the same level of resources or capacity available as large enterprises. They may face further challenges in obtaining data from their suppliers, as they may not have the same level of bargaining power as large enterprises. A business association for SMEs spoke about how they worried about their members not having the resources to adopt the necessary processes and systems to supply data to business partners directly affected by CSRD:

"If you're a very small company and you happen to have a large firm as your main customer, then you're either going to have to up your expenses for administration or simply accept you're not going to trade with your bigger customers anymore. The other option is that CSRD encourages the big companies that deal with small suppliers to put forth support measures to assist the small companies in integrating into their reporting systems. But if there is an associated cost with dealing with your small suppliers, then there is nothing to stop these big companies from just going, "OK, fine. We're not going to deal with suppliers with less than 250 employees anymore", because those who are above that number, can already form the audit report."
Business association

Another barrier identified by 38% of respondents was the lack of internal procedures. While enterprises are increasing their focus on ESG factors within the supply chain, enterprises mentioned being in the early stages of ESG data collection and management, making the digitalisation of such processes too premature for the enterprise to prioritise or consider. In addition, the lack of CSRD requirements from the EC and the numerous frameworks and standards available for collecting ESG data not only make it difficult for companies to compare and benchmark ESG performance, but also create concerns about investing in digital solutions that may not align with the final requirements. As a result, several enterprises expressed that they would wait to determine their IT needs and investments until the EU determines the requirements. Still, for some enterprises, this procrastination may have negative consequences, as they may miss out on early learnings and benefits from digitalisation in the meantime. Interviewees further stated how the lack of human resources skilled in ESG and data management is a challenge to ESG digitalisation:

"I would say that right now, sustainability competencies are centralised in many companies. Because it's such a new area, it's not a natural part of education. Hopefully, over time, these competencies will be a normal part of the competencies that the people we are hiring have. But right now, there's a lack of competencies all around" ***Large enterprise***

The shortage of qualified candidates in the job market may be explained by ESG data management skills being a fairly new market demand. However, without skilled professionals to manage ESG data, enterprises may struggle to collect and report accurate and complete data sets, which can impact the ability to make informed decisions, take proactive measures to address ESG issues, and lead to financial penalties.

In the survey, 50% of respondents indicated that the lack of supplier data, and moreover, obtaining accurate and complete data were a barrier to a high or a very high degree. This challenge is compounded by the supply chain being a large complex system of several players located in several countries. Suppliers may not have the necessary resources to collect and report ESG data, e.g., skills, knowledge, IT systems, and processes, resulting in data gaps or errors. Others may not see the value in collecting or are reluctant to share ESG data from concerns of confidentiality or competitive advantage. It creates a lack of transparency, making tracking and verifying supplier data difficult:

"We send out questionnaires in which we get an overview of how things are going, but I look at the data we get from our suppliers, and a lot is lacking (…). It's also really difficult for us to validate the data we get from our suppliers, and we really see that there's a lack of a standardised systems for collecting these things." ***Large enterprise***

Additionally, suppliers may use different methods, metrics, or units of measurement, for example, one supplier may report water usage in litres, while another may report it in cubic metres, making comparison and aggregation of data laborious at the enterprise level. Finally, the lack of standardisation is further a challenge to data quality, as various ESG reporting frameworks and standards, such as GRI, SASB or TCFD, may lead to inconsistent, incomplete, or inaccurate data sets as suppliers adhere to certain standards while being unaware of others. Without access to accurate and complete data from suppliers, the purpose of building a digital record of ESG data is lost.

4.8 Drivers for digitalisation

The interviews revealed several motivators for better management and digitalisation of ESG data. These motivators included customer management, including customers' expectations of brand behaviour, complying with legislation, improving efficiency, minimising human error, managing environmental impact, identifying risks and opportunities in real time, and increasing data validity and accuracy.

The most frequently voiced motivation for digitalisation was complying with legislation. Interviewees, who said C-level executives were not currently prioritising digitalisation, further said that legislation created a significant push for upper management to invest in the digitalisation of ESG data. Especially the interviewees who were actively working with ESG data management asserted that more digital processes would ease reporting efforts.

