



# Towards Strategic Implementations of the SDGs in Large Enterprises

- Learning from the Experiences with ISO 14001

2021





**AALBORG UNIVERSITY**  
STUDENT REPORT

**Department of Planning**

Geography

Rendsburggade 14

9000 Aalborg

<https://www.en.plan.aau.dk/>

**Title:**

Towards Strategic Implementations  
of the SDGs in Large Enterprises  
– Learning from the Experiences  
with ISO 14001

**Project:**

10<sup>th</sup> semester (Master's thesis)

**Project period:**

February 2021 - June 2021

**Participants:**

Laura Toftelund Poulsen

**Supervisor:**

Carla K. Smink

**Editions: 1**

**Report pages: 66**

**Appendix pages: 0**

**Completed 10-06-2021**

**Synopsis:**

This thesis examines how large enterprises can work strategically with the *UN's Sustainable Development Goals* (SDGs), as this research's state-of-the-art indicates that large enterprises lack strategic implementations of the SDGs. This research finds it interesting to explore if the experiences with the strategic management tool, ISO 14001, can be used for large enterprises to implement the SDGs strategically. Thus, the research question is as follows:

*To what extent is it possible to learn from experiences of implementing ISO 14001 to enable a strategic implementation of the SDGs in large Danish enterprises?*

The research question is answered by empirical data from 11 qualitative interviews and an non-systematic literature review.

It is concluded that the experiences with ISO 14001 can enable a strategic implementation of the SDGs based on identified challenges and opportunities that affect strategic implementations of the SDGs in large Danish enterprises. However, it is not possible to learn from all the experiences of ISO 14001 to enable a strategic implementation of the SDGs. This is because not all of the experiences with ISO 14001 can meet all the challenges and support all the opportunities.



# Preface

This thesis is made as the final work of my master's degree in Geography at Aalborg University in spring 2021. The thesis builds on the results from my project of my 9<sup>th</sup> semester where I did an internship at a large Danish Enterprise. Here, I worked with and studied the enterprise's implementation of the the the UN's Sustainable Development Goals (SDGs). The project concluded that the enterprise used the SDGs as an addition to its business as usual and not as a strategic use. It thus feels natural to continue this work in my master's thesis, by contributing with practical knowledge for how large enterprises can work strategically with the SDGs. Therefore, the thesis primarily apply to large enterprises that wishes to work strategically with the SDGs.

Writing this thesis has allowed me to expand my interest in advancing transformative sustainable development through the SDGs in the private sector. This has been of particular interest as I during this thesis continued working with implementing the SDGs in the large enterprise that I did an internship at. Therefore, I hope that the results from my thesis could provide the enterprise with recommendations for how it could implement the SDGs more strategically.

## Acknowledgements

Given the exploratory course of this thesis, the data collection has deeply depended on empirical data, which has been crucial for establishing this report. Therefore, I thank all of my 11 interview respondents for taking the time to participate in this research.

I would also like to give my most tremendous appreciation to my supervisor Carla K. Smink for the patient guidance and great encouragement throughout this thesis. It was an absolute honour for me to learn from your scientific knowledge and sharing friendly conversations at the beginning of our meetings.

Finally, I would like to thank my family and close friends for your unconditional support throughout the five years of my education.

*And thank you, Emil, for the encouragement, love, and tolerance on tough days.*

**Reading Instructions**

References in this report are made according to the Harvard referencing style. The complete list of references is located at the end of the report. Tables and figures are named according to the arrangement in the chapter that they are presented in; for instance, *Table 3.4* refers to the table being the fourth table in chapter three. Interviews with Danish respondents have been conducted for this report, for which reason the interviews are conducted in Danish. Therefore, the quotations from the interview transcriptions have been translated into English. This means that some of the Danish words have been adapted to make sense in English.

# Dansk Resumé

Dette speciale bygger på resultaterne fra mit 9. semesters projekt, hvor jeg var i praktik i en stor dansk virksomhed. Her arbejdede jeg med virksomhedens implementering af verdensmålene. Projektet konkluderede, at virksomheden implementerede verdensmålene som en tilføjelse til sin *business as usual* og dermed ikke som en strategisk anvendelse. På baggrund af disse resultater er formålet med dette speciale at bidrage med praktisk viden til, hvordan store virksomheder kan arbejde strategisk med verdensmålene.

Store virksomheder anses for at have en væsentlig rolle i at fremme verdensmålene. Af denne grund bør store virksomheders praktiske implementeringer afspejle en strategisk tilgang, der har en meningsfuld indflydelse på at fremme verdensmålene. Derfor sigter den indledende del af specialet mod at forstå i hvilket omfang store virksomheder strategisk implementerer verdensmålene i praksis. Dette er for at evaluere antagelsen om, at store virksomheder ikke arbejder strategisk med verdensmålene. Resultaterne fra denne del af specialet indikerer, at antagelsen er sand. Derfor betragter denne forskning det vigtigt at undersøge, hvordan store virksomheder kan drage lære fra erfaringer med et etableret strategisk bæredygtighedsværktøj. *Miljøledelsessystemer* er et eksempel på et værktøj som virksomheder anvender til at arbejde strategisk med miljødelen af bæredygtighed. *ISO 14001* er den mest anerkendte internationale standard for miljøledelse, der netop er et eksempel på et strategisk miljøledelsessystem. Dette leder frem til følgende problemformulering:

***I hvilket omfang er det muligt at lære af erfaringerne med at implementere ISO 14001 for at muliggøre en strategisk implementering af verdensmålene i store danske virksomheder?***

Til at besvare problemformuleringen er der indsamlet empirisk data som udgøres af 11 kvalitative interviews og et usystematisk litteraturstudie. Interviewene består af syv respondenter fra fem store danske virksomheder, tre respondenter, der dagligt konsulterer virksomheder i implementeringen af verdensmålene, og en respondent, der repræsenterer en dansk organisation for standardisering.

Interviewene er brugt til at identificere de udfordringer og muligheder, der påvirker strategiske implementeringer af verdensmålene i store danske virksomheder. Baseret på resultaterne fra interviewene konkluderes det, at især udfordringen med at oversætte verdensmålene til lokale mål påvirker virksomhedernes arbejde med verdensmålene. Dette betyder, at virksomhederne primært bruger verdensmålene som et kommunikationsværktøj. Således opleves verdensmålene ikke direkte som et strategisk værktøj, men som en del af de generelle strategiske formål om at implementere bæredygtighed i virksomhederne.

Baseret på det usystematiske litteraturstudie og interviewet med respondenter, der repræsenterer den danske organisation for standardisering, konkluderes det, at erfaringer med ISO 14001 viser, at det er muligt at undgå faldgruber og forbedre succesfaktorer. Nogen af de væsentligste faldgruber kan undgås ved at prioritere færre miljøpåvirkninger ved at fokusere på og fastholde kortsigtede mål. Nogen af de væsentligste succesfaktorer kan forbedres ved at involvere medarbejderne i aktiviteterne for standarden og sikre ledelsesmæssigt fokus for standarden. Desuden kan et øget fokus på samarbejde med eksterne interessenter bidrage til at forbedre miljøpåvirkningerne.

Baseret på de identificerede udfordringer og muligheder, som store danske virksomheder oplever med at implementere verdensmålene strategisk samt erfaringerne med ISO 14001 i virksomheder, gives der følgende anbefalinger til, hvordan virksomhederne kan arbejde strategisk med verdensmålene:

- Anbefaling 1: Angiv kortsigtede mål og mål fremskridt
- Anbefaling 2: Prioriter færre og mere specifikke mål
- Anbefaling 3: Sørg for *top-down* opbakning
- Anbefaling 4: Sørg for *bottom-up* involvering
- Anbefaling 5: Frem samarbejde på tværs af brancher

Erfaringerne med ISO 14001 kan bruges til at imødekomme udfordringen med at oversætte verdensmålene til lokale mål i store danske virksomheder, hvilket afspejles i anbefaling 1 og 2. Derudover kan erfaringerne med ISO 14001 bruges til at understøtte mulighederne for at involvere topledelse og medarbejdere samt interagere med interessenter, hvilket afspejles i anbefaling 3-5. Således konkluderes det, at erfaringerne med ISO 14001 kan muliggøre en strategisk implementering af verdensmålene i store danske virksomheder baseret på de ovennævnte udfordringer og muligheder. Det er imidlertid ikke muligt at imødekomme alle udfordringerne og understøtte alle de muligheder, der påvirker implementeringen af verdensmålene i store danske virksomheder.



# Table of Contents

<b>Chapter 1</b>	<b>Identifying Large Enterprises' Work with the SDGs</b>	<b>1</b>
1.1	State-of-the-art on Large Enterprises' Implementation of the SDGs . . . .	2
1.2	Environmental Management Systems as a Strategic Sustainability Tool . .	4
<b>Chapter 2</b>	<b>Research Question</b>	<b>9</b>
<b>Chapter 3</b>	<b>Research Design and Methods</b>	<b>11</b>
3.1	The Scientific Considerations of the Research . . . . .	11
3.2	Applied Methods for Data Collection . . . . .	13
<b>Chapter 4</b>	<b>Challenges and Opportunities that Affect Strategic Implementa- tions of the SDGs in Large Danish Enterprises</b>	<b>25</b>
4.1	Analysis Strategy . . . . .	25
4.2	Challenges Affecting Strategic Implementations of the SDGs . . . . .	26
4.3	Opportunities Affecting Strategic Implementations of the SDGs . . . . .	31
4.4	Sub Conclusion . . . . .	42
<b>Chapter 5</b>	<b>Experiences with ISO 14001 in Enterprises</b>	<b>45</b>
5.1	Pitfalls of ISO 14001 . . . . .	45
5.2	Factors for Successful Implementation of ISO 14001 . . . . .	48
5.3	Sub Conclusion . . . . .	51
<b>Chapter 6</b>	<b>Recommendations for Large Danish Enterprises to Work Strategic- ally with the SDGs</b>	<b>53</b>
6.1	Recommendation 1: Set Short-term Targets and Measure Progress . . . .	53
6.2	Recommendation 2: Prioritise Fewer and more Specific Goals . . . . .	54
6.3	Recommendation 3: Ensure Top-down Support . . . . .	54
6.4	Recommendation 4: Ensure Bottom-up Involvement . . . . .	54
6.5	Recommendation 5: Facilitate Collaboration across Industries . . . . .	55
6.6	Sub Conclusion . . . . .	55
<b>Chapter 7</b>	<b>Conclusion</b>	<b>57</b>

<b>Chapter 8 Methodological Limitations and Further Research</b>	<b>61</b>
<b>List of References</b>	<b>63</b>

# 1 | Identifying Large Enterprises' Work with the SDGs

This thesis builds on my project from my 9<sup>th</sup> semester's internship in a large Danish enterprise. The project investigated to what extent the large enterprise implemented the UN's Sustainable Development Goals (SDGs) strategically and concluded that the large enterprise engaged with the SDGs as an addition (add-on) to the business as usual (Poulsen, 2021).

Implementing the SDGs as an addition to the business as usual lacks a strategic and thus substantial use of the SDGs (Schönherr & Martinuzzi, 2019; Scheyvens et al., 2016). The enterprise used the SDGs to initiate initiatives that did not relate to the business, for example, by phasing out all single cups on the production site (Poulsen, 2021). As large enterprises are considered to have an essential role in advancing the SDGs, this is an issue (Scheyvens et al., 2016). Based on these results from my 9<sup>th</sup> semester's project, this thesis has an initial assumption:

***Large enterprises do not work strategically with the SDGs***

Large enterprises' practical implementations should reflect a strategic approach that has a transformative impact on advancing the SDGs (Schönherr & Martinuzzi, 2019). Sustainable development requires systemic changes of current practices to make the enterprises go beyond their business as usual (Scheyvens et al., 2016). Thus, the add-on and business as usual practices observed in the large Danish enterprises will not create the transformative actions for sustainable development that the SDGs mean to enable (Poulsen, 2021).

The 9<sup>th</sup> semester's project leaves unexplored knowledge on large enterprises' strategic engagement with the SDGs in practice. This knowledge is essential to acquire, as understanding large enterprises' implementation of the SDGs in practice can help understand how the goals can be strategically applied in a real-world context and enable broader uptake (Fleming et al., 2017). Therefore, the starting point of this thesis is to

investigate existing research on how large enterprises' implement the SDGs in practice to evaluate the initial assumption.

## **1.1 State-of-the-art on Large Enterprises' Implementation of the SDGs**

This section is a state-of-the-art that explores the existing body of international literature on how large enterprises implement the SDGs in practice with the aim of evaluating the initial assumption (c.f. chapter 1). The state-of-the-art has been carried out through a systematic literature review, for which the methodology is explained in chapter 3 *Research Design and Methods*.

### **1.1.1 Introducing the State-of-the-art**

The SDGs were published in 2015 and were set to be implemented from 2016, which has given large enterprises five years to implement the SDGs (United Nations, 2015). This relatively short period to implement the SDGs is reflected in the literature, as international research on large enterprises' practical implementations of the SDGs is scarce (van der Waal & Thijssens, 2020; Fleming et al., 2017; van der Waal, Thijssens & Maas, 2021). For this state-of-the-art, seven peer-reviewed articles were found to be relevant (see chapter 3 for relevance criteria). Still, this limited amount of research is reviewed to evaluate the initial assumption and explore large enterprises' approaches for implementing the SDGs. In chapter 3, Table 3.1 on page 16 provides an overview of the reviewed articles' authors, title, aims and results.

### **1.1.2 Results of the State-of-the-art**

In large enterprises, there are tendencies to select the SDGs that correlate with the existing business activities (van der Waal & Thijssens, 2020; Jones & Comfort, 2020; Santos & Bastos, 2020; Ionaşcu et al., 2020; Blagov & Petrova-Savchenko, 2020). The enterprises pick the SDGs that reflect the existing practices, for which reason there is a weak integration of the SDGs in the business strategies. This is, for example, illustrated by a large house building enterprise in the *United Kingdom* (UK). This enterprise focuses on SDG 1 (No Poverty) because the enterprise builds affordable housing, which contributes to housing costs and low wages in the UK (Jones & Comfort, 2020). Large enterprises in the real estate industry in the *European Union* (EU) primary focus on the SDGs that also reflect the existing business, namely SDG 11 (Sustainable Cities and Communities). From this SDG, the enterprise illustrates existing and positive contributions. This means that the enterprises typically create their interpretations of the SDGs, thus ignoring the targets

of the SDGs (Santos & Bastos, 2020; Ionaşcu et al., 2020; Jones & Comfort, 2020; Blagov & Petrova-Savchenko, 2020; van der Waal & Thijssens, 2020; van Zanten & van Tulder, 2018).

Some enterprises experience that their core business can help solve the global challenges that are addressed in the SDGs. For instance, *BT Group* believes that the technology that it represents can help realise the SDGs. However, there is no evidence of business cases or actions that are directly related to the SDGs (van der Waal & Thijssens, 2020). van der Waal & Thijssens (2020) elaborates, that if business cases are mentioned, they are examples of *vague* actions. For instance, *Nestlé* finds the SDGs to guide the creation of shared value, and *Merck* believes it has an essential role for women's health (van der Waal & Thijssens, 2020). van Zanten & van Tulder (2018) find a similar pattern for large enterprises that aim at aligning the business strategy to the SDGs. Most of the business strategies are directed at the SDGs that fit the internal and existing practices. van Zanten & van Tulder (2018) argue that enterprises' intentions of aligning the business strategy to the SDGs is misunderstood when they do not make any new actions related to the SDGs. This is especially problematic, as the enterprises perceive the externally actionable SDGs less relevant for the core business. External actionable SDGs are the SDGs that enterprises could impact with positive *spill-over* effects for society. The external actionable SDGs are perceived as too philanthropic for the enterprise. This indicates that enterprises seek to *avoid harm* rather than *doing good* (van Zanten & van Tulder, 2018).

In general, it is difficult to identify actions undertaken by large enterprises in their commitment to the SDGs (van der Waal & Thijssens, 2020; Ionaşcu et al., 2020). For instance, van der Waal & Thijssens, 2020 find that many of the enterprises communicate that they use the SDGs as a framework for identifying which sustainability challenges that they shall align to their business strategy. Some large enterprises also use the SDGs to identify the opportunities and risks that are of interest to their stakeholders (van der Waal & Thijssens, 2020). The fact that most of the large enterprises do not turn any of the SDG commitments into concrete actions could indicate they lack the organisational culture or miss the tools to do so (van Zanten & van Tulder, 2018; Ionaşcu et al., 2020; Fleming et al., 2017). Often, large enterprises use the *Global Reporting Initiative* (GRI) guideline or the *UN Global Compact* principles as tools to determine their performance on the SDGs (Fleming et al., 2017; Santos & Bastos, 2020; van der Waal & Thijssens, 2020; Blagov & Petrova-Savchenko, 2020). However, these tools do not encourage enterprises to improve practices or to change policies, but rather serve as mapping which SDGs their current practices and policies fit (Fleming et al., 2017).

Large enterprises also use the SDGs' logo to communicate that their reported sustainability activities fit a relevant SDG (van der Waal & Thijssens, 2020; Jones &

Comfort, 2020). A large enterprise illustrates this by categorising its GRI index to different SDG icons (van der Waal & Thijssens, 2020). This approach allows enterprises to continue their activities and do business as usual which does not generate beneficial effects for advancing the SDGs (Santos & Bastos, 2020; van Zanten & van Tulder, 2018; Ionaşcu et al., 2020).

### 1.1.3 Conclusion of the State-of-the-art

The state-of-the-art signifies that large enterprises' work with the SDGs is a largely unexplored area, which indicates a research gap. In addition, the literature does not explicitly investigate how large enterprises implement the SDGs. Consequently, large enterprises' work with the SDGs is an issue that is difficult to address because there are no best-case examples for successful strategic implementations of the SDGs. Thus, evaluating the initial assumption is difficult, as only little research has offered large enterprises' engagement with the SDGs in practice.

Nevertheless, the results indicate that large enterprises lack strategic implementations of the SDGs. They work superficially with the SDGs and do not take concrete actions on the goals. The enterprises implement the SDGs that support the existing practices, hence supporting business as usual. Some of these approaches reflect that enterprises lack *"the strategy, culture, and tools needed to turn sustainability commitments into concrete actions"* (Ionaşcu et al., 2020:15). In addition, there are limited examples of the enterprises measuring their progress with the prioritised SDGs (Ionaşcu et al., 2020; van Zanten & van Tulder, 2018; van der Waal & Thijssens, 2020).

Based on these results, this research aims at investigating how large enterprises can work strategically with the SDGs in practice. Therefore, it could be relevant to investigate *Environmental Management Systems* (EMS) more closely.

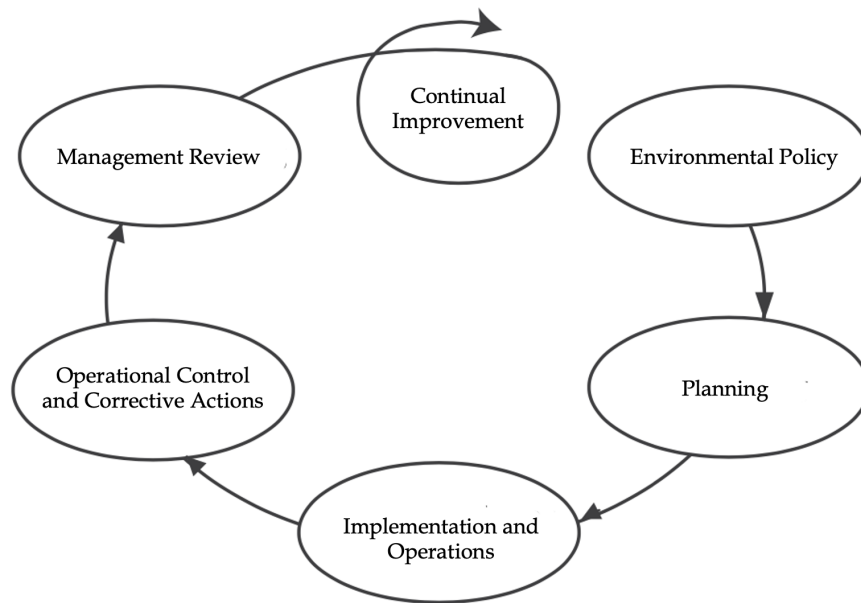
## 1.2 Environmental Management Systems as a Strategic Sustainability Tool

Since the 1990s, some enterprises have worked with environmental issues and sustainability. One approach that the enterprises have used is to adopt EMS voluntarily. EMS are internal systems for enterprises to systematically set up targets and strategies for reducing their environmental impacts (Mosgaard & Remmen, 2015).

### 1.2.1 Environmental Management According to ISO 14001

The most widely adopted international standard for EMS is *ISO 14001*. Other standards, for instance, include the *European Eco-Management and Audit Scheme* (EMAS). ISO 14001

was published in 1996, which means enterprises have used it for 25 years. The standard follows a plan-do-check-act methodology that provides enterprises with a systematic and strategic approach for managing their environmental impacts (Miljøstyrelsen, 2021; Dansk Standard, 2021; Mosgaard & Remmen, 2015). This process is illustrated in Figure 1.1:



**Figure 1.1** The plan-do-check-act methodology and structure of ISO 14001 (Mosgaard & Remmen, 2015:340, modified).

Figure 1.1 shows that ISO certified enterprises start with setting an *environmental policy*. The environmental policy is a declaration of commitment formulated by the management, which addresses enterprises' environmental impacts and ensures they comply with assigned regulations. The policy shall therefore establish the foundation for the vision of the environmental efforts (Mosgaard & Remmen, 2015).

The enterprises shall afterwards *plan* the environmental improvements of their environmental impacts. The environmental impacts relate to the enterprises' environmental aspects of activities, products, and services. From the environmental aspects with the most significant impacts, the enterprise should set measurable environmental objectives for improving the impacts. As part of the planning, the enterprise shall also examine how the environmental aspects apply to regulations. Finally, the planning process should ensure that the environmental objectives are met. Therefore, the enterprise should set measurable targets to meet the environmental objectives. Furthermore, the enterprise should formulate a plan of action for how to reach the targets within a given time frame. Finally, responsibilities should be delegated among the employees (ibid.).

After this part, the enterprise should carry out the *implementation and operations*

of the system. This involves allocating resources to facilitate the implementation of the environmental work and training the employees in understanding the importance of their responsibilities for reducing the environmental impacts. Communication also involves compiling documentation of the EMS (Mosgaard & Remmen, 2015).

After the implementation and operation of the environmental work, the enterprise should make *operational control and corrective actions*. Procedures should be established to monitor and measure operations, and records of these should be kept. The procedures include controlling if the targets are likely to be reached. If they are not, the enterprise should take corrective actions. Annually, audits occur to check if the EMS and the associated records conform to the prescriptions of the standard and if the system works as intended (ibid.).

The last step of the cycle is the *management review*. The management should regularly evaluate the annual audits and continually assess that the system is effective. From the reviews, there might occur areas of improvement, which should be corrected with actions. Therefore, there may be a need to change the environmental policy or redefine the environmental objectives of the system. Thus the *continual improvement* ensures that the processes of the system are ongoing and are consistent with the environmental policy (ibid.).

### 1.2.2 Revising ISO 14001 for Strategic Enhancement

Every fifth year ISO standards are obliged to be reevaluated by representatives of different standardisation organisations from around the world, and sometimes this results in revisions of the standards (Chief Consultant in ISO 14001, 2021). In 2015, ISO 14001 was revised in order to follow the common concept of the *High-Level Structure* (HLS). The HLS meant that enterprises operating with ISO 14001 were required to follow new clauses that enhanced the standard's strategic focus (Mosgaard & Kristensen, 2020).

The revision allowed integrating the ISO management systems (e.g. *ISO 9001* for *Quality Management* and *ISO 45001* for *Health- and Safety Management*) by aligning all the management systems in the same structure of clauses (Kristensen et al., 2020). The clauses 4-10 for ISO 14001 are summarised and briefly explained in Table 1.1. These are the clauses that are the requirements for the standard, where clauses 1-3 presents the standard description. For this reason, these clauses are not included in the table (Dansk Standard, 2015).



**Table 1.1** The clauses of the ISO 14001 standard.

Clause	Content
4. Context of the Organisation	This clause requires the enterprise to consider the context of the organisation by including any relevant stakeholders, legal requirements and risks that are affected by or affects the environmental activities of the enterprise.
5. Leadership	This clause requires the enterprise to address the top management's leadership, support and commitment for the EMS and to define the responsibilities, roles and environmental policy of the EMS. The environmental policy is required to align with the enterprises' overall strategy, to represent the overall goal of the EMS, and to prevent pollution.
6. Planning	This clause requires the enterprise to plan and identify risks and opportunities of the environmental aspects related to the organisation. At the same time, it requires the enterprise to plan how it will continuously follow legal requirements.
7. Support	This clause requires the enterprise to determine the resources in the EMS. These include competencies, training, EMS awareness, control of documented information, and internal and external communication relevant for the EMS.
8. Operation	This clause requires the enterprise to plan how to control its operations and responds to critical environmental situations.
9. Performance Evaluation	This clause requires the enterprise to address how it will monitor, measure, analyse, and evaluate the processes of the EMS. This includes addressing internal audits and management reviews of the EMS by ensuring the system's function and evaluating on allocating adequate resources in this regard.
10. Improvement	This clause requires the enterprise to check for improvements and correct with improved actions of the EMS processes.

**Source:** Dansk Standard (2015).

The revision of ISO 14001 in 2015 meant that it overwrote the requirements and approaches from the 2004 standard (Dansk Standard, 2021). According to Williams (2018), ISO14001:2004 failed to encourage enterprises to follow the sustainable changes that were demanded by societies, science, and businesses. This meant that enterprises worked superficially with ISO 14001, meaning that enterprises were weakly motivated and committed to their role of responding to the global environmental challenges from this standard. Williams compares this motivation to legal requirements: "*once the legal box has been ticked, the requirement conformed to, no further action needs to be taken*" (Williams, 2018:16). For instance, enterprises could choose a specific part of their operations to be certified by ISO 14001. This could cause a lack of focus on the business as a single entity with multiple environmental impacts spanning the enterprise. In addition, the parts of operations which possibly had the highest environmental impacts could be outsourced to countries that had fewer environmental regulations. Thus, this allowed the enterprise to hold the certification still while running business as usual.

This means that the ISO14001:2004 motivated enterprises to work in a closed system that caused limiting effects on the environmental pillar of sustainability, making no space for innovation or collaboration between or outside the enterprises' operations. Therefore, Williams argues that the HLS structure of ISO 14001:2015 represents a complete shift from an operational focus to a strategic focus where the system encourages enterprises to self-directing innovative solutions and collaborate with internal and external stakeholders on their environmental impacts. This means that the enterprises' sphere of influence

becomes greater in their role of responding to environmental challenges (Williams, 2018).

### **1.2.3 Summary of EMS as a Strategic Sustainability Tool**

EMS is a system that, in practice, enables enterprises to work strategically to reduce their environmental impacts. The most implemented standard of EMS is ISO 14001. ISO 14001 follows a plan-do-check-act methodology and structure that provides enterprises with a systematic and strategic approach for managing their environmental impacts. ISO 14001 has been implemented for 25 years, which means that certified enterprises could have experience with strategically managing environmental impacts. Therefore, it could be interesting to explore if these experiences can be used in the context of working strategically with the SDGs in large enterprises.

## 2 | Research Question

Large enterprises are considered to have an essential role in advancing the SDGs. For this reason, large enterprises' practical implementations should reflect a strategic approach that has a meaningful impact on advancing the SDGs. The preliminary part of this thesis aims to understand to what extent large enterprises strategically implement the SDGs in practice to evaluate the initial assumption that *large enterprises do not work strategically with the SDGs*. This study's state-of-the-art research shows that international research on large enterprises' practical implementations of the SDGs is scarce. The results indicate that large enterprises lack strategic implementations of the SDGs. Consequently, large enterprises' work with the SDGs is an issue that is difficult to address because there are no best-case examples for successful strategic implementations of the SDGs. Therefore, this research considers it essential to investigate how experiences with an established strategic sustainability tool could draw lessons for strategic implementations of the SDGs in large enterprises. Environmental management systems (EMS) is a system that, in practice, enables enterprises to work strategically to reduce their environmental impacts. The most implemented standard of EMS is ISO 14001. ISO 14001 has been implemented for 25 years, which means that certified enterprises could have experience with strategically managing environmental impacts. This leads to the following research question:

***To what extent is it possible to learn from experiences of implementing ISO 14001 to enable a strategic implementation of the SDGs in large Danish enterprises?***

### Sub-questions

In order to answer the research question, it is essential to investigate following sub-questions:

1. *Which challenges and opportunities affect strategic implementations of the SDGs in large Danish enterprises?*

2. *What are the experiences with ISO 14001 in enterprises?*
3. *How can the experiences with ISO 14001 be used to meet the challenges and support the opportunities that affect the strategic implementations of the SDGs in large Danish enterprises?*

## 3 | Research Design and Methods

This chapter presents the scientific considerations leading this research and explains the methodological basis of the research. The scientific considerations include the research's philosophical perspectives, while the methodology includes the methods applied for collecting the empirical data of this research. Thus, this chapter aims at clarifying the research design and methodological choices.

### 3.1 The Scientific Considerations of the Research

In this research, the ontological position is social constructionism. Social constructionism assumes that the world exists from people's constructed knowledge about it. The knowledge is constructed and shared in-between people, and it is, therefore, the practices that happen in people's everyday lives that are constructing the knowledge (Burr, 2015). Central for this ontological position is that the world is historically and culturally changeable, and so are the categories and concepts that are used to shape the understanding of it (Jespersen, 2014; Burr, 2015). This means that people's understanding of the world is products of a specific historical time or culture (Burr, 2015).

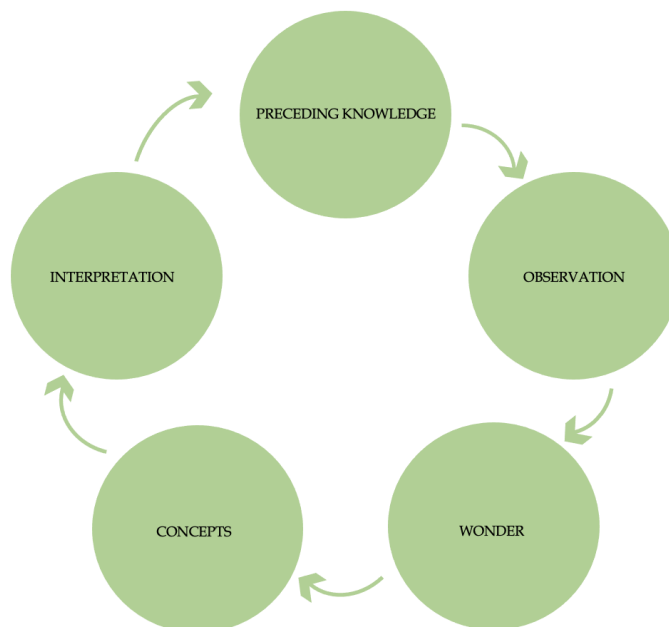
This project seeks to understand to what extent it is possible to learn from experiences with implementing ISO 14001 to enable a strategic implementation of the SDGs in large Danish enterprises. Given the definition of social constructionism, it is assumed that the research question shares and is linked to this ontology because people's constructed knowledge of the SDGs is essential to answer the research question. Thus, social constructionism allows this research to investigate how an international framework for sustainable development affects the social reality and practice it is implemented in.

Given the focus on people's understanding of implementing the SDGs, this research is qualitative and empirically driven. The background of this project was to build upon the conclusion from my project on my 9<sup>th</sup> semester's internship in a large Danish enterprise, as also explained in chapter 1. Building on the conclusion from the internship gives this project a motive to contribute to practice, as the knowledge generated through this research could, to a certain extent, help assess how large enterprises can work more

strategically with the SDGs in practice.