A business association also described how digitalisation and automation of processes would boost compliance in the industry:

> "*The ultimate takeaway from this should be that the more automated the processes are, the better. The less time enterprises in this country have to spend on final reporting, the better it'll be for them and the greater the likelihood of creating true profitable value and conformity with upcoming and current legislation*" Business association

A few enterprises said that being sustainable was a company value, and as such, included in the business strategy. These enterprises expressed that increased management of ESG data, and for some enterprises also increased digitalisation of ESG data, would enable better oversight of actions and outcomes and control of efforts to meet sustainability targets:

> "*We have a sustainable strategy which we presented in our company in 2018, with a set of goals we need to measure and report on according to the national finance law. We have our climate impact calculators, and we have the data needed for that (…). I would say our internal vision is driving it. Of course, within the last two years a lot of legislative measures have been introduced, and [we have taken action due to] that. But I would actually claim that we do it because we want to"* Large enterprise

In addition, enterprises also noted that digitalisation would facilitate more effortless data exchange between supply chain players, including ESG data exchange with customers, decreased manual labour, and increased efficiency. As previously stated, data management and exchange are very manual processes facilitated by emails and Excel sheets. A system provider asserted how the reduction of manual work and increased systematisation and standardisation of information was one of the greatest gains from digitalisation for businesses in the textile industry.

> "*The biggest advantage is that [the employees] spend less time searching for information. That they get this data structure and eased collaboration with the supplier, so they can start focusing on things that drive value and not spend time digging through emails. A normal working day for a buyer is looking through emails to figure out who said what, when, and where are we in the process. There are these really tight deadlines, you need to approve things, and it's a creative process, so the designer might change from blue to green. It's difficult to track that if you do it via email.*" IT vendor

As such, skilled employees could use the time handling more complex assignments instead of, for example, reformatting data. Additionally, several enterprises voiced that reducing manual processes would also decrease the risk of human error and increase data traceability and transparency.

> "*I think it will make our data much more credible and valid because the more manual handling there is, the more human error. And I would say, on the other hand, time we can move from manually handling data, is time given to acting on the data."* Large enterprise

However, enterprises generally detailed that while mainly large B2B customers are requesting ESG data, both B2B and B2C customers do not accept poor performance within ESG measures, making control of ESG data is crucial, as the ESG performance equated to a licence to operate:

> "*I would say business to business; we get more and more questions [about these] things. I would say environmental data is more important than traceability for our B2B consumers. On the other hand, I have a feeling that end-consumers are more concerned about traceability than environmental data because [it's easier to comprehend] (..). From the consumer research we have been doing, the feedback is also that they don't want to be told that things are good. That is an expectation. And if they figure out you're not doing it, then you're dead and gone."* Large enterprise

Similarly, enterprises noted how digitalisation could advance risk management, making it possible for the enterprise to spot risks and opportunities quickly within the supply chain. One interviewee explained how the enterprise wanted to use data in the future to better control risks and realise opportunities:

> *"The purpose of retrieving this information on our suppliers should be to build a supplier portfolio to make you understand much better. OK, these 11 out of 50 suppliers are really outperforming, we need to place more orders with these suppliers – and we need to look at replacing some of the orders we placed with the supplier with 20% compliance with a supplier that has 80% compliance (…). But right now, we look historically at that data because we collect it once a year. We do the assessment, and we get some understanding, and then we can try to incorporate it in the coming year. But we need that information in real time to control and make sure that we place purchase orders with [the right suppliers]."* Large enterprise

Some enterprises also expressed how digitalisation would allow enterprises to differentiate themselves from competitors and create a competitive advantage. One enterprise described how they were working on using data to minimise the carbon footprint by prolonging usability and optimising the production of their products:

> *"We are also really focused on prolonging the use phase of our garments, which is an area that has been neglected for a long time but has quite a big impact on the full product's carbon footprint. So, we're working on initiatives to make sure that our products are used better and for longer, but also to figure out a way where we can actually get some data on the use phase because we don't have anything. So, we're kind of working on an assumption, and it's really difficult to include these actions in reporting and measurements."* Large enterprise

Some interviewees also mentioned that they hoped the increased traceability and transparency would help reduce the greenwashing and scepticism towards green companies:

> "*Hopefully, it can create a little more credibility around products because we are a little tired of when we go out and sell green products, people roll their eyes and say it must be a scam because it's everywhere. I think it needs some clean-up.*" SME

Similarly, another interviewee stated how CSRD will create more standardisation, enabling increased comparability between companies:

> "*Suddenly, we are [competing in a fairer] way because we are all [held to the same standards] and we're all measuring and reporting*" SME

Greenwashing has become a major problem in recent years, with companies using ESG claims as a marketing strategy to appeal to consumers who have become increasingly environmentally conscious. Some interviewees stated that this practice had raised consumer scepticism towards companies. By providing detailed information on sustainability practices, enterprises will demonstrate their commitment to the environment and back up claims with data. Sharing this information further enables consumers to hold companies accountable for their words and actions in their work to reduce the negative impact on the environment.