Given the current research gap on implementing the SDGs in large enterprises, this research follows an exploratory approach. This approach allows the researcher to investigate the subject field from an open approach to empirical knowledge. Exploratory research begins with a broad idea or assumption used to identify problems that may give insights that direct the further investigation and empirical data (Jupp, 2006). The initiating assumption of this research has been presented in chapter 1 and has been the key driver of approaching the data collection. The process of abduction can explain specifically the approach for this research.

Abduction is a dynamic process between induction and deduction. The process typically begins inductively by having no theoretical starting point before the data collection. Insights or concepts emerge from the data collection's analytical process, and the data collection will subsequently be interpreted from the insights or concepts. Thus, the interpretation of the empirical data and the insights or concepts altogether involves answering the research question (Brinkmann & Tanggaard, 2015). The abduction process of this project is visualised in Figure 3.1:



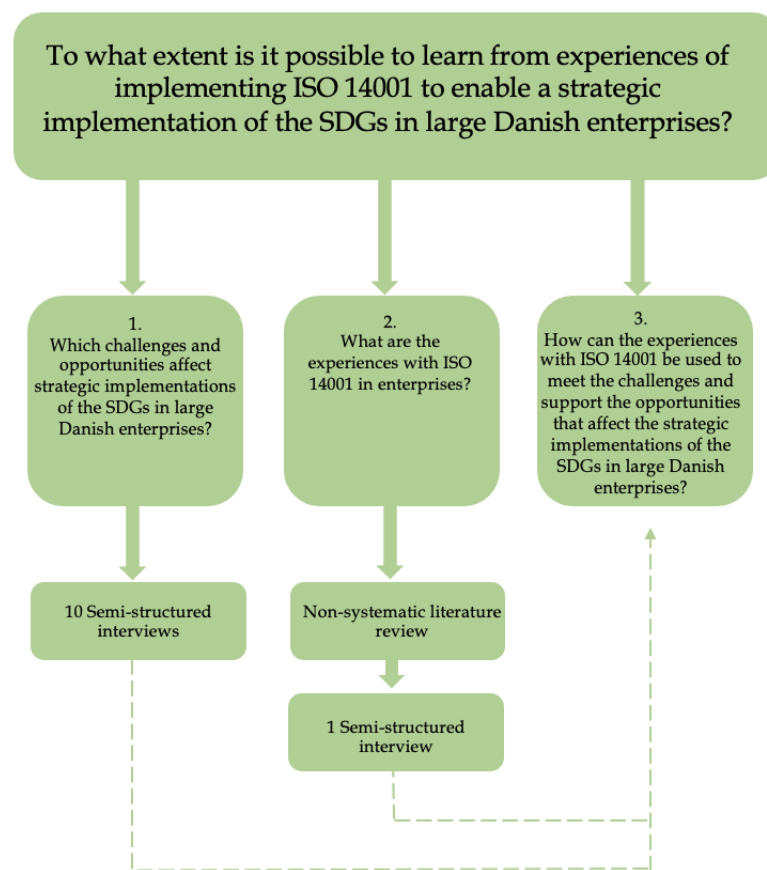
**Figure 3.1** The abduction process within this project (ATU Midt, 2018:3, modified).

Figure 3.1 illustrates that answering the research question begins with a *preceding knowledge* about existing research on strategic implementations of the SDGs in large enterprises. This knowledge is used to explore and *observe* large Danish enterprises' implementations of the SDGs by identifying challenges and opportunities that affect strategic implementations of the SDGs in these enterprises. The patterns that emerge

from the empirical data start a *wonder* of what can explain and, to a certain extent, enable a strategic implementation of the SDGs in large Danish enterprises. *Concepts* emerge from the analytical process of interpreting the empirical data, and these concepts are further used to interpret the data collection. As Figure 3.1 shows, the process might start all over again and build upon the generated knowledge.

## 3.2 Applied Methods for Data Collection

The research question is explored by three sub-questions, as described in chapter 2 on page 9, and answered from 11 qualitative interviews and an non-systematic literature review. The qualitative methods are considered appropriate for exploring experiences of practice that likewise support the philosophical perspectives of this research. The methods applied for answering the research question and the associated sub-questions are illustrated in Figure 3.2:



**Figure 3.2** The methodology for answering the research question.

Figure 3.2 illustrates the methodology for answering the research question. The applied methods for the data collection are elaborated in the following sections.

### 3.2.1 Literature Reviews

For this research, a systematic literature review has been applied as a method for establishing the state-of-the-art in the first part of the thesis (c.f. section 1.1 on page 2). In addition, a non-systematic literature review has been applied as a method for answering sub-question 2 of the research question (c.f. Figure 3.2). Thus this section both explains the methodology for the systematic literature review and the non-systematic literature review.

#### Systematic Literature Review

In order to evaluate the initiating assumption of the thesis that large enterprises do not work strategically with the SDGs (c.f. chapter 1), a systematic literature review has been done on large enterprises' implementation of the SDGs. A systematic literature review is an appropriate method for exploring and summarising existing research based on the prior formulated assumption. The review was conducted following the systematic steps provided by Jesson et al., 2011. The literature search was conducted from the beginning of February 2021 till the end of March 2021.

The first step is to identify relevant databases for the literature search. The chosen databases are *Scopus* and *ProQuest*. The search is limited to English peer-reviewed articles in order to secure the quality of the articles. The keywords are searched within the peer-reviewed articles' article title, abstract, and keywords to ensure that the keywords are not briefly mentioned in the full text. The search date is chosen to be 2015 to 2021, as the SDGs were published in 2015.

To ensure that the selected articles related to the assumption, I searched keywords and synonyms directly related to the assumption. Therefore, I searched the keywords:

(*"sustainable development goals"* OR *sdgs* OR *global goals*) AND (*"large enterprise"* OR *"large compan"* OR *"large firm"*) AND (*implement\** OR *integrat\** OR *engage\** OR *adopt\**) AND (*strategic\**)

However, this was too specific as it gave a total of seven results, indicating that this might be an unexplored research area or an unsatisfactory search. By broadening the search, the final keywords that identified most results (total n=185) were:

(*sdgs* OR *"sustainable development goals"*) AND (*large enterprise* OR *large firm* OR *large company* OR *large firms* OR *large companies*)

First, I removed *strategic* as keyword, which gave a total result of n=121. In order to see if broadening further could provide more results, I removed (*implement\** OR *integrat\** OR *engage\** OR *adopt\**). Thus, this resulted in a total of 185 peer-reviewed articles.



A total of 185 peer-reviewed articles from Scopus and ProQuest was transferred to the online system *RefWorks* in order to control the amount of literature. Duplications were removed, which resulted in a total of 176 peer-reviewed articles. Each abstract of the 176 articles was screened for any relevant findings exploring the implementation of the SDGs in large enterprises. The 176 articles were then limited to 36 articles by screening abstracts. The limitation was, for example, based on the following exclusion criteria:

- The article focused on SMEs
- The article did not mention the SDGs in either title or abstract, indicating no focus on the SDGs
- The article focused on countries' contributions to the SDGs
- The article investigated the most mentioned SDGs in corporate sustainability reports
- The article explored the financial benefits of implementing the SDGs in enterprises
- The article linked activities of different sectors to certain SDGs

All the 36 articles' full texts were glimpsed. This limited the final peer-reviewed articles to seven articles. Table 3.1 provides an overview of the reviewed articles' authors, title, aims and results. The exclusion of 29 articles was based on the fact that the articles mainly investigated enterprises' role in advancing the SDGs (e.g. Selmier II & Newenham-Kahindi, 2017; Kolk et al., 2017; C. S. Pedersen, 2018) or addresses the SDGs as part of a sustainability framework used to examine enterprises' sustainable development commitment (e.g. D'Souza et al., 2019; Battagliaa et al., 2020). This indicated that no focus was made on large enterprises' practical implementations or actions on the SDGs.

In the final step, relevant data were processed from the articles. This was done on the basis of interpreting the data by identifying recurring themes. These themes were related to the approaches of implementing the SDGs in large enterprises. Thus, the passages in the articles related to implementing the SDGs in large enterprises were copy-pasted to a new document that gathered all the passages according to the themes. From the emerged patterns of these passages, the state-of-the-art in section 1.1 on page 2 was done.

**Table 3.1** Overview of the reviewed articles' authors, title, aims and results.

Reference	Title	Aims of the Article	Results of the Article
van der Waal & Thijssens (2020)	'Corporate involvement in Sustainable Development Goals: Exploring the territory'	The study quantitatively and qualitatively maps the world's 2000 largest stock listed corporations' SDG involvement from their sustainability reports in order to investigate the corporations' motives of engaging with the SDGs.	The results revealed that the implementation of the SDGs in corporations is overall still limited. Corporations mainly associate the SDGs to the commitment with other sustainability related themes of the corporations. The results showed, that the SDG involvement is motivated by legitimacy and institutional motives. However, the SDG involvement is more symbolic than substantive. This indicates, that enterprises involve with the SDGs as a scheme with non-committal implications.
Jones & Comfort (2020)	'The UK's largest volume housebuilders and the Sustainable Development Goals'	The study qualitatively explores some of the UK's largest housebuilders' public claimed SDG commitments, in order to address the extent of the commitments and the challenges connected to fulfill the commitments.	The results showed that the level and scale of substantive commitment to the SDGs varied in UK housebuilding enterprises. The authors argued that the UK housebuilding enterprises overall contribute positively to the SDGs in the private sector. The authors identified three key challenges connected to the fulfillment of the commitments: 1) to focus on specific goals, 2) to measure progress, and 3) to report on the SDGs.
Fleming et al., (2017)	'The sustainable development goals: A case study'	The study qualitatively investigates how an Australian influential aquaculture company, that has not been introduced to the SDGs prior to the study, perceives the SDGs. The purpose was to determine motivations and barriers connected to the considerations of implementing the SDGs in a large company.	The main results showed that the company was open to consider the implementation of the SDGs, because corporate and personal values were driving the process of the implementation and the company was made aware of the potential gains of engaging with the goals that were related to aquaculture. These results demonstrate, that enterprises' active engagement to interpret the goals and be reflective about corporate and personal values is able to prepare enterprises for a positive engagement with the SDGs.

*Continued on next page*

Table 3.1 – Continued from previous page

Reference	Title	Aims of the Article	Results of the Article
Zanten & Tulder (2018)	'Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement'	The study quantitatively explores 500 MNEs' engagement with the SDGs to obtain initial evidence of the SDGs being a concept for international business strategies. The study aims to suggests a policy and research agenda to enhance MNEs' further engagement with the SDGs, as the study adopts an institutional lens to investigate, if institutional pressures are affecting MNEs' engagement with the SDGs.	The results revealed, that MNEs primarily engage with SDG targets that have internal sustainable effect in order to avoid negative impacts on sustainable development. MNEs act far less on SDG targets, that have external sustainable effect and thus those targets that proactively do good. From this, the authors problematise that MNEs adopt a passive role in advancing the SDGs, as sustainable development demands global and external action. The authors suggest, that MNEs should engage in more partnerships to realise more external SDG targets.
Santos & Bastos (2020)	'The adoption of sustainable development goals by large Portuguese enterprises'	The study qualitatively investigates the approach and reasons for implementing the SDGs into five large Portuguese enterprises' strategies. The aim with this, is to develop a theoretical framework that demonstrates enterprises' priority levels of management and motivations for adopting the SDGs.	The results show that the large Portuguese enterprises involve different management models for integrating the SDGs, in order to operationalise the SDGs. Some of the key reasons for such involvement are the enterprises' concerns over ethical and social legitimacy based on the 2030 Agenda. Thus, the results demonstrate that these reasons influence the level of management for adopting the SDGs. However, the results do not address the type of integration.
Ionaşcu et al., (2020)	'The Involvement of Real Estate enterprises in Sustainable Development - An Analysis from the SDGs Reporting Perspective'	The study qualitatively and quantitatively examine mostly large EU real estate enterprises' sustainability reports and annual reports in order to explore how real estate enterprises strive to create legitimacy through commitment to the SDGs. The study aims to evaluate the extent to which the SDGs are integrated in the enterprises' business models.	The results demonstrate that most real estate enterprises commit to the SDGs but do not undertake real actions. The study finds, that reasons are, that the enterprises do not have the needed strategy, culture and tools to act on the SDGs. However, few of the enterprises have reported KPIs to measure the degree of achievement of some of the SDGs.

*Continued on next page*

Table 3.1 – Continued from previous page

Reference	Title	Aims of the Article	Results of the Article
Blagov & Petrova-Savchenko (2020)	“The transformation of corporate sustainability model in the context of achieving the UN SDGs: evidence from the leading Russian enterprises”	The study quantitatively explores how leading Russian enterprises’ implement the SDGs in order to identify the integration of the SDGs in their corporate sustainability models.	The results show that leading Russian enterprises pick out the SDGs that correlates with their existing business practices. The lack of integrating the SDGs into corporate sustainability models is mostly due to a lack of cooperation between enterprises.

### Non-systematic Literature Review

In order to answer sub-question 2 (c.f. Figure 3.2), a non-systematic literature review was done. This literature review was conducted from the middle of April 2021 till the middle of May 2021.

Both grey literature and peer-reviewed articles are included in the search. For the grey literature, *Google* is used for searching the keywords. For the peer-reviewed articles, the databases *Google Scholar* and *PRIMO* are used. For the grey literature, keywords are searched in Danish, and for the peer-reviewed articles, keywords are searched in English. The search date is chosen to be 1996 to 2021, as ISO 14001 was published in 1996. The main keywords used for the English search are: *ISO 14001* and (*enterprises* or *companies*) and (*experiences* or *lessons learned* or *drivers* or *barriers*). The main keywords used for the Danish search are: *ISO 14001* and *virksomheder* and *erfaringer*. The total number that was found of the peer-reviewed articles is unknown. However, the articles that were excluded did not have a solution-based perspective of the experiences with ISO 14001, but merely explained the drawbacks and potentials of implementing the standard in enterprises. Especially two references were considered essential for answering sub-question 2:

- **(Boiral, 2011):** 'Managing with ISO systems: lessons from practice'
- **(C. Pedersen & Nielsen, 1996):** 'Kom godt i gang. Virksomheders erfaringer med miljøledelse'

The strengths of (Boiral, 2011) and (C. Pedersen & Nielsen, 1996) are that they both explain negative and positive factors for implementing ISO 14001 in enterprises and provide solutions for these.

(Boiral, 2011) is a peer-reviewed article that has interviewed 189 managers and employees' experiences of ISO 14001 in certified enterprises. In addition, recommendations from the managers of the enterprises are included as a solution-based perspective on the experiences as well as the author's synthesis of the enterprises' experiences. The study size of this article and the qualitative method used for the research provided the data that was considered essential for this research. The qualitative focus in the article thus supports that this research is lead by socially constructed knowledge.

(C. Pedersen & Nielsen, 1996) is a scanned pamphlet sponsored by the Danish authority *Miljøstyrelsen*. The pamphlet has included the experiences of ten Danish enterprises' experiences with ISO 14001. In addition, interviews with different environmental management advisory boards and a certification body have been conducted for the pamphlet. Therefore, this pamphlet includes solution-based perspectives from both enterprises and

environmental management experts.

### **3.2.2 Semi-Structured Interviews**

A total of 11 semi-structured interviews has been conducted to answer the research question. The respondents are made anonymous, and all the interviews have been transcribed.

It is essential to answer the research question from people's perceptions of implementing the SDGs in practice. This is due to the research gap on the implementation of the SDGs in large enterprises (c.f. chapter 1), and the philosophical perspective of this research. Qualitative interviews are beneficial in this connection, as they allow the researcher to explore an uninvestigated area of research in-depth and explore the respondents' perceptions of the topic (Bryman, 2012).

First and foremost, these people need to represent large Danish enterprises that work with the SDGs. However, as there is a research gap on the implementation of the SDGs, it was considered to include SDG consulting experts to get an overview of the challenges and opportunities that affect the strategic implementations of the SDGs in large Danish enterprises. Interviewing the SDG consulting experts first in time was considered essential, as patterns could emerge from these, guiding the interview questions for the large enterprises. Lastly, it is relevant to get a deeper understanding of the past experiences of implementing ISO 14001. Therefore, one of the interviews includes a person who deals with developing ISO standards and consulting enterprises in the implementation of these.

#### **Interviews with SDG Consulting Experts**

In order to answer sub-question 1 (c.f. Figure 3.2), interviews with SDG consulting experts were found relevant. As this is exploratory research, it is essential in the initiating phase of the data collection to establish an overview of the challenges and opportunities that affect strategic implementations of the SDGs in large enterprises. Therefore, I have interviewed experts who daily consult enterprises in implementing the SDGs. These experts can include business associations, networks for sustainable business development, and public authorities as chosen for this project. The respondents and their consulting organisation are illustrated in Table 3.2:

**Table 3.2** Overview of the interviews with the SDG consulting experts.

<b>SDG Consulting Experts</b>	<b>Respondent</b>
Business Association	Head of Sustainable Business
Network for Sustainable Business Development	Consultant in Sustainable Business
Public Authority	International Project Developer

The business association is involved in consulting enterprises within a broad range of industries and in increasing the diffusion of sustainable development, including the SDGs among enterprises of all sizes and industries. The respondent from the business association has been involved in a project that aimed at developing strategic approaches for working with the SDGs in 21 Danish enterprises for two years. Among the 21 enterprises were 11 of them large enterprises<sup>1</sup>. From the project, the business association developed a tool to help enterprises implement the SDGs. The respondent is therefore considered an essential expert.

The network for sustainable business development is involved in consulting enterprises in sustainable business development in one of the Danish regions. The network builds its consultancy on partnerships between enterprises, public authorities, and knowledge institutions. The network regularly holds courses and workshops that provide enterprises with inspiration or guidance on implementing sustainable development, including the SDGs. The respondent from the network mainly consults SMEs but can connect the experiences of the SMEs' implementations of the SDGs to the large enterprises.

The public authority is involved in consulting enterprises to transform their practices into more sustainable practices by following environmental regulations. Consulting different enterprises that, for example, implement the SDGs as a tool to transform the practices, the public authority might, to some extent, have knowledge that inspires or guides enterprises to implement the SDGs. The respondent of the public authority has more precisely experience with international authority collaboration by exchanging experiences of implementing sustainable development such as the SDGs across sectors.

<sup>1</sup>Large enterprises are classified as  $\geq 250$  employees and/or with revenue of  $> 313$  million DKK (Martinsen Rådgivning & Revision, 2021)

### Interviews with Large Danish Enterprises

After the expert interviews, it was considered essential to interview respondents from large Danish enterprises that work with the SDGs. In order to select the enterprises, I drew advantage of the two expert interviews with the business association and the network for sustainable business development. The business association has much experience with consulting large enterprises in their implementation of the SDGs. For this reason, the large enterprises were selected because of their membership in the business association. This still resulted in an intangible amount of large enterprises. Therefore, I identified the large enterprises that were also members of the regional network for sustainable business development. This means that the selected enterprises have opportunities to be consulted in implementing the SDGs in both the business association and the network for sustainable business development.

The total number of large Danish enterprises that had membership in both consulting organisations was 13, where 11 of these mentioned in their CSR that they worked with the SDGs. All 11 large enterprises were contacted and resulted in five different large enterprises as the remaining enterprises either declined or did not return with an answer. The respondents of the five large Danish enterprises, the enterprises' industries, and their employee number are shown in Table 3.3:

**Table 3.3** Overview of the interviews with the large Danish enterprises.

Enterprise	Corporate Employee Number	Danish Employee Number	Industry	Respondent
A	16,000	3,500	Architect- and Engineering Consultancy	1) Environmental Consultant 2) Senior Sustainability Manager
B	2,230	236	Fishery	Corporate Sustainability Manager
C	2,939	335	Concrete Manufacturing	Head of Sustainability & External Relations
D	110	110	Maritime Logistics	1) Environmental Coordinator & Engineer 2) Head of Law, Policy, & CSR
E	6,179	3,854	Power Supply	Senior Sustainability Manager

**Source:** Employee numbers are based on the enterprises' web pages. Industrial classifications are based on (Danmarks Statistik, 2014).



All the respondents of the large Danish enterprises illustrated in Table 3.3 are considered important to answer the research question because they are part of implementing the SDGs in their specific enterprise. Enterprise B, C, and E were all represented by their sustainability manager. Enterprise A and D each provided two respondents from different positions. Common for the two enterprises was that the respondents were representatives of employees working hands on with the SDG activities directed from the managers, and the managers themselves. This means that they experience directly the positive and negative impacts that the implementations of the SDGs entail. Managers and employees are thus significant in providing information and recommendations on the issues that emerge from the implementations of the SDGs.

It is considered a strength that the enterprises represent different industries and positions in the enterprises. Despite the small sample of enterprises, it is interesting to explore if any of the enterprises find the challenges and opportunities that affect strategic implementations of the SDGs especially difficult for their specific business. In addition, having respondents from different positions can reveal different challenges and opportunities in contrast to the managers' perspectives.

As visualised in Figure 3.1 and explained in section 3.1 the concepts to interpret the data collection has emerged from the analytical process of interpreting the empirical data. In this case, the central concept that emerged from the empirical data that could explain and interpret the data was EMS. The environmental consultant in Enterprise A mentioned that they had been given courses for customers on how the EMS support various SDGs. This initiated a thought that there might have been similar difficulties of implementing EMS standards when these were published. Thus, this directed to interview a person with years of experience in ISO 14001.

### **Interview with Consultant in ISO 14001**

In order to answer sub-question 2 (c.f. Figure 3.2) it is essential to contribute with knowledge from a person who has experience with the revision of the ISO 14001 standard throughout time. Therefore, I found it essential to interview a respondent representing a Danish organisation that publishes ISO 14001 and facilitates the standard courses.

I contacted a person from one of these organisations after joining the Danish webinar *UN SDGs, Standards, and Your Enterprise* arranged by *CLEAN* (a Danish cluster for the environment). On the webinar, the person provided insights into how the SDGs can be linked to EMS and, more specifically, ISO 14001. The respondent and the position in the organisation is shown in Table 3.4:

**Table 3.4** Overview of the interview with the consultant in ISO 14001.

<b>Organisation</b>	<b>Respondent</b>
Organisation for Standardisation	Chief Consultant in ISO 14001

The respondent advises and gives courses for enterprises in environmental management with an emphasis on ISO 14001. In addition, the respondent has worked eight years in the standard organisation and has thus years of experience with ISO 14001 as well as the value of international standards as strategic tools.

Having generated knowledge at this point in the time sequence of large Danish enterprises' challenges and opportunities that affect the strategic implementations of the SDGs, allows using the unwritten sub-conclusion and discuss these with the respondent.

## 4 Challenges and Opportunities that Affect Strategic Implementations of the SDGs in Large Danish Enterprises

This chapter analyses the opportunities that affect strategic implementations of the SDGs in large Danish enterprises. The analysis is based on the interviews with five large Danish enterprises and the respondents who on a daily basis consult enterprises in implementing the SDGs. The interviews have been manually transcribed in their full lengths which has given the foundation for coding the interviews.

### 4.1 Analysis Strategy

As described and visualised in chapter 3 *Research Design and Methods*, this research follows the process of abduction. This is also reflected in the coding of the interviews:

The coding of the interviews with the large Danish enterprises is based on open- and closed coding. Closed coding involves approaching the empirical data from codes found by preceding knowledge. As the interviews with the SDG consulting experts were conducted first in time, patterns emerge from these, which guide the interview questions for the large enterprises. This knowledge, in combination with the preceding knowledge of large enterprises' lack of strategic work with the SDGs (c.f. chapter 1), directs the closed coding of the interviews with the large Danish enterprises. Thus, this coding strategy is deductive, as the transcriptions of the empirical data are investigated from preceding codes (Brinkmann & Tanggaard, 2015).

Open coding involves generating codes that emerge from the empirical data, which was not expected from the preceding knowledge and the closed coding. Thus, this coding strategy is inductive, as the transcriptions of the empirical data show interesting passages and points that also are relevant for answering the research question. Thus,

these passages are given codes that relate to the theme of these passages (Brinkmann & Tanggaard, 2015).

The interviews with the SDG consulting experts were approached similarly. As these interviews were conducted first in time, it was the initial assumption from chapter 1 that guided the interview questions for these respondents. However, as this is an exploratory study, most of the passages and points from these interviews were based on open coding. The reason is that these interviews were conducted first in time to get an overview, thus an open approach to the respondents' knowledge.

Sub-codes of the codings are assembled in main codes. Every subsection consists of multiple sub-codes. The sub-codes will be presented for each of the subsections. The main codes appear in this chapter by the name of the subsections. Quotations from the interviews will be presented and they are included from the passages of the sub-codes and tagged according to the sub-code they emerge from. As the respondents are anonymous, they are named according to their respondent title from the respective overview-tables in chapter 3 *Research Design and Methods*. When mentioning the specific enterprise, the enterprise is named according to its letter given in Table 3.3 on page 22. The aim with this, is to understand which enterprise that is mentioned and its circumstances (e.g. industry and employee number) under which it operates.

## 4.2 Challenges Affecting Strategic Implementations of the SDGs

This section identifies the challenges that affect strategic implementations of the SDGs in large Danish Enterprises.

### 4.2.1 Translating the SDGs to Local Goals

This subsection is based on the sub-codes *Lost in Translation*, *Immeasurability*, and *Fluffiness*.

All of the interviewed enterprises find that the SDGs address broad and global challenges that are difficult to reflect in the context of the enterprises. It is a complex process to translate the goals into the enterprises' specific contexts:

The SDGs are not formulated for an energy enterprise. [...] the SDGs are, for better or worse, very, very broad. Moreover, it also means that when we look at the targets, we cannot just plug and play and say, if we read this target, we can ultimately figure out how our impact is on it. The target needs to be translated into an energy context, which is clearly a challenge.

Senior Sustainability Manager E, Code: Lost in Translation

Enterprise E believes that the translation of the goals has been a challenge in how an energy enterprise can specifically contribute to the broad formulations of the goals and targets (Senior Sustainability Manager E, 2021). Thus, the enterprise has chosen to primarily focus on the goals that reflect its existing business activities despite awareness of the interconnections of the SDGs:

If you look in our sustainability report, then right now, we are not reporting across all the SDGs. We report mostly on those where we have a positive impact or where our programs match. Some day, we would like to move on and say we would like to report across the SDGs, and then we map the impact we have within each of these areas. We have not reached that point yet. It takes a long process to handle that and present it properly.

Senior Sustainability Manager E, Code: *Lost in Translation*

Enterprise E only reports on the goals that reflect the positive impacts of the enterprise (Senior Sustainability Manager E, 2021). Reporting on the positive impacts and ignoring the negative impacts could affect the enterprise of being accused of green washing (Consultant in Sustainable Business, 2021). However, the argument is, that mapping the enterprise's impact across all the SDGs is a long process that the enterprise has not prioritised. The reason is that the 169 targets associated to the goals are time consuming and demanding to interpret (Senior Sustainability Manager E, 2021). According to Consultant in Sustainable Business, the network for sustainable business development experiences that enterprises find the targets too specific:

[...] Precisely because it [the formulation of the SDGs] is broad, but at the same time also some very specific targets, which you may not necessarily see yourself in. What do you do with them? Are we going to define it ourselves and how do we do that and what are we doing okay? One can also say that one can also miss the hotspots that are in one's business. You do not get help to identify them either.

Consultant in Sustainable Business, Code: *Fluffiness*

The broad overall goals and specific targets could therefore explain that the process of interpreting the SDGs might be too complex for enterprises to handle. Enterprises lack guidance in interpreting and prioritising the goals. Determining the interpretation and prioritisation themselves raises several questions of uncertainty for how to handle the goals (Consultant in Sustainable Business, 2021). Enterprise C believes that the complexity is explained by the *fluffy* character of the goals, which makes them difficult to measure:

The way we work with sustainability is often very particular measurable. So how much CO<sub>2</sub> is coming out of our chimney? How are our limit values compared to other emissions? It can be measured completely accurately. [...] You could say that the SDGs can quickly become fluffy. [...] You can say that the SDGs are super ambitious, but at the same time, they are not very measurable. So yes, we need clean water, and we need to reduce inequality, but how is that measured?

Head of Sustainability & External Relations C, Code: *Immeasurability & Fluffiness*

Enterprise C typically works with areas of sustainability that can be measured accurately. The SDGs' fluffy formulations make them challenging to measure compared to other ways of working with sustainability in the enterprise. The agenda of the SDGs is ambitious, but it is difficult to measure and identify the progress of goals that, for instance, include reducing inequality. The fluffy formulations could cause the SDGs to become unambitious if enterprises do not know how to measure the goals. The reason is that it is not certain that enterprises impact the SDGs when they interpret the goals. In addition, if the enterprises cannot measure the SDGs, it could become a challenge to benchmark between enterprises. The enterprises could lose interest in implementing the SDGs if they cannot be competitive, compared to other more measurable sustainability frameworks or tools (Head of Sustainability & External Relations C, 2021).

#### 4.2.2 Lacking Demand for the SDGs

This subsection is based on the sub-codes *Business Constraints* and *Measurable Frameworks*.

A challenge for implementing the SDGs strategically is the lack of demand from stakeholders (Head of Sustainability & External Relations C, 2021; Environmental Consultant A, 2021; Head of Sustainable Business, 2021). Although some of the enterprises find that the SDGs can enable an advantageous market position (Senior Sustainability Manager E, 2021; Head of Law, Policy, and CSR D, 2021; Senior Sustainability Manager A, 2021), Enterprise C does not experience demand on implementing the SDGs from stakeholders:

The other certification schemes that we are working with are some hardcore measures. Moreover, when we, for example, talk to investment enterprises and banks, they are not talking about the SDGs. They talk about *ESG Ratings*, *EU Taxonomy*, and they might talk about *Science Based Targets*, and so on. However, they never talk about the SDGs.

Head of Sustainability & External Relations C, Code: *Business Constraints*

Although Enterprise C works with the SDGs, it is not the demand from stakeholders that is a driver for working strategically with the SDGs. The SDGs are not perceived to be

advantageous when the enterprise talks with investors or banks. The stakeholders might find the goals fluffy and immeasurable compared to other sustainability frameworks or tools such as *Science Based Targets* or the *EU Taxonomy*. The SDGs are therefore not be of investment interest to some stakeholders (Head of Sustainability & External Relations C, 2021). Environmental Consultant A has used the SDGs to communicate which SDGs some of the enterprise's consulting projects support. However, the respondent has not experienced many customers of Enterprise A that explicitly demand that the SDGs are part of project executions:

I do not think it [the demand of the SDGs in project executions] is something the customers specifically ask. I do not think that many customers come to us with that. Now, I know that customers of our Swedish colleagues and English colleagues are a little more ahead in asking for those things. For instance, they ask that you get documented it a little better and how they can work with it. However, I would say it is not like we are overwhelmed with customers who want to work with them [the SDGs].

Environmental Consultant A, Code: *Business Constraints*

According to Environmental Consultant A, some of the corporation's customers in other countries such as Sweden and England demand that the SDGs are part of project executions (Environmental Consultant A, 2021). The lack of demand for the SDGs from stakeholders in Denmark could be explained by the different markets and industries that the interviewed enterprises represent (Head of Sustainable Business, 2021). This is what Head of Sustainable Business experiences when talking to large enterprises:

Not all markets and not all customers are so enthusiastic about the SDGs. So for many enterprises, as soon as they start using sustainability as branding, positioning, or innovation tactic or strategy, it is not always that the SDGs are relevant. There are national and international regulations and standards regarding fishing, for example, which are much more detailed than *Life Below Water* which I believe is SDG 15.

Head of Sustainable Business, Code: *Measurable Frameworks*

Head of Sustainable Business does not believe that all markets find that the SDGs are relevant when wanting to promote enterprises' sustainability performance. Instead, the respondent believes industry-specific regulations or standards are more relevant when enterprises promote their sustainability performances. The argument is that the industry-specific regulations or standards are more detailed and measurable than the SDGs. In addition, the industry-specific regulations or standards are more the focus for stakeholders than the SDGs when having an interest in enterprises. When enterprises experience that the SDGs are of little interest for stakeholders, Head of Sustainable

Business believes that the SDGs are perceived to be more *nice to have* rather than *need to have*. Therefore, the business association experience that enterprises use the SDGs as a communication tool to communicate existing sustainable activities (Head of Sustainable Business, 2021). Hence, the incentive to implement the SDGs strategically could lack as the enterprises might feel that "*the SDGs do not make much of a difference to how we work with sustainability. The SDGs are another way of communicating what we already do or as we would do anyway*" (Head of Sustainability & External Relations C, 2021).

#### 4.2.3 Being Transparent about Negative Impacts

This subsection is based on the sub-codes *Negative Impacts* and *Green Hushing*.

The enterprises' communication about their sustainability efforts through the SDGs is perceived as an opportunity to implement the SDGs strategically (Senior Sustainability Manager E, 2021; Corporate Sustainability Manager B, 2021; Head of Law, Policy, and CSR D, 2021; Senior Sustainability Manager A, 2021; Head of Sustainable Business, 2021). However, enterprises also experience it as a barrier (Senior Sustainability Manager E, 2021; Corporate Sustainability Manager B, 2021). This is because being public transparent about the negative impacts could negatively impact businesses by risking criticism (Consultant in Sustainable Business, 2021). Consultant in Sustainable Business has experienced that some enterprises will not tell about their sustainability efforts publicly:

We observe that many enterprises do a lot related to sustainability. However, they do not want to tell about it because, as they say: "We are not at the finish line. We know that there is a lot we do not have under control yet, so we do not want to go out and brand us as sustainable. We still have to do this and this first". That is when we tell them that this is how it is to work with sustainability. It is that you never reach the finish line. There is always something you can do better. So there is a barrier to that, which is why we talk about this as *green hushing*.

Consultant in Sustainable Business, Code: *Green Hushing*

The network for sustainable business development has observed *green hushing* tendency among enterprises because of a concern that they are not ready to communicate their sustainable activities before having them under control. Consultant in Sustainable Business argues that the challenge with this mentality is that sustainability is never something that one fully reaches. Therefore, the network considers it essential to be transparent about both positive and negative impacts. The reason is to inspire consumers or enterprises within the industry of their sustainable changes and their understandings of areas that demand their solutions. Avoiding the criticism of their sustainability efforts by not communicating any efforts could result in more difficulty integrating sustainability



in the business (Consultant in Sustainable Business, 2021). Enterprise E also experiences that it is a challenge to be transparent about negative impacts:

It is a process as an enterprise to report on something where you do it less well. So there is more work internally in training the muscle where you put forward, that there are some elements of SDG 8 or 13, now I just mention some of them, where our performance today is not as good as we would like to. Getting to a point where you put it very honestly is a process in your enterprise.

Senior Sustainability Manager E, Code: *Negative Impacts*

Enterprise E sees one of the challenges of the SDGs as being an ongoing process. When there is no finish line, there are continually negative impacts that the enterprise can improve and communicate (Senior Sustainability Manager E, 2021). Senior Sustainability Manager E explains that it takes practice for the enterprise to become transparent about the negative impacts. The reason is that the enterprise usually reports on positive impacts. Therefore, when reporting on negative impacts, it could imply that the enterprise is doing less well (ibid.). Corporate Sustainability Manager B explains that concern of transparency is something Enterprise B has also experienced in the work with the SDGs:

One of the differences in the work we have now with the SDGs compared to before is that we are much more specific about what targets we want to achieve. However, there is something in publishing those targets. One thing is to have some targets on the internal track, but saying it in public obliges differently.

Corporate Sustainability Manager B, Code: *Negative Impacts*

Since Enterprise B began working with the SDGs, it has not always been setting targets for the work. Being transparent about those targets obliges the enterprise to meet those targets, which most likely creates concern about not meeting the targets and being criticised (Corporate Sustainability Manager B, 2021). Therefore, green hushing is a survival tactic that could hinder enterprises from implementing the SDGs that they need to perform better on (Consultant in Sustainable Business, 2021).

### **4.3 Opportunities Affecting Strategic Implementations of the SDGs**

This section identifies the opportunities that affect strategic implementations of the SDGs strategically in large Danish Enterprises.

#### 4.3.1 Accessing Advantageous Market Positions with Sustainability

This subsection is based on the sub-codes *Emerging Trend*, *Future Regulations*, and *Economy*.

Enterprises' work with the SDGs is, among other things, driven by moral principles that are connected to enterprises' awareness of their roles in global sustainable development. At the same time, they recognise, that their existence in the future depends on a more sustainable business (Senior Sustainability Manager E, 2021; Head of Law, Policy, and CSR D, 2021). According to Senior Sustainability Manager E, these are two of the reasons that drive Enterprise E's work with the SDGs:

Let me say it in two ways: One is a moral responsibility that we think that as an enterprise in the 21st century, you have a responsibility to help build a more sustainable world. So that is the first part. The other part is that if one as an enterprise wants to be successful in five, ten, or 15 years, then only the genuinely sustainable enterprises are successful when we look out there. If Enterprise E should still exist in ten or 15 years, it will only do so because we have built a sustainable business.

Senior Sustainability Manager E, Code: *Emerging Trend & Economy*

Senior Sustainability Manager E explains that the SDGs are part of a direction to a successful business in the future. This involves sustainability in general, for which reason these reasons are not specific for the SDGs. However, Enterprise E believes that a successful business can sustain itself on the market in the future (Senior Sustainability Manager E, 2021). The business association finds similar strategic opportunities for implementing the SDGs:

We have prioritised the SDGs because we believe that sustainability is a megatrend that has come to stay and will hit every single industry and every single enterprise at some point. So they [enterprises] must take a stand on it. [...] So, one must both go into using sustainability as a strategic driver with a clear business understanding, but also with an authentic belief that it is a purpose-driven agenda that they believe.

Head of Sustainable Business, Code: *Emerging Trend*

As Head of Sustainable Business states, sustainability will affect every enterprise at some point. Therefore enterprises should consider the strategic potentials connected to implementing sustainability. The business association informs enterprises about the risks associated with being last in the class to implement sustainability in their businesses and the potentials associated with being first in class. However, the trend does not necessarily hit all businesses or markets at the same time (Head of Sustainable Business, 2021). Nevertheless, considering the importance of this trend requires strategic actions on the

SDGs and a belief that sustainability can drive enterprises' positions in the future (Head of Sustainable Business, 2021; Head of Law, Policy, and CSR D, 2021). This is supported by Enterprise D that believes, that the implementation of the SDGs enables an advantageous market position for enterprises in the future:

I think you should understand the fact that the SDGs could also enable a unique market position. Can you restructure your production? Can you create a new brand around your enterprise? [...] That is what the SDGs can do also. The perspective [on the future market position] requires shifts.

Head of Law, Policy, and CSR D, Code: *Emerging Trend & Economy*

The advantageous market position could be focused on the SDGs, for instance, by changing the practices of an enterprise's business, such as restructuring the enterprise's production. However, Head of Law, Policy, and CSR D adds that a sustainability transformation is time-consuming to diffuse and adapt in the organisation (Head of Law, Policy, and CSR D, 2021). Still, the enterprise believes that the commercial advantage of it is worth the effort:

Once you have control over them [the enterprise's sustainable efforts], they may become a commercial advantage compared to enterprises that do not have control over them [enterprises' sustainable efforts]. To a large extent, that involves [enterprises of] third-world countries. In that way, it [the enterprise's sustainable efforts] can be part of a larger perspective of the world's trade and across countries with whom you want to trade with.

Head of Law, Policy, and CSR D, Code: *Economy*

Enterprise D expects that the enterprises with the best examples of implementing sustainability will determine the world's future trade (Head of Law, Policy, and CSR D, 2021). However, Head of Law, Policy, and CSR D recognise, that it could also cause exclusion and inclusion of some enterprises of certain countries. For Enterprise D, the expectation of more sustainable requirements for trade is a driver for implementing the SDGs (Head of Law, Policy, and CSR D, 2021). Enterprise A also experience that sustainable requirements are demanded increasingly in practice by customers:

Many of them [customers] come and say: "We would like to talk about this project, but we are only interested in talking to you if you can show us that you can propose a higher degree of sustainability, for example, on the construction site". This has, of course, been pushed a lot by legislation and the change in consciousness that has taken place in many countries.

Senior Sustainability Manager A, Code: *Future Regulations & Emerging Trend*

The requirements of implementing sustainability in more projects in Enterprise A are evident by the work that Environmental Consultant A practices. In some cases, Enterprise A uses the SDGs to communicate which SDGs that the sustainable elements in the projects support (Environmental Consultant A, 2021). Senior Sustainability Manager A believes that the increased demand for implementing sustainability in more projects is driven by countries' legislation and customer's change in consciousness. The demand from customers who want more elements of sustainability in projects is, therefore, a clear business case for Enterprise A to implement the SDGs (Senior Sustainability Manager A, 2021). However, once again, it could indicate that the respondents believe that this opportunity applies to sustainability in general and not the SDGs specifically. Enterprise B shares the understanding that the market's demand determines the business case for implementing the SDGs. Additionally, Enterprise B believes that the degree of the commitment to the SDGs is connected to the expected advantages of the goals:

I think this [the economic advantage of the SDGs] is difficult to make up entirely financially. It is a market requirement today that you work with these things [the content of the SDGs], but I also think that the commitment would not be great if one does not make it a financial advantage. These two elements often follow each other, and one can say that the financial incentive could be that it is easier to sell one's end product. [...] It is not a giveaway; it is a strategic approach that helps make sense of sustainability.

Corporate Sustainability Manager B, Code: *Economy*

Corporate Sustainability Manager B highlights that the approach to the SDGs also determines the business case. Enterprise B claims that it uses a strategic approach that benefits the enterprise as a whole. This quotation can be linked to the earlier quotation by Senior Sustainability Manager A, as they both mention how consumer awareness and demand for sustainability are a driving force for them to work with the SDGs. This is expressed in the quotation above by the fact that it is easier to sell one's end product. In this regard, it is interesting that the Corporate Sustainability Manager B mentions that this is considered as one of the arguments as the manager also says that the commitment would not be great if one does not make a financial advantage too. This could indicate that working with the SDGs is considered a means to profit. Working with the SDGs may differentiate the enterprise from other enterprises with similar businesses and make consumers choose them. Thus, the SDGs might be able to improve the image of specific enterprises (Corporate Sustainability Manager B, 2021; Senior Sustainability Manager A, 2021).

#### 4.3.2 Communicating Sustainable Actions

This subsection is based on the sub-codes *Common Language* and *Frame of Translation*.

All of the respondents emphasised that the SDGs can simplify the language of sustainability from simple visualisation and communication. According to Consultant in Sustainable Business, the SDGs have provided a language for sustainability:

The SDGs help to raise awareness about running a sustainable business, which we have not seen before. The SDGs speak a language that, especially those who have not previously or are immature in working with sustainability, can join and feel it is something they want to be part of.

Consultant in Sustainable Business, Code: *Common Language*

As the quotation states, the SDGs can raise awareness about running a sustainable business, which has especially attracted immature enterprises in implementing sustainability. Therefore, this could indicate that the SDGs support enterprises with a framework that accommodates the needs to contribute to sustainable development. The argument is that the SDGs speak a simple language that enterprises understand and relate to. For Enterprise D, the SDGs has provided the potential to communicate the sustainable initiatives of the enterprise:

It [the framework of the SDGs] is a communication promotion because it is like a common language that everyone can relate to in their own context. It is not certain that it [the framework of the SDGs] can be translated one by one, but we can all say that we, for example, are working towards creating growth and innovation. We do this because we have a goal that we must create decent jobs in the municipality, and this is how we do it. Then there may be others who do it in other ways, but it gets translated into their context. So it is like a direction, one might say.

Head of Law, Policy, and CSR D, Code: *Frame of Translation*

Enterprise D uses the SDGs as a common language that can be used to communicate between stakeholders and direct the enterprise's sustainability work (Head of Law, Policy, and CSR D, 2021). Head of Sustainability & External Relations C mentions, that the SDGs provide a folksy aspect, that includes the general public to understand enterprises' sustainability actions:

It can be a nice thing to have a common language that you can communicate about. Moreover, I think that there is an important folksy aspect regarding the fact that, one can say in an international context, that there is a common language about what is the size of sustainability and how can one work with that? [...] it is a really good communication tool in terms of telling the things that we work with.

Head of Sustainability & External Relations C, Code: *Common Language*

The SDG's ability to include the folksy aspect of sustainability could indicate that if enterprises implement the SDGs, they can show that they meet society's expectations of implementing sustainability (Head of Sustainability & External Relations C, 2021). However, the SDGs are used as a tool to understand and communicate the complexity of sustainability (Head of Sustainability & External Relations C, 2021; Head of Law, Policy, and CSR D, 2021; Senior Sustainability Manager E, 2021). This is a benefit when enterprises want to tell about their desired sustainable impacts (Consultant in Sustainable Business, 2021). This is, for example, reflected in the quotation by Enterprise E:

I would say that the other thing that helps us is actually in terms of communicating our sustainability work to the outside world. So because we have the SDGs, it is actually a lot easier for us as a business to communicate externally what kind of impact we are trying to create and what kind of world we are trying to make. Because as soon as we can link that communication to the SDGs, it just lands better than it used to do both with investors and with the broader stakeholder perspective we work with. [...] It is a great tool, and can be used both internally as a mapping exercise but also externally in your communication to say: "hey, we are betting on SDG 7 and 13 because there we can really move something as an enterprise".

Senior Sustainability Manager E, Code: *Common Language*

For Enterprise E, the SDGs are both beneficial internally and externally in the enterprise. Again, it is mentioned that communicating with external stakeholders about the enterprises' sustainability work is an important element driving the work with the SDG. Communicating the SDGs is relevant when presenting their sustainability efforts for investors because investors are interested in the enterprises being transparent and providing sustainable data that express credibility (Senior Sustainability Manager E, 2021). Another interesting element in the quotation is the enterprise's primary focus on specific SDGs. For Enterprise E, it is beneficial to implement SDG 7 (Clean and Affordable Energy) and SDG 13 (Climate Action) because these are the goals that the enterprise can impact the most: *"This does not mean that we downgrade the others [SDGs]. It just means that this [SDG 7 and 13] is the area where we believe that we can help the world with a transformative impact"* (Senior Sustainability Manager E, 2021). These goals make sense for the enterprise to focus on, as these goals reflect the business of this enterprise, which is power supply (c.f. Table 3.3 on page 22). Enterprise D has chosen to focus on 13 of the SDGs with a primary focus on the two SDGs that reflect its business:

On the whole, all the SDGs make sense. We have deselected four SDGs and decided that two SDGs are especially important to us. That is SDG 9, and then it is SDG 17

around partnerships. SDG 9 is important because we are an infrastructure. We have a responsibility to develop infrastructure for the enterprises that are located here and ensuring cooperation. This is where SDG 17 on partnerships comes in. Between these two, which we sort of call platforms for development, there are many other SDGs, such as the goals expressing quality education, the environment, and the climate.

Head of Law, Policy, and CSR D, Code: *Frame of Translation*

The SDGs directed at the enterprises' core business are the ones that are most popular to implement among the enterprises. However, Enterprise D also sees the opportunities of the goals that are not directly linked to the core business. However, it is unclear whether the enterprise actively works with these goals (Head of Law, Policy, and CSR D, 2021). There is a tendency among the large enterprises that they believe that they work with almost all of the SDGs than they choose to focus on in their reporting:

In reality, it is also just some framework you have to work according to. Because a lot of the efforts you make as an enterprise, if you want an environmental focus or a social focus, these naturally support many of the SDGs. So it is really just about communicating it.