4.9 Conclusions

Overall, the assessment finds that there is a large gap between the digital maturity of companies and the expected requirements in terms of data collection and handling from the upcoming legislation – regardless of whether the company will be directly or indirectly affected by CSRD.

Further our analysis shows that:

A. Data collection, sharing, and management are generally very manual, as the industry has been slow to adopt digitalization, meaning that data exchange is mostly facilitated by email and handled by Excel.
B. The lack of standardized data formats means additional manual work in data handling when exchanging data with suppliers.

C. There is a tendency for the sustainability data collected on textile products for enterprises in Denmark, to focus on social indicators such as human rights, work environment and conditions, and business ethics.

D. Most respondents said that they did not use any ESG-data from publicly available databases (green databases) to calculate their environmental footprint, with most of these being small companies. That is mainly due to lack of knowledge, technical set-up, and/or financial resources. Especially as some databases require very specialized knowledge and multiple employees.

E. The maturity of ESG-related product data management among Danish textile companies varies significantly between enterprises. One factor that separates the more ESG-mature enterprises from those more immature is whether the enterprise is a producer or a distributor of textiles. The distributor relies heavily on receiving ESG product data from its suppliers and, therefore, has limited data, including limited opportunity to verify data accuracy and validity. Another factor influencing ESG data maturity is whether the enterprise holds a certification. The various types of certifications greatly influence the data points collected by the enterprise. However, our findings suggest that data from certifications tends to be less detailed.

F. We often found a positive correlation between the larger the size of the enterprise and the better the data quality and data maturity. While large companies generally collect ESG data, produce reports that include sustainability aspects, and have employees or departments dedicated to ESG, the SMEs interviewed were in the process of data mapping and figuring out which data points to collect.

5. Appendix - Methodology

The methodology of the analyses is based on a mixed methods design, in which quantitative and qualitative methods supplement each other. The quantitative data foundation is one survey with 246 completed responses in total, completed between 10 January and 10 March 2023. To back up and explore the survey results, we conducted 19 interviews, had 1 observation, conducted one workshop (with four organisations) and undertook desktop research from October 2022 to March 2023.

5.1 Desktop research

A desktop review was undertaken to ensure that the analysis was built on established knowledge. Deloitte drew upon material provided by the DBA (and other Danish public authorities), as well as research and expertise from Deloitte subject matter experts. Throughout the desktop research a broader range of literature and sources was studied to derive an understanding of the general context of consumers, systems and legislative environment of the subject matter. For the specific textile context, the environmental standards and CSRD related material was studied.

5.2 Quantitative approach

An online survey was conducted for this case study. The format of the survey enabled the collection of a significant amount of objective quantitative information in a short period of time. The primary aim of the surveys was to obtain broad-scale responses regarding the types of data currently being collected by enterprises, how this data is registered and shared across the value chain, and the expected burden of collecting additional data and reporting due to forthcoming legislation.

5.2.1 Sample

We conducted a comprehensive segmentation to ensure that we obtained outcomes from relevant enterprises that currently are, or will be, impacted by the forthcoming legislation. This segmentation ensured that our enterprise sample included relevant sectors and a distribution of company sizes that reflected the population expected to be affected by the legislation. The result of the segmentation is shown in 5.5 Segmentation approach.

In total 3.708 enterprises were identified in the segmentation and with 246 responses, we obtained a response rate of 7%, as shown below.

Table 1. Overview of sample size and response rate for surveys

Sample size	**3,708**
Completed survey	138
Partly completed in survey	108
Included in survey	**246**
Response rate	**7%**

Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

The comparison between the identified sectors in the segmentation and the survey-sample is shown in figure 11. We generally found the enterprises to be representative of the business population, however 49% of participants identified their belonging to the "retail/trade sector" – whereas the total population in the Danish textile sector categorized is that category is 71%. In addition, 5% of the interviewees could not be properly categorized. This makes it difficult to put the answers into their sector context.