Environmental Consultant A, Code: *Frame of Translation*

Many enterprises have not necessarily decided to use the SDGs in all their external communications. But that does not mean that they are not working on either the SDGs or the underlying challenges that the SDGs represent. That is the most important thing to remember.

Head of Sustainable Business, Code: *Frame of Translation*

The quotations indicate that the SDGs are beneficial at illuminating enterprises' sustainability activities, as some enterprises perceive that they already work with the themes of the SDGs (Environmental Consultant A, 2021; Senior Sustainability Manager E, 2021; Head of Sustainability & External Relations C, 2021). It could be assumed that the enterprises are not actively working with the SDGs that do not reflect their businesses, as they believe that their existing practices relate to most of the SDGs. However, this may also be the case, but there is no documentation for this work with these SDGs. This is especially clear, as none of the enterprises were working with the targets of the SDGs.

#### 4.3.3 Interacting with Stakeholders

This subsection is based on the sub-codes *Collaboration* and *Knowledge Sharing*.

Besides the SDGs being beneficial for the enterprises to communicate with stakeholders, they also experience that the SDGs provide interaction with external stakeholders

(Senior Sustainability Manager E, 2021; Corporate Sustainability Manager B, 2021; Head of Law, Policy, and CSR D, 2021). This is an advantage for the enterprises because they experience increased networks, more collaboration across businesses, and more knowledge about the possibilities of sustainability (Head of Law, Policy, and CSR D, 2021; Corporate Sustainability Manager B, 2021; Consultant in Sustainable Business, 2021; Head of Sustainable Business, 2021). For Enterprise D, this knowledge is, for example, a valuable resource for its business: "[...] networks can put some knowledge resources into play around Enterprise D that we do not own. This network, i.e knowledge, is a rare resource if you know how to get these networks to play into your own core business." (Head of Law, Policy, and CSR D, 2021). Enterprise D expresses the opportunities connected to sharing knowledge from interactions in its networks. Enterprise D has knowledge that is valuable for another stakeholder to gain, and the stakeholder has knowledge that the enterprise could not access without the interaction (Head of Law, Policy, and CSR D, 2021). The SDGs address challenges that enterprises cannot solve alone if sustainable development is to be achieved on a societal level (c.f. chapter 1). Therefore, the inclusion of the enterprises' value chain is an important aspect to create collaboration around sustainability (Head of Law, Policy, and CSR D, 2021; Consultant in Sustainable Business, 2021). This is reflected by Enterprise D:

*Danish Agriculture & Food Council*, for example, cannot lift the green transition themselves. They must have outside help from everyone in the value chain. Is there anything we can contribute with in relation to our part of the value chain? [...] What can we contribute with? What is possible for us? And then of course, it is something that we ask about through our dialogue and cooperation. [...] Then all of a sudden you have some dynamics.

Head of Law, Policy, and CSR D, Code: *Collaboration*

Collaborating for sustainable solutions in the value chain is important for Enterprise D. The solutions might answer some of the problems that the enterprise cannot solve as an individual entity. By breaking down some of the boundaries set between organisations in the value chain, it is possible to upon another space of possibility (Head of Law, Policy, and CSR D, 2021). Enterprise E has also seen this opportunity and uses the SDGs as a communicative frame for which sustainability challenges that the enterprises' internal and external stakeholder find important:

Once a year we talk to all our stakeholders both internally and externally to find out what some of the sustainability challenges they face are. And then we use that overview to identify which sustainability challenges we need to play more into. [...] Last year we identified 40-45 sustainability challenges that we could work on, and then there were some of those that we are better positioned to work with than others.



[...] So some of those we prioritise are, for example, safety and health [related to SDG 8 and 3].

Senior Sustainability Manager E, Code: *Collaboration*

Including stakeholders in mapping, sustainability challenges have directed some of Enterprise E's work with SDG 3 and 8 (Senior Sustainability Manager E, 2021). It is unclear to which degree these goals are worked with, but the quotation illustrates that stakeholders are involved in the work of selecting relevant SDGs. However, as the (Senior Sustainability Manager E, 2021) adds, the enterprise chooses to address the goals that it can affect more than others (Senior Sustainability Manager E, 2021). This could indicate a less progressive focus on the SDGs that the stakeholders find important if these SDGs do not reflect the competencies of the enterprise.

For Enterprise B, the work with the SDGs has improved due to an invitation from a business association. The business association invited the enterprise to be part of a longer course that made different enterprises work with different approaches to the SDGs:

It [the course] provided great knowledge sharing, and those consultants who were in the business association were very committed. The most important thing was that they helped to push us. So when the rest of us were about to give up and were like: "Oh it is too much of an uphill struggle, how do we get all the others in our enterprises involved", then they could just come up with new ideas and help us a little along the way.

Corporate Sustainability Manager B, Code: *Knowledge Sharing*

The involvement of consultants has been important for Enterprise B in the work with the SDGs. In this specific example in the quotation, Enterprise B and the other enterprise enterprises had difficulties involving the employees in the work with the SDGs. When the respondent is surrounded by the same organisational settings, it is challenging to think from a new perspective. Therefore, external consultants could provide the enterprises with new perspectives, such as how to involve employees in the work with the SDGs. Another factor that influenced Enterprise B's implementation of the SDGs was the knowledge sharing between the enterprises of the course. This is an approach to get new perspectives on how to implement the SDGs by learning from other case examples of enterprises that implement the SDGs (Corporate Sustainability Manager B, 2021). The knowledge sharing between enterprises is also experienced valuable for the Consultant in Sustainable Business from the network for sustainable business development:

They get much value through each other, which is why we put them together. If we can see that there are any enterprises with any common tasks or a common challenge, then we make sure that they meet through us to match them. We also do

this across industries because there is much knowledge gained from other industries. The industries are typically strong in various things, so they can get a lot of input from other industries. Also more than I think many of them imagine.

Consultant in Sustainable Business, Code: *Knowledge Sharing*

As stated earlier by Enterprise D, it is beneficial to knowledge share (Head of Law, Policy, and CSR D, 2021). For the network for sustainable business development, it is also relevant to share knowledge on what enterprises have in common of tasks and challenges to solve them in collaboration. In addition, it is an advantage that the network consists of enterprises from different industries, as different industries have different competencies. This could help create new perspectives on the practical solutions connected to specific tasks and challenges, such as the SDGs (Consultant in Sustainable Business, 2021).

#### 4.3.4 Involving Top Management and Employees

This subsection is based on the sub-codes *Top-down*, *Bottom-up*, and *Attraction of Young People*.

Another opportunity influencing the strategic implementation of the SDGs in large danish enterprises is the involvement of the top management and the employees (Senior Sustainability Manager E, 2021; Senior Sustainability Manager A, 2021). Involvement of the top management secures anchoring of the work with the SDGs throughout the organisation (Consultant in Sustainable Business, 2021):

It [the involvement of the top management] is important to us because it is the way we really see that we are driving an impact on this. [...] In this process where we identify in a very early stage that there is a problem with biodiversity, for example, we already link that challenge to our top management so that someone in our top management is given the responsibility to say that now we must develop a biodiversity program. [...] And that just makes this a huge integrated part for the whole way Enterprise E works.

Senior Sustainability Manager E, Code: *Top-down*

In this example, Enterprise E mentions that the sustainability team involved the top management in the early stages of the sustainability project concerning biodiversity. This benefits the enterprise because the engagement of the top management signals that the project is of strategic value for the enterprise. Thus, Senior Sustainability Manager E believes that top management's involvement is important for impacting the progress of the business (Senior Sustainability Manager E, 2021). For Enterprise A, the involvement of the top management is also seen to be as an opportunity to work strategically with the SDGs (Senior Sustainability Manager A, 2021) :

Our CEO [...] is an insanely central element. It is important to have the top management's support and have it integrated into the business strategy in order not to make sustainability an independent track but a part of the enterprise's overall strategy.

Senior Sustainability Manager A, Code: *Top-down*

Having the top management's support helps to reduce the risks of the sustainability projects being an independent track of the enterprise. By involving the top management, the sustainability projects are connected to the enterprise's strategic direction. It is therefore important that this value also affects the employees, for instance, by making the employees feel part of the work with the SDGs (Senior Sustainability Manager A, 2021):

I would say that even though we have not done it perfectly, then the fact that we started by having a dialogue with the employees in relation to getting the SDGs introduced and informing them of their relevance concerning the SDGs and what SDGs which we as an enterprise can contribute to, has meant that there has been a considerable change in behavior. Some places [in the enterprise] more than others, of course, but across the whole line in Enterprise A.

Senior Sustainability Manager A, Code: *Bottom-up*

Sarah believes that the employees are connected to the work with the SDGs and are able to reflect themselves in the work. This is seen as an opportunity for the enterprise, as the employees' impact on making customers select sustainable products. Thus, making the employees believe in the work with the SDGs could make them feel more confident to suggest sustainable solutions in the dialogue with customers that want the cheapest solutions (Senior Sustainability Manager A, 2021). However, sustainability should also be an inspiration for the employees to work in Enterprise A:

It [involving the employees] is part of the enterprise's DNA. It also makes the employees aware of sustainability because it helps inspire their further work and see for themselves that it makes a difference to go to work, what they work with. It helps to create value for the enterprise. It helps to secure the future of the enterprise.

Head of Law, Policy, and CSR D, Code: *Bottom-up*

Enterprise D believes that there should be a connection between the sustainable desires of the enterprise and the employees' attachment to sustainability. This improves the enterprises' overall performances (Senior Sustainability Manager A, 2021). It could also be a driver for enterprises to integrate sustainability more in their daily work because sustainability is an important aspect for future recruitment (Consultant in Sustainable Business, 2021):

The young people also place great demands on the enterprises and the sustainable handling of products. So we have to go in and work with that. So there is also something with a recruitment question; just as you want to recruit young people in, you have to make yourself attractive in a sustainable way as an enterprise now.

Consultant in Sustainable Business, Code: *Attraction of Young People*

Young people have a greater focus on sustainability, for which reason enterprises need to adapt to the demand in workplaces. Therefore, the enterprises should, to a higher degree, implement sustainability in order to be able to attract and recruit young people in the future (Consultant in Sustainable Business, 2021).

## 4.4 Sub Conclusion

The challenges and opportunities that affects strategic implementations of the SDGs in large Danish Enterprises are identified as follows:

**Table 4.1** Summarised challenges and opportunities that affect strategic implementations of the SDGs in large Danish enterprises.

Challenges	Opportunities
– Translating the SDGs to local goals	– Accessing advantageous market positions with sustainability
– Lacking demand for the SDGs	– Communicating sustainable actions
– Being transparent about negative impacts	– Interacting with stakeholders
	– Involving top management and employees

The challenge *Lacking demand for the SDGs* can be seen as a demotivating factor for working strategically with the SDGs. When the enterprises do not perceive to benefit financially from the SDGs, there is less incentive to work with the SDGs beyond a communicating tool. This is because the enterprises experience more demand for sustainability frameworks, such as Science Based Targets, that directly quantify and measure sustainability. However, when the SDGs are used as a communication tool, the enterprises focus on the goals that reflect their existing practices. This is because the goals and targets are broad and challenging to translate to the context of enterprises. In addition, the enterprises find it time-consuming to examine the targets of the SDGs. The SDGs are thus used less progressive than the measurable frameworks.

The enterprises typically focus on the goals that reflect their existing practices. However, some enterprises also communicate the SDGs that are not directly related to the business, but where the enterprises have a positive impact. This results in the enterprises communicating on more than ten of the SDGs. However, the SDGs where the

enterprises impact negatively are not communicated because they find it challenging to be transparent about these.

The enterprises experience that the top management's support of implementing the SDGs is important to signal the strategic direction of sustainability in the enterprises. It is unclear whether the top management supports the implementation of the SDGs or sustainability in general. In addition, the enterprises experience that employee involvement in the SDGs has created awareness of sustainability.

The SDGs are perceived to represent a common language that is beneficial when the enterprises communicate with stakeholders. The enterprises experience that the SDGs address challenges that should be solved in collaboration with stakeholders. However, it is unclear whether this applies to the SDGs specifically or if the enterprises use the SDGs as a frame for interacting with stakeholders on sustainable matters. There are no examples of the enterprises advancing the SDGs in collaboration with stakeholders specifically. However, the potential of collaborating across industries to advance the SDGs is seen as an opportunity. The SDGs reflect the desired sustainable direction for the enterprises, for which reason the SDGs are used as a communicative frame for the overall sustainability actions of the enterprises. Therefore, the discrepancy between the lack of demand for the SDGs and the perceived opportunity to access advantageous market positions from the SDGs could indicate that the SDGs are not used strategically in the enterprises.



## 5 | Experiences with ISO 14001 in Enterprises

This chapter explores enterprises' experiences with ISO 14001 based on pitfalls and factors for successful implementation of the standard in practice. It is considered necessary to investigate if ISO 14001's 25 years of experience (c.f. chapter 1) can meet the challenges and support the opportunities identified in chapter 4, to enable large Danish enterprises to implement the SDGs strategically. Therefore, answering this requires identifying the experiences with ISO 14001.

### 5.1 Pitfalls of ISO 14001

Based on Boiral (2011), the pitfalls of ISO 14001 are categorised as 1) *Inappropriate or excessive documentation*, 2) *Lack of follow-up and system continuity*, 3) *Search for commercial certification*, and 4) *Externalisation of the implementation process*. These pitfalls are often overall caused by a lack of organisational preparation and misunderstood outcomes of the standard (Boiral, 2011). However, the pitfalls could be avoided, which the following subsections will further explain.

#### 5.1.1 Inappropriate or Excessive Documentation

As explained in chapter 1 the continuous improvements are ensured in EMS by following the plan-do-check-act methodology. The setting of targets in order to reduce negative environmental impacts requires documentation for continuous improvements (Mosgaard & Remmen, 2015). The documentation connected to the ISO 14001 certification has been criticised for not corresponding to the available resources in the enterprises (Boiral, 2011). This causes enterprises to struggle with the balance between efforts and results of the EMS (Mosgaard & Kristensen, 2020).

Employees that work on the process of documenting the certification find that preparing and maintaining the documentation for the certification requires a great deal of time and competences. In some enterprises full-time persons are hired for the documentation of the ISO 14001. In enterprises where a limited amount of resources

hinders to hire full-time persons for the job, it makes it difficult to do the documentation. The employees who also work on regular daily activities in the enterprises could thus experience the procedures of documentation having a negative impact on the daily activities in the enterprise. Consequently, the intentions with the documentation process is perceived as burdensome rather than good practices (Boiral, 2011). However, this could be explained by the fact that some enterprises prioritise multiple environmental impacts to act on at a time. Therefore, this pitfall could be avoided by prioritising fewer and the most essential environmental impacts at a time (C. Pedersen & Nielsen, 1996).

### **5.1.2 Lack of Follow-up and System Continuity**

For some enterprises, the standardised criteria of the EMS are a means of ensuring that stakeholders operate on the same criteria:

Enterprises have realised that there are good reasons and sense in using standards because they speak the same language. So if you refer to a standard, everyone knows that ISO 14001 has the same content whether you want to implement it in São Paulo in Brazil or Hirtshals in Denmark.

(Chief Consultant in ISO 14001, 2021)

The Chief Consultant in ISO 14001 further explains, that when enterprises for instance operate with numerous subcontractors the standard is a means to speak the same language regarding environmental performance (Chief Consultant in ISO 14001, 2021). Studies have also shown, that the environmental performance in the value chain is improved by collaborating with stakeholders in the diffusion of ISO 14001 in the value chain (Prajogo et al., 2014).

However, a pitfall connected to the documentation process is the complexity of the standard. Employees has experienced difficulty in navigating in the format of the documentation and the details of the content, some of it, which might reflect the purpose of the standardisation (Boiral, 2011). For instance, the standard requires enterprises to set up and report on environmental targets from the environmental objectives defined in the system. The standard does not specify which environmental targets, which means that the enterprises should locate activities themselves to address the environmental impacts (Delmas, 2000). However, it is an experience, that this pitfall is connected to the fact that the standard is difficult to translate into the specific context of the enterprises' targets and associated practical work tasks. It could thus be relevant to include external stakeholders for the advice of how to translate the language of the standard into practical work tasks. This could help initiate the process by having given examples of practical translations, thus enabling system continuity (Miljøstyrelsen, 1996). However, there are also pitfalls



connected to including external stakeholders (see following sub section), which should be considered. It could also be relevant to visit other enterprises that has implemented ISO 14001. This knowledge sharing could provide the enterprises with practical examples of how the system could be implemented (Boiral, 2011).

Another pitfall is experiences to be the lack of ensuring the standard's continuity. This has been linked to the lack of follow-up procedures. Once the system has been implemented, tendencies towards a decrease in use have often been observed. Managers are likely to perceive the system to operate relatively independently. This means that even though the system requires regular audits and management reviews for the monitoring and improvements of the system, only a little attention is given to the system on an ongoing basis (ibid.). Consequently: "*A system that kick into action once a year for audits will never provide concrete benefits*" (Boiral, 2011:13). When the systematic approach of EMS is lacking and improvement is not ensured, the practices are likely to reverse back as business as usual. This means, that when environmental improvements of enterprises' practices are not included in daily operations, production processes, and so on, implementing ISO 14001 will not lead to improved environmental impacts (Mosgaard & Kristensen, 2020).

### 5.1.3 Externalisation of the Implementation Process

The lack of ensuring ISO 14001's continuity is also possible to be explained by the externalisation of the ISO 14001 implementation process. Some enterprises depend on consultants for planning and determining the process of the implementation. The reasons for this for example involve lacking competences in the enterprise to implement the system. Therefore, enterprises typically entrust "*consultants, temporary trainees, co-op students or managers*" (Boiral, 2011:15) with the implementation process. Drawbacks from this involve that the system is not anchored locally in the enterprise which could result in a disconnection between the standard's prescriptions and the organisational practices and needs (Boiral, 2011).

When externalising the process there is a risk that organisational needs are ignored which may lead to frustrations among the employees because they are not involved in the process. This could result in the employees going against the system by stating that the externalised decisions are disconnected with the actual activities of the enterprise. On paper, the certification might still look fine but in practice the prescriptions of the standard are poorly integrated into the enterprise and its needs (ibid.). However, it is an experience, that involving external consultants is an advantage if needing an 'extra push', but the involvement should also reflect on the experience and costs of the output from consultants (C. Pedersen & Nielsen, 1996; Boiral, 2011). Therefore, it is essential that

after til external involvement, the enterprise cooperate with the employees, especially in the beginning of the implementation phase in order to anchor the system locally in the enterprise (Boiral, 2011).

#### **5.1.4 Search for Commercial Certification**

For some enterprises, their environmental performance connected to ISO 14001 has been driven by image and marketing opportunities. From this perspective, enterprises use the certification as a marketing tool to promote themselves for the sake of commercial purposes rather than improving environmental practices. This can partly be explained by wanting to appear responsible for the perceptions of external stakeholders and partly by a lack of internal motivation and enthusiasm for ISO 14001 (Boiral, 2011). However, this disconnection from improving environmental practices through ISO 14001 and aiming at a symbolic certification for appearance is often associated with practising *greenwashing* (Heras-Saizarbitoria et al., 2020). An experience is, that if the enterprise sets targets and measure progress on these, the pitfall of green washing could be avoided. However, it is important, that the enterprises monitor the progress in order to secure that progress and improvements is made. By documenting this progress, the enterprise gets more credibility with its environmental work. However, if the targets are set to be reached for example in 10-15 years, the motivation for continually acting on the targets is minimised. Therefore the targets could reflect 2-3 years targets for instance supplemented with annual sub-targets (C. Pedersen & Nielsen, 1996).

## **5.2 Factors for Successful Implementation of ISO 14001**

Based on Boiral (2011), the factors for successful implementation of ISO 14001 are categorised as 1) *Showing managerial conviction and support*, 2) *Explaining the Reason for Certification*, 3) *Mobilising Employees and Knowledge*, and 4) *Adapting the Standard to the Organisation*. Adopting these factors could improve the environmental practices and provide advantages for the enterprises (ibid.).

### **5.2.1 Showing Managerial Conviction and Support**

Especially the new role of the top management is considered an important element in the new HLS system of ISO 14001 (c.f. chapter 1) (Chief Consultant in ISO 14001, 2021). Six years after the publication of ISO 14001, Delmas (2002) investigated among other things some of the barriers of implementing ISO 14001. The barrier that most of the enterprises (77 %) considered to be the most relevant was the lack of top management support (Delmas, 2002). In the new HLS system of ISO 14001 the new focus on the

strategic EMS became significantly apparent in clause 5 (c.f. Table 1.1 in chapter 1) as this clause focuses on the top management's support of the EMS (Chief Consultant in ISO 14001, 2021). This element was not included in any ISO management system before, as the top management's role in the EMS until 2015 has been on appointing a management representative: *"The manager could simply say: [...] 'Now we are hiring you as quality- and environmental manager and then we do not bother to do more with it. You must make sure that you are our representative'"* (Chief Consultant in ISO 14001, 2021). In the revised ISO 14001 the top management has a greater role in supporting the EMS for example by being part of the internal and external audits. However, whether this takes place in practice is unsure (Chief Consultant in ISO 14001, 2021).

In order for the EMS to be a success in relation to a strategic focus in the enterprise it is important that the top management and the employees supports and contribute to the work that is connected to the EMS (C. Pedersen & Nielsen, 1996). In addition, Boiral (2011) argues, that the managers should also believe in the system in order to show conviction to the implementation. Encouraging employees' support and participation in the EMS is motivated by the top management's support and conviction (Boiral, 2011). It is furthermore an experience, that the top management should participate actively in activities, involve employees, and allocate adequate resources (C. Pedersen & Nielsen, 1996). Therefore, arranging one or two meetings with the top management every quarter of the year to maintain the processes of the system is important to sustain managerial focus (Boiral, 2011).

### 5.2.2 Explaining the Reason for Certification

As stated in the previous section, the top management's involvement is important for motivating and thus involving employees in the implementation of ISO 14001. In addition, the employees' knowledge and understanding of the standard's prescriptions and objectives is considered as an important element for a successful implementation of ISO 14001 (Boiral, 2011).

When the employees understand the reasons for implementing the standard, it provides potentials for anchoring the standard throughout the organisation. This is because, the employees are aware of their roles in relation to the standard and thus the consolidated efforts that that standard requires to be successful. If the standard has not been adequately informed among the employees, it is likely to be perceived as irrelevant by the employees.

Therefore, mobilising knowledge of the standard could for instance be provided with training of the employees regarding the standard's relevance for the organisation and the procedures and consequences of the standard (ibid.). In addition, if there are minimal

resources for training employees, the enterprise could arrange project days that inform the employees of the standard and the different competencies of different departments required to solve the tasks of the standard (C. Pedersen & Nielsen, 1996).

### **5.2.3 Mobilising Employees and Knowledge**

The employees have different competencies and qualities which are essential to share knowledge around the environmental status of different areas of the enterprises. Giving the employees the opportunity to participate by sharing knowledge could provide the enterprises with innovative programs or improvements for existing programs in the system (Boiral, 2011).

Using the knowledge of the employees for consultation of the system benefits the organisation as it could mobilise employees to support and participate in the activities of in the system. Furthermore, consulting the employees could help ensure that the standard is adapted to organisation (ibid.). It is an experience, that especially in the beginning phase of the implementation of the standard, there are more resistance to the change that the standard entail. Therefore, it could be advantageous to involve one or two motivated employees in the beginning phase and later involve more employees. For instance, it is an experience, that involving employees that are especially passionate about the implementation could influence more employees to involve (C. Pedersen & Nielsen, 1996).

### **5.2.4 Adapting the Standard to the Organisation**

Anchoring the standard in the organisation is important for successfully internalising and integrating the practices of the standard throughout the organisation. This could meet the risks of the standard becoming an independent track of the enterprise which is disconnected from current strategies and operations. In addition, it could hinder the standard to become bureaucratised and involuntarily adopted in the organisation. Therefore, it is important that the standard is adapted to organisation and not the opposite (Boiral, 2011).

The involvement and support of the employees for the standard and the related activities is thus crucial. Involving employees helps to ensure that the standard is integrated into the practices and fundamental goals of the organisation. Integrating the fundamental goals of the enterprises in the standard is perceived as a success factor of connecting the purpose of the standard to the objectives of the enterprises (ibid.).

Adapting the standard to organisational needs and existing procedures could for example convince the employees, that the standard improves the daily work of the employees. This could support the employees in understanding the connection of the

standard and the workplace realities. Therefore, it is an experience, that adapting the standard to the enterprise is a factor for successfully anchoring the ISO 14001 implementation in the organisation (ibid.).

### 5.3 Sub Conclusion

This analysis has explored enterprises' experiences with ISO 14001 based on pitfalls and factors for successful implementation of the standard in practice. The main pitfalls and factors for successful implementation are summarised in Table 5.1:

**Table 5.1** Summarised experiences with ISO 14001.

<b>Pitfalls of ISO 14001</b>	
Inappropriate or excessive documentation	– If full-time persons are not hired for the standard's documentation tasks, the documentation process is time-consuming and impacts the daily activities of the employees that are responsible for the documentation
Lack of follow-up and system continuity	– The standard is designed from a language that is perceived as complex to translate into practical work tasks. – Lacking follow-up procedures hinder monitoring and improving the environmental impacts.
Externalisation of the implementation process	– External consultants are needed for the support of understanding the standard's design and language. – Involving external consultants for support of the implementation process could create a disconnection from the organisational practices and needs.
Search for commercial certification	– Certification decision builds on image and marketing opportunities without improving environmental practices.
<b>Factors for Successful Implementation of ISO 14001</b>	
Showing managerial conviction and support	– The top management is important for integrating the standard to the organisations by involving employees, allocating adequate resources and having regular meetings.
Explaining the reason for certification	– Employees' knowledge and awareness of the standard provides potentials for anchoring the standard's implementation in the organisations to the daily tasks of the employees.
Mobilising Employees and knowledge	– Employees' involvement in the implementation is important as different competencies are needed for a successful implementation.
Adapting the standard to the organisation	– Using the organisational needs for designing the standard could promote support and willingness from the employees to integrate the standard as daily activities in the organisations. – Integrating the enterprises' fundamental goals in the standard could promote an understanding among the employees of the relevance of the standard.

In Table 5.1 it is shown which pitfalls and success factors that enterprises experience with the work of ISO 14001. Inappropriate or excessive documentation leads to a struggle between efforts and results of ISO 14001. Documentation becomes a burden instead of good practices, which could be avoided if companies prioritise acting on fewer environmental impacts at a time. Standards are difficult to translate to the daily practices of an enterprise, and when the work with the standard is not systematised, no changes occur. The enterprises then risk continuing business as usual. There have been examples of enterprises using the ISO 14001 standard to green wash their activities.

Green washing could be avoided by enterprises setting reachable targets, such as 2-3 years targets, to avoid losing motivation of acting and following up. In some enterprises, the implementation of ISO 14001 is externalised due to a lack of competencies inside the enterprise. Externalising the implementation process risks ignoring organisational needs, which could lead to frustrations internally among the employees. In some cases, the externalised involvement could risk that the employees are going against the system. After external involvement, the enterprise must collaborate with its employees to ensure that the system is anchored locally. The support of the top management and employees is essential for the success of the system. Support from employees can be initiated by informing them of the purpose of the certification. Employees' knowledge and ideas could also improve the system and ensure that the standard is integrated into the enterprise's practices and organisation. It is possible, that the latest revision of the standard could impact the experiences with ISO 14001 after the implementation of this (c.f. chapter 1). For example the revision encourage enterprises to provide self directing innovative solutions and to collaborate with internal and external stakeholders on their environmental impacts (Williams, 2018).

## 6 Recommendations for Large Danish Enterprises to Work Strategically with the SDGs

This chapter provides recommendations for how large Danish enterprises can work strategically with the SDGs. The recommendations are based on 1) the identified challenges and opportunities that large Danish enterprises experience affect strategic implementations the SDGs and 2) the experiences with ISO 14001 in enterprises. Thus, the recommendations are created from how the experiences with ISO 14001 can meet the challenges and support the opportunities that affect the strategic implementations of the SDGs in large Danish enterprises.

### 6.1 Recommendation 1: Set Short-term Targets and Measure Progress

Large enterprises should set and translate relevant SDGs into quantifiable targets to have a more strategic work with the SDGs. For example, an enterprise could choose to focus on SDG 12.5: "*By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse*" (United Nations, 2021). From this SDG target, the enterprise should set its target, which, for example, could be: *Reduce 40 percent of hazardous waste from all operations by 2023*. The target itself does not provide the enterprise with strategic actions. However, setting specific and measurable targets allows the enterprise to take actions that should meet the targets. Measuring and monitoring the targets, for example, every second month, will indicate if the enterprise needs to improve practices, thus ensuring continual improvements. The targets should be short-termed such as 2-3 years. When adopting long-term targets, the enterprises could lack the motivation to measure progress continually, thus not ensuring continual follow-up and improvement.

## **6.2 Recommendation 2: Prioritise Fewer and more Specific Goals**

The enterprises should limit the number of SDGs to prioritise and focus on the most central SDGs to their business. The prioritisation of fewer SDGs could meet the primary use of the SDGs as a communication tool. When the goals are perceived as complex to translate, it is assumed that focusing on 10-15 of the SDGs is unrealistic for a strategic work. At the same time, focusing on the most central SDGs to their business could connect the SDGs to more specific business opportunities. However, in order to avoid that the enterprises select the goals that reflect their business as usual, they should shift their focus from the broad formulated goals to the associated specific targets that the UN has defined. This could support that the enterprises act, measure and monitor progress on the SDGs.

## **6.3 Recommendation 3: Ensure Top-down Support**

Large enterprises should ensure that the top management supports the implementation of the SDGs. If the top management does not believe in the SDGs bringing advantages for the business, the implementation of the SDGs is not likely to be aligned in the organisation. The top management should participate actively in the work with the SDGs and allocate adequate resources for the work. For example, the top management should secure that the process with the SDGs is ongoing to sustain managerial focus, for instance, by having meetings every quarter of the year. In addition, the top management could ensure that the implementation of the SDGs aligns with the business strategy to avoid that the SDGs are not implemented in a specific department or area of the enterprise but is related to the organisation's daily operations. This could also support that the employees are aware of the importance of the implementation. Thus it could create an incentive for the employees to participate in activities.

## **6.4 Recommendation 4: Ensure Bottom-up Involvement**

Large enterprises should ensure that the employees are involved in the work with the SDGs. Involving the employees in this process could provide the enterprise with innovative activities or improvements for existing activities. For example, it could be relevant to arrange project days that inform the employees of the SDGs and the associated targets. On the project days, the employees could decide which activities to focus on for the different goals and targets. The employees are more motivated to support and participate in the activities if the SDGs are adapted to the organisation and not the



contrary. When the employees are not involved in the work with the SDGs, the SDGs risk being part of an independent track of the enterprise. However, in order to avoid that the SDGs are disconnected from strategies and operations, the SDGs should be adapted to the organisational needs and practices. This could also support that the employees can recognise and understand the reasons for implementing the SDGs.

## **6.5 Recommendation 5: Facilitate Collaboration across Industries**

The enterprises should use the strength of the SDGs' common language to collaborate on advancing the SDGs across industries. Collaborating across industries could provide the enterprises with more business opportunities. This could enable a more strategic approach with the SDGs, because the enterprises' sphere of influence becomes greater in responding to the challenges of the SDGs. Together, the enterprises could work together to select the targets of the SDGs and develop innovative approaches from the competencies of each industry to meet the targets. This could enable the enterprises to advance the external actionable targets, thus advancing sustainable development on a societal level.

## **6.6 Sub Conclusion**

The recommendations of this chapter are created from how the experiences with ISO 14001 can meet the challenges and support the opportunities that affect strategic implementations of the SDGs in large Danish enterprises. Recommendations 1 and 2 reflect that the experiences with ISO 14001 can meet one of the challenges. The challenge underlying these recommendations is *translating the SDGs to local goals*, as shown in Table 4.1 on page 42. Recommendations 3–5 reflect that the experiences can support some of the opportunities. The opportunities underlying these recommendations are *involving top management and employees* and *interacting with stakeholders*, as shown in Table 4.1 on page 42.



## 7 | Conclusion

This research aims to contribute to practice with knowledge on how large enterprises can strategically implement the SDGs. Given that the systematic literature review used for the preliminary analysis showed that research on large enterprises' practical implementations of the SDGs are scarce, this research follows an exploratory approach that aim to answer:

***To what extent is it possible to learn from past experiences of implementing ISO 14001 to enable a strategic implementation of the SDGs in large Danish enterprises?***

The research question is carried out by empirical data of 11 qualitative interviews and a non-systematic literature review. The interviews consist of seven respondents from five large Danish enterprises, three respondents from different SDG consulting organisations, and a respondent representing a Danish organisation for standardisation.

In order to answer the research question, it was found necessary to identify the challenges and opportunities that affect strategic implementations of the SDGs in large Danish enterprises. This was done based on the interviews with five large Danish enterprises and the respondents who on a daily basis consult enterprises in implementing the SDGs. The challenges and opportunities that affect strategic implementations of the SDGs are summarised below:

**Table 7.1** Summarised challenges and opportunities that affect strategic implementations of the SDGs in large Danish enterprises.

Challenges	Opportunities
– Translating the SDGs to local goals	– Accessing advantageous market positions with sustainability
– Lacking demand for the SDGs	– Communicating sustainable actions
– Being transparent about negative impacts	– Interacting with stakeholders
	– Involving top management and employees

Based on the interviews, it is concluded that especially the challenge of *translating the SDGs to local goals* affects the enterprises' work with the SDGs negatively. The SDGs are perceived as broad and immeasurable, especially compared to other more quantifiable sustainability frameworks. This results in the enterprises using the SDGs primarily as a communication tool. Therefore, the opportunities affecting a strategic work with the SDGs are related to sustainability in general instead of the SDGs specifically. This indicates that the SDGs reflect the desired sustainable direction for the enterprises and are used as a communicative frame for the overall sustainability actions of the enterprises. Thus, the SDGs are not directly experienced as a strategic tool, but are part of the general strategic intentions of implementing sustainability in the enterprises.

Based on the non-systematic literature review and the interview with the respondent, who represents the Danish organisation for standardisation, it is concluded that experiences with ISO 14001 shows that it is possible to avoid pitfalls and improve success factors. Some of the major pitfalls can be avoided by prioritising fewer environmental impacts to focus on and setting short-term targets. This is to ensure that the environmental impacts are measured and monitored. Some of the key success factors can be improved by involving employees in the activities of the standard and ensuring managerial focus. In addition, an increased focus on collaboration with external stakeholders can help to improve the environmental impacts of the enterprises.

Based on the identified challenges and opportunities that affect strategic implementations of the SDGs in large Danish enterprises and the past experiences with ISO 14001 in enterprises, the following recommendations are given for how enterprises can work strategically with the SDGs:

- Recommendation 1: Set short-term targets and measure progress
- Recommendation 2: Prioritise fewer and more specific goals
- Recommendation 3: Ensure top-down support
- Recommendation 4: Ensure bottom-up involvement
- Recommendation 5: Facilitate collaboration across industries

The experiences of ISO 14001 can be used to meet the challenge of *translating the SDGs to local goals* in large Danish enterprises, which is reflected in recommendation 1 and 2. In addition, the experiences of ISO 14001 can be used to support the opportunities of *involving top management and employees* and *interacting with stakeholders*, which is reflected in recommendation 3–5. Thus it is concluded that the experiences with ISO 14001 can enable a strategic implementation of the SDGs in large Danish enterprises

based on the aforementioned challenges and opportunities. However, it is not possible to learn from all the experiences of ISO 14001 to enable a strategic implementation of the SDGs. This is because not all of the experiences with ISO 14001 can meet all the challenges and support all the opportunities that affect strategic implementations of the SDGs in large Danish enterprises.



## 8 | Methodological Limitations and Further Research

Given that this research aims to contribute with knowledge for how large enterprises can work strategically with the SDGs, there are some limitations regarding the context. The challenges and opportunities that the enterprises experience should be considered from the context of large Danish enterprises. Therefore, the recommendations for how large enterprises can work strategically with the SDGs might differ in other geographical or socio-cultural contexts. As such, it could be relevant to explore the practice perspective in other large enterprises in other countries.

If this research was to continue for another semester, it could have been interesting to present and act on the results together with the enterprise that I did an internship at. This could make the research take a more action-research-based approach, as the presentation of the results could create an opportunity for testing if some of the recommendations could enable a strategic implementation of the SDGs. This could allow the enterprise to participate in the research and contribute to test the recommendations in practice.

Given the time frame of this thesis, the main focus has been to conduct multiple interviews that could contribute to the exploratory study. The respondents were allowed to be provided with the interview questions in advance of the interviews. This was considered to affect the respondents agreeing to participate in the interviews. However, providing the questions in advance has allowed the respondents to prepare the answers for the questions. This could be a limitation for the research because it could hinder immediate responses if the answers are practiced in advance.

The interviews with the respondents of the large Danish enterprises could have been affected by the enterprises wanting to bring out specific interests of the topic. Asking the respondents about the challenges and opportunities of implementing the SDGs could cause the respondents to tell more about the opportunities than the challenges because

they might want to tell more about their positive contributions to the SDGs and sustainability. However, the respondents were at the beginning of the interviews told that they were going to be anonymous in order for them to feel comfortable sharing both negative and positive experiences.

It could have affected the results of this research if other interview respondents were included. For example, a Danish certification body could have been included to answer sub-question 2. It is assumed that the certification body deals more with the practical aspect of the experiences with ISO 14001 than the organisation for standardisation. This is assumed, as the certification body issue the ISO certifications based on audits in enterprises. This could have provided the results with more in-depth knowledge of what the experiences with ISO 14001 in enterprises are in Denmark.

Another limitation to research is that the non-systematic literature review do not cover all experiences with ISO 14001. Therefore, there may have been experiences that are not included in this research that could influence a strategic work with the SDGs.



# List of References

- ATU Midt, Akademiet for Talentfulde Unge - Midt** (2018). *Deduktion, induktion og abduktion – en note*. URL: [https://atumidt.dk/sites/default/files/aktiviteter/forskningsstrategier\\_mc\\_0.pdf](https://atumidt.dk/sites/default/files/aktiviteter/forskningsstrategier_mc_0.pdf) (visited on 01/06/2021).
- Battagliaa, M., Annesi, N., Calabrese, M. & Frey, M.** (2020). 'Do agenda 2030 and Sustainable Development Goals act at local and operational levels? Evidence from a case study in a large energy company in Italy'. In: *Business Strategy and Development* 3 (4).
- Blagov, Y. E. & Petrova-Savchenko, A. A.** (2020). 'The transformation of corporate sustainability model in the context of achieving the UN SDGs: evidence from the leading Russian companies'. In: *Corporate Governance (Bingley)* 21 (2).
- Boiral, Olivier** (2011). 'Managing with ISO systems: lessons from practice'. In: *Long Range Planning* 44 (3).
- Brinkmann, Sven & Tanggaard, Lene** (2015). *Kvalitative metoder: En grundbog*. 1st ed. Chapter 10 & 17. København: Hans Reitzels Forlag.
- Bryman, Alan** (2012). *Social Research Methods*. 4th ed. Chapter 1 & 17. New York: Oxford University Press Inc.
- Burr, Vivien** (2015). 'What is Social Constructionism?' In: *Social Constructionism*. London: Routledge. Chap. 1.
- Chief Consultant in ISO 14001** (2021). *Interview with the Chief Consultant in ISO 14001 from the organisation for standardisation*.
- Consultant in Sustainable Business** (2021). *Interview with the Consultant in Sustainable Business in Network for Sustainable Business Development*.
- Corporate Sustainability Manager B** (2021). *Interview with the Corporate Sustainability Manager in Enterprise B*.
- D'Souza, Clare, McCormack, Silvia, Taghian, Mehdi, Chu, Mei-Tai, Sullivan-Mort, Gillian & Ahmed, Tanvir** (2019). 'Influence of Sustainability Scholarship on Competencies – An Empirical Evidence'. In: *Education & Training* 61 (3).

- Danmarks Statistik** (2014). *Dansk Branchekode og standardgrupperinger*. URL: <https://www.dst.dk/da/Statistik/dokumentation/nomenklaturer/dansk-branchekode-db07> (visited on 04/06/2021).
- Dansk Standard** (2015). *DS/EN ISO14001:2015: Environmental Management Systems - Requirements with Guidance for Use*. Electronic published via Dansk Standard's webshop.
- Dansk Standard** (2021). *ISO 14001 Miljøledelse*. URL: <https://www.ds.dk/da/om-standarder/ledelsesstandarter/iso-14001-miljoeledelse> (visited on 27/04/2021).
- Delmas, Magali A.** (2000). 'Barriers and Incentives to the Adoption of ISO 14001 by Firms in the United States'. In: *Duke Environmental Law & Policy Forum* 11 (1).
- Delmas, Magali A.** (2002). 'The diffusion of environmental management standards in Europe and the United States: an institutional perspective'. In: *Policy Sciences* 35 (1).
- Environmental Consultant A** (2021). *Interview with the Environmental Consultant in Enterprise A*.
- Fleming, A., Wise, R. M., Hansen, H. & Sams, L.** (2017). 'The sustainable development goals: A case study'. In: *Marine Policy* 86.
- Head of Law, Policy, and CSR D** (2021). *Interview with the Head of Law, Policy, and CSR of Enterprise D*.
- Head of Sustainability & External Relations C** (2021). *Interview with the Head of Sustainability & External Relations in Enterprise C*.
- Head of Sustainable Business** (2021). *Interview with the Head of Sustainable Business in the Business Association*.
- Heras-Saizarbitoria, Iñaki, Boiral, Olivier & Junguitu, Alberto Díaz de** (2020). 'Environmental management certification and environmental performance: Greening or greenwashing?' In: *Business Strategy and the Environment* 29 (6).
- Ionașcu, E., Mironiuc, M., Anghel, I. & Huian, M. C.** (2020). 'The involvement of real estate companies in sustainable development-An analysis from the SDGs reporting perspective'. In: *Sustainability* 12 (3).
- Jespersen, Jesper** (2014). 'Kritisk realisme - Teori og praksis'. In: *Videnskabsteori i samfundsvidenskaberne - på tværs af fagkulturer og paradigmer*. Frederiksberg: Samfundslitteratur. Chap. 5.
- Jesson, Jill, Matheson, Lydia & Lacey, Fiona M.** (2011). *Doing your literature review: traditional and systematic techniques*. 1st ed. London: SAGE Publications.
- Jones, Peter & Comfort, Daphne** (2020). 'The UK's largest volume housebuilders and the sustainable development goals'. In: *Property Management* 39 (1).

- Jupp, Victor** (2006). 'Exploratory Research'. In: *The SAGE Dictionary of Social Research Methods*. London: SAGE Publications.
- Kolk, Ans, Kourula, Arno & Pisani, Niccolò** (2017). 'Multinational enterprises and the Sustainable Development Goals: what do we know and how to proceed?' In: *Transnational Corporations* 24 (3).
- Kristensen, Heidi Simone, Mosgaard, Mette Alberg & Remmen, Arne** (2020). 'Integrating circular principles in environmental management systems'. In: *Journal of Cleaner Production* 286.
- Martinsen Rådgivning & Revision** (2021). *Regnskabsklasser*. URL: <https://martinsen.dk/revision-og-regnskab/regnskabsklasser/> (visited on 09/06/2021).
- Miljøstyrelsen** (1996). *Miljøledelsessystemer*. URL: <https://www2.mst.dk/udgiv/publikationer/1999/87-7944-103-3/html/indsat/kap07.htm> (visited on 03/06/2021).
- Miljøstyrelsen** (2021). *ISO 14001*. URL: <https://mst.dk/erhverv/groen-virksomhed/groenne-produkter/miljoeledelse/iso-14001/> (visited on 11/05/2021).
- Mosgaard, Mette Alberg & Kristensen, Heidi Simone** (2020). 'Companies that discontinue their ISO14001 certification - Reasons, consequences and impact on practice'. In: *Journal of Cleaner Production* 260.
- Mosgaard, Mette Alberg & Remmen, Arne** (2015). 'Miljøledelse'. In: *Bæredygtighed - Værdier, regler og metoder*. Aarhus: Aarhus Universitetsforlag. Chap. 14.
- Pedersen, C. & Nielsen, BB.** (1996). *Kom godt i gang. Virksomheders erfaringer med miljøledelse*. Pamphlet.
- Pedersen, Claus Stig** (2018). 'The UN Sustainable Development Goals (SDGs) are a Great Gift to Business!' In: *25th CIRP Life Cycle Engineering (LCE) Conference* 69.
- Poulsen, Laura Toftelund** (2021). *Realising Transformative Action on the Sustainable Development Goals through Strategic Management – Exploring Man Energy Solutions Frederikshavn's Process with the SDGs*. Not published since the project contains confidential content. 9<sup>th</sup> semester's project.
- Prajogo, Daniel, Tang, Ailie K.Y. & Lai, Kee-Hung** (2014). 'The diffusion of environmental management system and its effect on environmental management practices'. In: *International Journal of Operations & Production Management* 34 (5).
- Santos, M. J. & Bastos, C. Silva** (2020). 'The adoption of sustainable development goals by large Portuguese companies'. In: *Social Responsibility Journal* unknown.

- Scheyvens, Regina, Banks, Glenn & Hughes, Emma** (2016). 'The Private Sector and the SDGs: The Need to Move Beyond 'Business as Usual''. In: *Sustainable Development* 24.
- Schönherr, Norma & Martinuzzi, André** (2019). *Business and the Sustainable Development Goals - Measuring and Managing Corporate Impacts*. 1st ed. Switzerland: Palgrave Pivot.
- Selmier II, W. Travis & Newenham-Kahindi, Aloysius** (2017). 'Under African skies – mining TNCs in Africa and the Sustainable Development Goals'. In: *Transnational Corporations* 3.
- Senior Sustainability Manager A** (2021). *Interview with the Senior Sustainability Manager in Enterprise A*.
- Senior Sustainability Manager E** (2021). *Interview with the Senior Sustainability Manager of Enterprise E*.
- United Nations** (2015). *A/RES/70/1 Transforming our world: the 2030 Agenda for Sustainable Development*. URL: [https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E) (visited on 26/03/2021).
- United Nations** (2021). *Targets and Indicators*. URL: <https://sdgs.un.org/goals/goal12> (visited on 06/06/2021).
- van der Waal, Johannes & Thijssens, Thomas** (2020). 'Corporate involvement in Sustainable Development Goals: Exploring the territory'. In: *Journal of Cleaner Production* 252 (12).
- van der Waal, Johannes, Thijssens, Thomas & Maas, K.** (2021). 'The innovative contribution of multinational enterprises to the Sustainable Development Goals'. In: *Journal of Cleaner Production* 285.
- van Zanten, Jan Anton & van Tulder, Rob** (2018). 'Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement'. In: *Journal of International Business Policy* 1 (3).
- Williams, Sarah** (2018). 'Can a Values Reframing of ISO14001:2015 Finally Give Business an Effective Tool to Tackle Climate Change?' In: *Redefining Corporate Social Responsibility (Developments in Corporate Governance and Responsibility, Vol. 13)*. Emerald Publishing Limited, Bingley. Chap. 10.