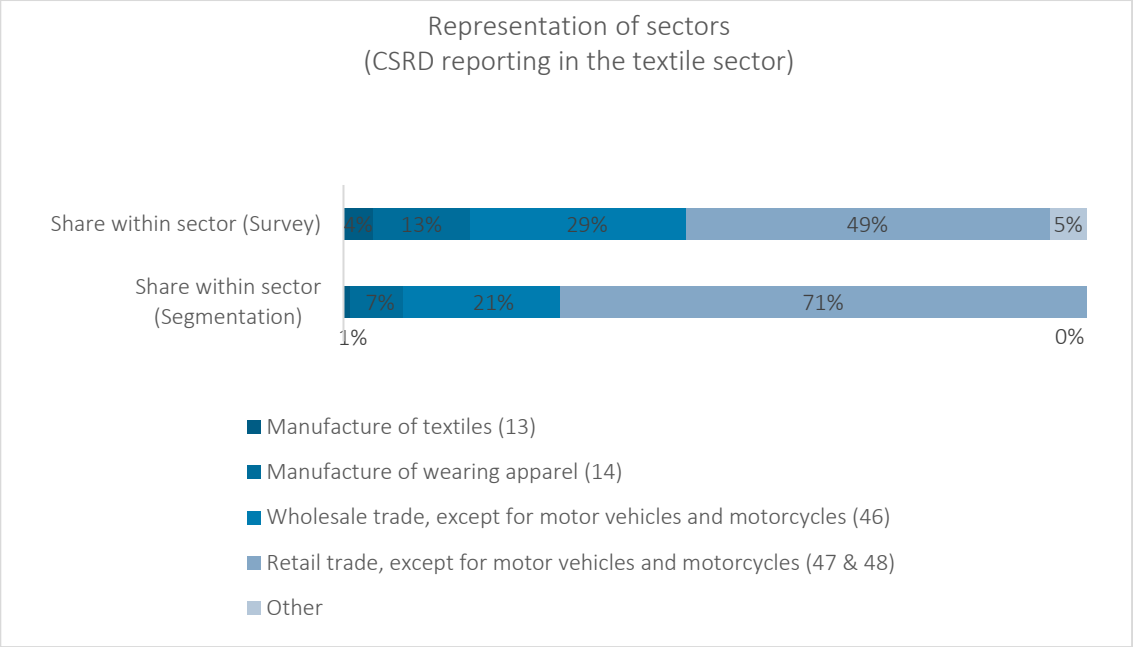


Figure 11. Source: Online survey sent by Deloitte and the Danish Business Authority, January 2023

5.2.2 Procedure for survey

In improving the quality of the survey, the questionnaires were made in close collaboration with the Danish Business Authority (DBA) and Deloitte professionals who have specialised knowledge of the fields. The procedure was as follows:

A. Questionnaires were made by Deloitte and reviewed and finally approved by DBA.
B. A thorough segmentation was made for the case study and approved by DBA.
C. The surveys were sent by DBA to the identified recipients through Digital Post (a Danish national digital mailing system).
D. After two weeks, a reminder was automatically sent to those enterprises that had not completed the survey.

5.2.3 Validation

To ensure the validity of the survey results, we have taken the following steps before and after the survey was launched:

Before:

A. Because the surveys included questions related to potential future legislation, there was a risk that respondents might interpret the expected legal requirements differently. To address this concern, we included relevant information and diagrams in the survey to provide participants with a clearer understanding of the requirements. We also simplified the language used in the survey to ensure that all participants could grasp the implications of the legislation for their company.

After:

A. To ensure that the survey participants represented the population being analyzed, we conducted a segmentation analysis that compared the size and sector of the enterprises surveyed to identify potential bias in the responses.
B. In exploring the validity of the results, the questions were compared to the data from the interviews. As we had enterprises, who participated in both the survey and the interviews, we were able to explore the answers to the survey questions and get an indicator of questions that might have been understood differently. We were able to this into account when we were analysing the data. In addition, we did some controls, in which we compared the answers to specific questions with the answers the enterprises had given in the background questions.

5.3 Qualitative approach

While the survey results help us to quantify and generalise processes and behaviours of the enterprises, a limitation of survey results is that they, due to the questionnaire structure, only give limited insights into complex processes. As a result, we also adopted a qualitative approach, which will be explained below.

5.3.1 Selection strategy

As in the survey approach, we conducted a comprehensive segmentation analysis to make sure that our sample consisted of relevant enterprises, interest organisations, experts, public players, etc. The result of the segmentation is shown below. Due to the segmentation, only certain sectors of the textile industry were covered, and therefore not every single player and perspective within the textile sector is considered.

In the survey we asked the participants whether they wanted to participate in follow-up interviews, and those that responded positively were invited to an interview while we continuously verified the background information of the enterprises to ensure that they met the segmentation criteria. As a result of the recruiting process, a large quantity of companies interviewed were rather small and would not fulfil the minimum requirements of the current CSRD regulation. The assumption was and remains that from a qualitative perspective the selected players from the segmentation analysis would give a good oversight of the industry. Nevertheless, it needs to be addressed as a potentially limiting factor in this analysis.

5.3.2 Interview approaches

The following methodological approaches were taken before, during, and after the interviews:

Preparation of the interview guide: We approached the interviews with a semi-structured, explanatory interview guide. We did not rigidly follow a formalised list of questions but rather posed open-ended questions that allowed the interviewees to elaborate on their experiences. The interview guide was reviewed by experts from Deloitte and DBA with expertise in the case study.

Conduct of interviews: The interviews were conducted by two consultants, which prevented subjectivity in the study. Most interviews were conducted online or by phone – a few interviews were conducted physically at the respondent's location. We ceased data collection when we determined that the data had reached the *theory-saturation* point – a judgment that we would not gain further knowledge by conducting additional interviews.

Analysis of interviews: The analysis utilised a cross-sectional approach, which provided an overview of the themes frequently emerging across the interviews. The themes from the interviews were compared to knowledge from other studies and information that already existed in the field, as well as the results from the conducted surveys.

5.3.3 Observation

Along with interviews and surveys, we employed ethnographic observations to examine whether the data collected from the interviews aligned with the actual words and actions of the respondents concerning the registration and reporting of data. We observed professionals carrying out their roles and utilising existing systems within their respective environments, allowing us to gain a human perspective on the current situation. This approach facilitated a contextual enquiry, enabling us to observe specific behaviours and gather feedback on why certain actions were being taken.

5.4 Validation and reliability

To ensure the reliability and validity of our analyses, we implemented several precautions throughout the data collection process and the analyses. For both the quantitative and qualitative methods, we conducted a thorough segmentation to ensure our samples included a broad range of players from relevant sectors. Upon comparing our segmented sample with the survey results, we found that although there was an underweight of one sector in the survey-sample, we in general observed coherence among the data from the surveys, the interview responses, the observed actions, and existing research in the field. By achieving an acceptable response rate and conducting a significant number of interviews, our assessment is that the data collection and analysis demonstrate a high level of validity and reliability.

5.5 Segmentation approach

Table 2 summarises the methodology behind the segmentation regarding which businesses were in scope for the survey. The segmentation of businesses is based upon Dansk Branchekode (DB)/NACE and number of employees within the business, based upon the CVR register.

Table 2. Segmentation analysis for survey

Segmentation level	Description	Population/ Number of businesses
Level 1	**Value chain link: Industry code** From the supply chain we identified that we should focus on textiles sector manufacturers, wholesalers, and retailers. Focusing on these types of businesses resonates with the understanding of stakeholders interviewed, incl. interest organisations.	20.000+ Danish companies registered in the CVR database as Manufacturing, wholesale and retail.
Level 2	**Commodity code "Branchekode"** Based on conversations with Dansk Mode & Tekstil and the Danish Environmental Agency, we identified 19 specific commodity codes. Out of the 19 identified codes, 2 commodity codes were deemed outside of the current scope.	9.995 Danish companies registered in the CVR database in the 17 identified commodity codes.
Level 3	**Size of business: Number of employees** Only businesses registered as limited companies, limited liability companies and sole traders were included. Businesses registered with 0 or one employee were excluded. This segmentation was done to ensure that the survey population consists of only active/operational businesses (thus excluding dormant/non-operational businesses), while at the same time ensuring representation of SMEs.	3.708 Danish companies registered in the CVR database.

The segmentation of businesses is based upon Dansk Branchekode (DB)/NACE and number of employees within the business, based upon the CVR-register, and several factors were taken into account. During the interview-phase we relied on firms of different sizes and from different sub-sectors of the textiles sector to be willing to participate in the interviews. To ensure that the interviews, were representative (across size of business and type of business/sub-sector), we continuously monitored the process of selecting and setting-up interviews with enterprises.

Table 3. Segmentation analysis for interviews

Segmentation level	Description	Population/ Number of businesses
Level 1	**Value chain link: Industry code** From the supply chain, we identified that we should focus on textiles sector manufacturers, wholesalers, and retailers. Focusing on these types of businesses resonates with the understanding of stakeholders interviewed, incl. interest organisations.	20/20
Level 2	**Commodity code "Branchekode"** The interviewee selection process will represent a variety of businesses within the 17 specific commodity codes identified for the survey segmentation.	10 Large/Medium firms 10 Small firms
Level 3	**Size of business: Number of employees**	Minimum 10 large companies (above CSRD requirement

Table 3. Segmentation analysis for interviews

	Large companies: Above 250 employees SMEs fulfilling CSRD requirements: Below 250 employees but a turnover of more than €40 million; or total assets of €20 million. Businesses selected for an interview will represent a variety of specific sub-sectors within the textiles sector (manufacturers, wholesalers, and retailers).	threshold) and 10 SMEs (above CSRD requirement threshold).

Visit our website:

Deloitte.

Funded by
the European Union

Find out more
about the Technical
Support Instrument: