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Building an ESG baseline framework for a small enterprise: The case of EMS

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Abstract

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Title of the thesis

Building an ESG baseline framework for a small enterprise: The case of EMS

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Abstract

This thesis explores how an SME can take its first structured steps toward ESG reporting by developing a tailored framework based on the VSME Standard. The case company, EMS – a Danish steel fabricator in the energy sector – faces increasing sustainability expectations from its customers. The author's personal interest in practical, real-world solutions for making companies more sustainable shaped the approach taken in this thesis. The aim was to create a usable ESG baseline that fits the everyday realities of a small company like EMS.

The VSME framework was used as a foundation and combined with stakeholder analysis and a materiality matrix to build a simple, scalable starting point for ESG work. The research method of this thesis is based on a qualitative approach where the data has been collected through literature review, semi-structured interviews, and the company's secondary data. The two most valuable outcomes for EMS were the development of a clear ESG baseline and a set of tailored opportunity areas that can support the company's future sustainability work.

Keywords

ESG, steel fabrication, SME sustainability, VSME Standard, sustainability reporting

Contents

List of abbreviations

CEO – Chief Executive Officer

CFO – Chief Financial Officer

CHRO – Chief Human Resources Officer

CO_2 – Carbon Dioxide

CSR – Corporate Social Responsibility

CSRD – Corporate Sustainability Reporting Directive

ESG – Environmental, Social, and Governance

EU – European Union

GHG – Greenhouse Gas

HSE – Health, Safety, and Environment

ISO – International Organization for Standardization

LCA – Life Cycle Assessment

MIR – Methodology for Interdisciplinary Research

R&D – Research and Development

SDG – Sustainable Development Goal

SME – Small and Medium-sized Enterprise

VSME – Voluntary Sustainability Reporting Standard for SMEs

1 Introduction

1.1 Thesis background

Sustainability has increasingly become a central focus for companies across industries, driven by growing stakeholder expectations, regulatory requirements and the global need to address climate change. Environmental, Social and Governance (ESG) reporting has therefore emerged as a tool to measure and communicate companies' sustainability efforts – beyond traditional financial performance (Shalhoob & Hussainey 2023). Although larger companies are already covered by the EU's Corporate Sustainability Reporting Directive (CSRD), small and medium-sized enterprises (SMEs) are experiencing increasing pressure from customers, partners and financial actors to document their sustainability work (Bevilacqua & Del Prete n.d.).

The steel manufacturing industry plays an important role in this context, as it is resource-intensive and has a significant environmental and social impact. In response, the European Commission has prioritized steel – alongside aluminium, textiles, furniture, tyres, and mattresses – for new ecodesign and energy labelling requirements, based on their potential to contribute meaningfully to the circular economy (European Commission 2025). Engineered Market Solutions (EMS), a Danish SME operating in the steel fabrication sector, acknowledges the need to take active steps towards greater sustainability and transparency. Although EMS is not a primary steel producer, it operates within the industry's value chain and is influenced by the same environmental expectations and regulatory trends (OECD 2024). As a supplier to larger energy industry companies, EMS must increasingly address these sustainability pressures in its operations and reporting to maintain its competitiveness in the market (Based on internal EMS documents and interviews 2025). This thesis therefore examines how EMS can unfold its ESG journey in a realistic and practical way.

1.2 Thesis objectives and limitations

The objective of this thesis is to develop a tailored ESG baseline framework for EMS. Therefore, the scope is limited to the case company EMS, and the findings are primarily intended for internal development use.

The framework is designed in alignment with the Voluntary Sustainability Reporting Standard for SMEs (VSME), aiming to support EMS in understanding its ESG performance. In addition, it will help to identify improvement areas, address sector-specific sustainability challenges, and prepare for future reporting requirements, as well as stakeholder demands.

The framework is built on the Basic Module of the VSME Standard and does not attempt to deliver a comprehensive ESG solution, but rather a feasible starting point suitable for a small enterprise.

The main research question guiding this thesis is:

- **How to set up a framework for reporting ESG efforts within EMS?**

Research sub-questions include:

- **What industry-specific features influence the nature of ESG reporting for EMS?**
- **What are the ESG reporting opportunities and challenges for EMS?**

1.3 Thesis structure

The thesis is structured to reflect a logical progression from theory to practical application illustrated on Figure 1:

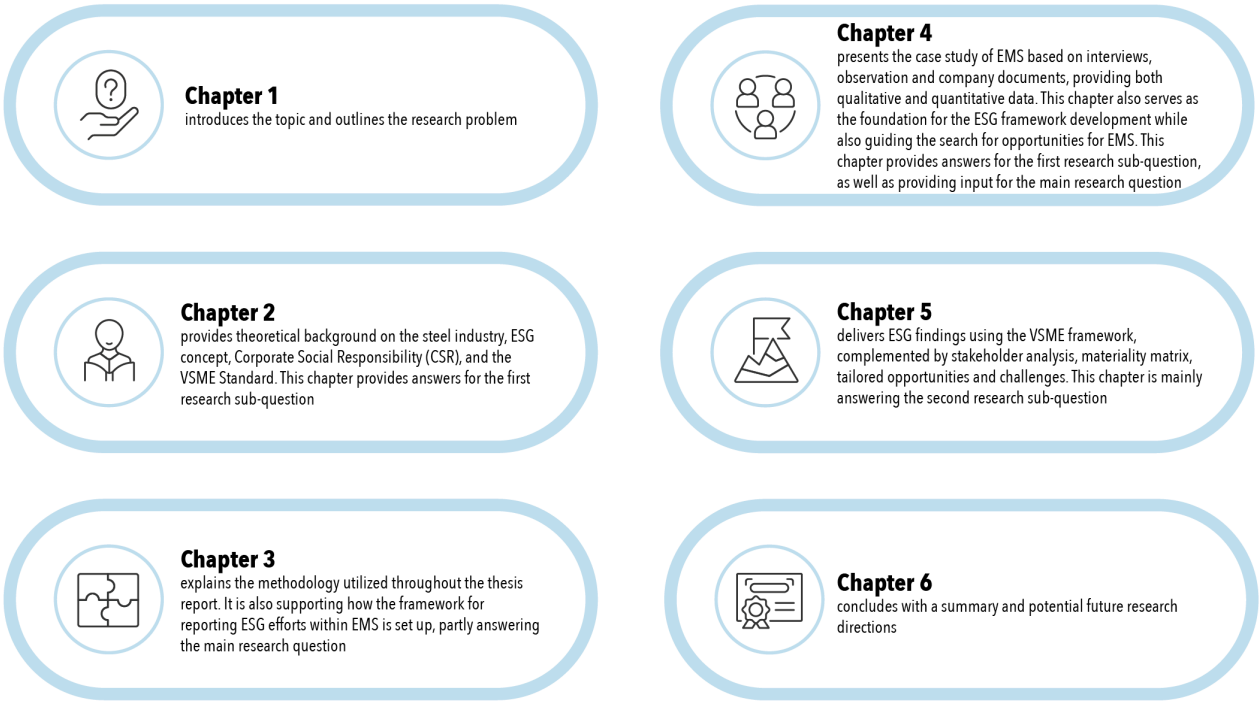

Figure 1. Thesis structure

2 Literature review

2.1 Steel industry and its sustainability

World crude steel production has increased from 189 million tons to 1885 million tons between the years 1950 and 2022, respectively (World Steel Association 2023). The growing number illustrates the vast importance of steel to the world and world's economy as it is the key material for building, infrastructure and manufacturing. In addition, it is fostering innovation within different sectors, as well as supporting global research and development. (World Steel Association 2019.)

Steel is produced in various types, depending on the end product requirements. Some of the typical steel types are flat steel, stainless steel, alloy steel and carbon steel. Flat steel has a broad and thin profile, which is used in automotive components and construction materials. Stainless steel's strength lays in its corrosion resistance, temperature resistance and aesthetics, being a chosen material in kitchen appliances and medical equipment. Alloy steel is a versatile type of steel as it can be blended of diverse metals (for example, chromium, nickel, manganese, silicon), making it suitable for many applications, such as aerospace and automotive components. Carbon steel is known for its strength, ductility and inexpensiveness, therefore being used for example for automotive, construction and shipbuilding components. (Brinkle 2024; LEADRP 2024.)

Due to steel's wide range of applications, functions and extremely complex value chain, it is a cause of several negative impacts. From the environmental perspective, steel manufacturing has a high contribution to greenhouse gas (GHS) emissions, particularly carbon dioxide (CO_2). Specifically, iron and steel energy-related emissions from manufacturing account for 7.2% of global GHG emissions. (Ritchie 2020.) Furthermore, steel industry is among the largest energy consumers, as well as water is used extensively, particularly for cooling purposes (Conejo et al. 2020). From a social perspective, the metal industry in general (including steel), can have a negative impact on local communities and workers if managed unregulated (Hatayama 2022). From the governance perspective, as the environmental awareness among society grows, steel manufacturers face stricter regulatory pressures and tighter policies. Leading steel companies, such as ArcelorMittal, are actively adopting CSR initiatives which focuses on footprint reduction, recycling practices and involving local communities. (Conejo et al. 2020.)

From a sustainability perspective, steel industry has already largely adopted the circular economy principles as steel is fully recyclable – something that is now well-integrated in the

industry's culture. Steel's characteristics remain unchanged through several recycling cycles, making it a prosperous material for sustainable practices as it saves the production of virgin materials, reduces CO_2 emissions and reduces energy consumption. As technological innovation improves, recycling of steel is also constantly implemented further – for example, better scrap recycling and general re-use of wastes could improve sustainability and resource efficiency. In addition to environmental benefits, there are also economic benefits – reduced raw material extraction means less waste being produced, while recycling keeps the value of steel as high as on virgin material. Furthermore, Life Cycle Assessment (LCA) plays a valuable role in the steel industry – it helps to optimize and monitor the lifecycle of steel and to make informed decisions. (Broadbent 2016; Conejo et al. 2020.)

As mentioned earlier, circular economy can be a significant sustainability driver in steel production by contributing to resource efficiency and developing new business opportunities (Hatayama 2022). One of the opportunities is industrial symbiosis which can facilitate collaboration between steel and other industries to optimize their resource allocation and reduce carbon emissions. This type of collaboration demands thorough information sharing strategies to be effective. (Zhang et al. 2018.) More concretely, there are great economic and environmental benefits from practicing industrial symbiosis in-between steel, cement and power industries. For example, utilization of steel production's fly ash and blast furnace can be utilized in cement production. Another example from the study is regarding large amount of heat generated in steel and cement industry, suggesting incorporating waste heat utilization technology which is attractive for the power industry. (Zhang et al. 2022.)

Despite advanced technologies, recycling systems and jobs created to communities, the impacts stay significant as steel production is growing steadily (Conejo et al. 2020) indicating the importance of striving for sustainability in the industry. According to Hatayama (2022), steel companies tend to focus on SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry Innovation and Infrastructure) and SDG 12 (Responsible Consumption and Production). Regarding SDG 12, it is reported that companies believe that by improving the supplier relationships and inspiring them to incorporate stronger CSR initiatives, they could promote the general steel industry sustainability state. World Steel Association (2023) on the other hand, has stressed that to boost the emissions reductions needed, it is the responsibility of all the players within the steel value chain. The current focus of the Association is to promote the acceleration of the decarbonization among the wider steel community, which in turn, helps to enable other sectors to meet their own decarbonization goals.

It is imperative that collaborative efforts throughout the steel value chain are essential to achieve meaningful sustainability improvements. Figure 2 serves as a summary of how the entire steel value chain can contribute to sustainability goals, from raw material extraction to end-product applications, ensuring that steel companies at all stages work together to

reduce emissions, conserve resources, and enhance overall industry efficiency. (World Steel Association n.d.)

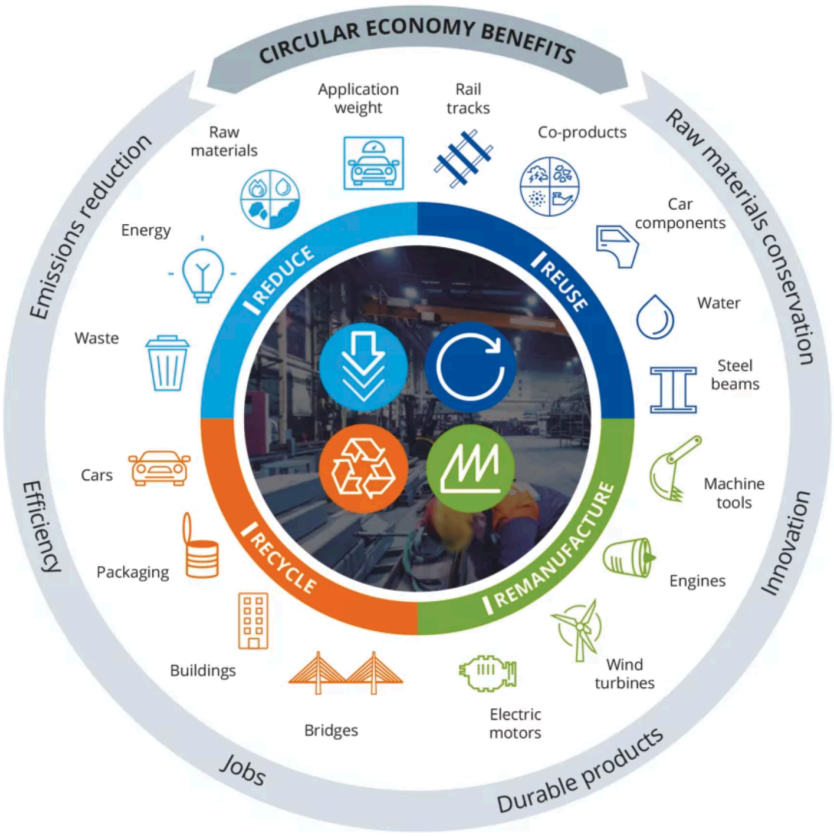

Figure 2. Steel value chain in circular economy (World Steel Association n.d.)

2.1.1 CSR in steel industry

Given some of the challenges mentioned in steel industry and its sustainability chapter, can be responded to through CSR.

CSR plays a central role in how steel companies address their environmental and social impacts. As large emitters and resource users, companies in this sector have long been under pressure to demonstrate ethical conduct, reduce pollution, and contribute positively to society. (Latapí Agudelo et al. 2019.)

Leading global manufacturers such as ArcelorMittal and Tata Steel have integrated CSR into their core strategies to not only meet regulatory requirements but to also build long-term trust and corporate legitimacy. ArcelorMittal focuses on stakeholder dialogue, circular economy practices, and local partnerships to promote sustainable development and social

inclusion. (ArcelorMittal a n.d.; ArcelorMittal b n.d.) Similarly, Tata Steel focuses on stakeholder engagement, skills development, and long-term community investments as some of their CSR initiatives (Tata Steel n.d.).

For SMEs in the steel value chain, CSR represents an important stepping stone toward more structured ESG reporting. While many SMEs operate without formal sustainability strategies, CSR provides a practical entry point for aligning with customer expectations, mitigating risk, and enhancing stakeholder relations. Moreover, CSR engagement helps SMEs begin measuring their impacts, setting internal targets, and preparing for future legal requirements. (Knudson n.d.)

2.2 Steel fabrication and sustainability in production processes

Machining is one of the key steps in steel fabrication (distinct from primary steel manufacturing). It makes raw steel suitable for specific applications by enhancing its properties and shaping it for intended use. (Oleksik et al. 2021.) Some of the main methods under machining category are cutting, drilling, forming and drawing, each representing a specific outcome depending on the product's requirements. Some of the cutting methods are guillotine shearing, cold saws, abrasive wheels, flame cutting, and laser cutting, each chosen depending on the thickness and other characteristics of steel. For drilling, computer-controlled systems are often used to secure precise hole drilling. Forming and drawing are typical methods in steel machining to bend and roll shapes and curvatures during fabrication. The latter might have its limitations as the excessive straining caused by forming can demand reheat treatment to restore material characteristics. (Thackray & Burdekin 2012.)

Welding is a crucial part of steel fabrication due to the opportunities it provides. Welding itself comes in many different welding types, each representing a unique way of modifying the steel product. However, two of the most common welding types for general applications are arc welding processes (particularly suited for thicker materials) and the resistance welding processes (best for thinner materials, such as steel sheets). (Thackray & Burdekin 2012.)

In parallel with the technical processes, it is important to consider their environmental implications – particularly emissions. When it comes to emissions in steel fabrication, the common Scope 1, 2, and 3 categories are just as relevant as in any other industry. Scope 1 includes direct emissions from on-site activities like welding or running fuel-powered machines. Scope 2 covers emissions from purchased electricity and district heating. Scope 3 goes beyond the company's direct operations and includes emissions from the supply

chain, like the extraction of raw materials or transporting steel components. For fabricators, understanding these categories is an important step toward tracking and reducing their total environmental impact. (Klimakompasset n.d.)

In terms of sustainability within machining and welding of steel, there are several ways of reaching more environmentally friendly conditions when working with steel. As mentioned in the previous sub-paragraph, steel is fully recyclable, and its characteristics remain unchanged through several recycling cycles. Meaning, the scraps from the fabrication are also recyclable. (Broadbent 2016.) In addition, Khan et al. (2021) explains that energy efficiency and carbon footprint reductions can be controlled via electrical energy consumed. One way to achieve that is by using advanced 'lubricooling' technology which enables more effective cutting procedures. While dry machining is most sustainable approach, it is not always the most suitable method. In addition, monitoring energy consumption at different machining stages enables to optimize the resource usage.

Welding is considered high energy and resource consumer, harmful for the health of the workers and polluting to the environment, sustainable alternatives are crucial to be considered. There are several welding techniques available – depending on material's properties and the combination of techniques, it is not optimal to suggest one best welding method. In addition, due to welding's multifaceted nature, LCA is relevant for optimizing the workflow. The components contributing to LCA analysis are the mass and power source used, the amount of electricity used, the welding time, and the welder's level of skills. Looking at these components can help to make informed modifications in becoming more sustainable. (Doncheva et al. 2024.)

Additionally, the integration of advanced technologies, such as automation and digitalization, enhances precision and efficiency in steel processing. Adopting sustainable practices not only mitigates environmental impact but also aligns with global sustainability goals, ensuring long-term viability and compliance with evolving regulations. (International Energy Agency 2020.)

2.3 The importance of ESG

ESG, standing for environment, social and governance, is a framework used to assess businesses and organizations involvement in sustainability, ethics and CSR matters. During the last two decades, ESG has become a central concept in decision-making and invest-

ment strategies and today, it is widely incorporated into business operations, helping companies to take the right steps towards societal and environmental responsibilities. ESG framework stands out due its flexibility and adaptability, allowing businesses to tailor their own operational context while adhering to varying regulations across regions and sectors. Furthermore, ESG has become a cornerstone in investment decision-making as investors increasingly rely on ESG framework when evaluating businesses risks and opportunities. Naturally, this trend has been especially beneficial for businesses performing successfully in ESG reporting, showcasing a positive impact of ESG to a business. In addition, risk management comes as a crucial part of ESG implementation. In today's volatile world, it is necessary for the companies to take measures towards a more resilient business strategies. This involves considerations of potential challenges related to climate change, regulatory compliance and labour practices, to name a few. By being proactive, companies can ensure their long-term resilience and trust with stakeholders, making it an apparent reason for companies to employ ESG matters into their strategy. (Pollman 2022; Setyaningsih et al. 2024; Shalhoob & Hussainey 2023.)

2.3.1 ESG in SMEs

SMEs are crucial to world economies – globally, SMEs represent 90% of businesses (World Bank Group 2019) and in Europe, 99% of businesses (European Commission n.d.), indicating that SMEs' focus on ESG principles is vital. Even though, SMEs typically are not among the biggest polluters, they do collectively contribute to environmental degradation (Setyaningsih et al. 2024).

ESG reporting offers a range of benefits for the SMEs. Several studies have pointed out it enhances transparency, improves performance, and guides to a better business and stakeholder relationships. The latter helps to build competitive advantages and grow the reputation in the market. Furthermore, increasing ESG focus will eventually demand also SMEs to comply, making it smoother for the early adapters. Many governments and policymakers recognize the need to help SMEs, offering support and incentives for easier transition. (Setyaningsih et al. 2024; Shalhoob & Hussainey 2023.)

While there are benefits, there are also significant challenges for SMEs within ESG reporting. Due to possible resource issues among SMEs, results are slow to show, resulting in slow performance improvement. Therefore, it is wise to make long-term ESG plans for positive outcomes. (Setyaningsih et al. 2024; Shalhoob & Hussainey 2023.) One way to tackle this challenge is to start small by following most crucial ESG principles, helping to create a

baseline which a company can build on each year when updated. VSME Standard is an effective tool for that, which is further elaborated in the next sub-chapter. (Bevilacqua & Del Prete n.d.)

2.4 VSME Standard

European Financial Reporting Advisory Group (EFRAG), a technical body operating under European Commission, has developed VSME for non-listed SMEs. This standard is separate from Corporate Sustainability Reporting Directive (CSRD) which is a mandatory directive to listed companies. VSME, on the other hand, is voluntary and is created to guide SMEs facing increasing data requests from partners and clients with a streamlined and standardized ESG reporting. The VSME aims to reduce uncoordinated ESG reporting demands, lower costs and improve SMEs' access to financing and business opportunities. (Bevilacqua & Del Prete n.d.)

According to Simonsen, Director at ESG Report for VSME, following VSME Standard helps to identify and fill gaps in company's data and ensure actions are in accordance with expectations when serving bigger entities, securing investments, or meeting stakeholder and customer expectations. Reporting on ESG helps to make informed decisions that are the drivers for sustainability and compliance. (Simonsen n.d.)

The VSME Standard is divided into Basic and Comprehensive Module. The Basic Module, which is incorporated in this thesis, is set up as follows (EFRAG 2024):

Basic Module – General information

- B1 – Basis for preparation
- B2 – Practices, policies and future initiatives for transitioning towards a more sustainable economy

Basic Module – Environment metrics

- B3 – Energy and greenhouse gas emissions
- B4 – Pollution of air, water and soil
- B5 – Biodiversity
- B6 – Water
- B7 – Resource use, circular economy and waste management

Basic Module – Social metrics

- B8 – Workforce – General characteristics
- B9 – Workforce – Health and safety
- B10 – Workforce – Remuneration, collective bargaining and training

Basic Module – Governance metrics

- B11 – Convictions and fines for corruption and bribery

3 Methodology and data collection

This thesis uses primarily qualitative case study design, supplemented with quantitative findings, a method often used in sustainability research when there is a need to understand complex and context-specific issues. The case study approach was chosen to provide deeper insight into the case company EMS and to examine the company's ESG readiness and potential for further development. The method aligns well with the Methodology for Interdisciplinary Research (MIR) framework, which supports the use of different data sources and research strategies to address real-world issues. (Tobi & Kampen 2018.) In the case of this thesis, the methods used align with interdisciplinary research principles, bridging environmental, social, and governance sustainability domains, as well as industry-specific context of steel fabrication.

Data collection approaches

To support the main research question and the development of this thesis, the author followed a combination of methods. Both primary and secondary research were conducted:

1. **Literature review:**

Academic and industry literature was reviewed to create an understanding of steel industry, ESG frameworks, the role of CSR in steel industry, and SME-specific challenges. Sources include journal articles, books, open-access standards (VSME), and sustainability roadmaps from recognized organizations. Keywords were chosen for narrowing down the scope and to simplify finding the relevant information.

2. **Company documents and internal data:**

Internal confidential documents (therefore not shared in the thesis) provided to the author by EMS formed a valuable source of contextual and quantitative information, related to operations, energy use, waste, safety policies, etc. As EMS was open for author's data requests, nearly everything got an answer to map the ESG indicators. Quantitative data was systematically collected and organized into tables, seen in chapter ESG findings and baseline framework for EMS, providing measurable indicators across ESG dimensions. While the study does not apply advanced statistical modelling, the quantitative data is used to establish baseline performance and identify patterns (e.g. recycling rates, accident frequency).

3. **Semi-structured interviews:**

Semi-structured interviews are based on flexible open-ended questions that help structure the conversation without restricting it. The interview format allows interviewees to speak

freely while keeping the conversation focused on key topics. This balance between structure and flexibility makes the method suitable for investigating complex or specific situations. The approach also supports deeper insights, as the interviewer has the opportunity to ask follow-up questions along the way. (McIntosh & Morse 2015.)

Interviewing proved to be the most valuable information gathering method of this thesis. An interview guide was prepared beforehand, focusing on key themes under environmental, social, and governance practices. Afterwards, the responses were reviewed and grouped by common themes to highlight opportunities, challenges, and patterns in EMS's sustainability work.

The interviews were conducted with six EMS managerial-level employees to gather insights on company's basic information, operations, environmental practices, social considerations, governance related matters and stakeholder pressures. Interviewees included were heads of departments such as CHRO (Chief Human Resources Officer), Warehouse and Logistic Manager, HSE (Health, Safety, and Environment) Coordinator, CFO (Chief Financial Officer), Engineering Team Lead, as well as CEO (Chief Executive Officer) of EMS. Interviews were conducted mostly face-to-face; a small part was conducted via email due to sharing of documents and extra questions. An overview of the interviews is visible in the Table 1. Due to a comprehensive amount of interview questions, they can be seen in Appendix 1.

Table 1. Overview of the interviews.

Interviewee	Position	Mode of interview	Date	Duration	Language
Interviewee 1	CHRO	90% face-to-face, 10% email	06/01/2025	4h	English
			15/01/2025	4h	
			03/02/2025	3h	
			13/02/2025	1h	
			05/03/2025	1,5h	
			20/03/2025	1,5h	
Interviewee 2	Warehouse/Logistic Manager	90% face-to-face, 10% email	13/02/2025	1,5h	English
			18/03/2025	1h	
Interviewee 3	HSE Coordinator	90% face-to-face, 10% email	19/02/2025	1h	English
Interviewee 4	CFO	90% face-to-face, 10% email	19/02/2025	1h	English
Interviewee 5	Engineering Team Lead	90% face-to-face, 10% email	19/02/2025	30min	English
Interviewee 6	CEO	100% email	25/03/2025		English

4. VSME Standard framework:

Among VSME Standard framework, few other frameworks were considered, such as an ESG framework offered by Lederne and GRI Standard (The Global Reporting Initiative). Lederne is Denmark's largest organization for managers and offers a practical ESG tool to help companies assess and report on sustainability efforts (Lederne n.d.). GRI Standard, on the other hand, is a world-scale complex sustainability reporting standard, guiding with comprehensive and detailed datapoints (GRI n.d.).

However, VSME Standard got chosen due to its high relevance for EMS – VSME Standard is voluntary and dedicated for specifically SME companies such as EMS. In addition, it is one of the latest standards of its kind, first released in December 2024, making it highly topical. Moreover, as mentioned earlier, it is coming from a European Commission sub-organisation, EFRAG, making it credible source for ESG guidance within the European context. (Bevilacqua & Del Prete n.d.)

5. Applied Thematic Analysis:

Applied Thematic Analysis (ATA) is a flexible and practical approach to analysing qualitative data, especially well-suited for real-world, interdisciplinary studies like this one. One of ATA's strengths is that it encourages using various tools that happen to be most appropriate for a writing project at hand, including basic quantification when useful. This makes it useful for cases like EMS, where qualitative insights from interviews are combined with frameworks like VSME and with company documents including quantitative data. (Guest et al. 2014.) ATA's emphasis on adaptability helped guide the analysis of topics such as ESG readiness, stakeholder priorities, tailored opportunities and challenges in Chapter 5.

4 EMS case study: Business and sustainability context

4.1 General overview

EMS, founded in 2009, is a global company offering their clients with tailored solutions within engineering, fabrication, inspection and maintenance services. EMS is located in Esbjerg, southern-west side of Denmark, which is known for its energy industry. Today, they have 90 employees dominated by male gender due to the nature of the industry. However, it is of EMS interest to have more female employees which is considered when people are hired. With the number of employees and the amount of turnover, EMS is categorized as an SME company.

EMS, next to Global Gravity and Kenso Group Ejendomme, are under an umbrella company called Kenso Group. As Global Gravity is operating in the same address and same industry as EMS, some of their facilities and equipment are shared, which needs to be considered when building the ESG framework.

Some of the most important clients for EMS are Semco Maritime, Total Energies, INEOS Energy Denmark, Siemens, Vestas, Topsoe, Ørsted and Energinet. The named clients are all nationally and/or globally known larger companies operating within energy industry. As the clients progress in their sustainability initiatives, they increasingly expect their partners and suppliers, including EMS, to meet specific standards. As a result, EMS is incentivized to improve its sustainability efforts and implement reporting practices to align with these expectations.

EMS specializes in steel structures in energy industry (both offshore and onshore), offering services from design and construction to production and installation. They provide high-quality fabrication for projects in all sizes in their multifaceted and well-equipped fabrication and welding facilities. Specifically, EMS can support with new constructions, assembly, renovation (pipeline solutions and leak sealing capabilities), as well as other multidisciplinary capabilities including mechanical engineering, electrical systems and project management, to name a few. Furthermore, EMS offers also equipment rentals and maintenance. Additionally, EMS ensures high skill-level and proactivity of the manpower by providing them training and development needed.

4.2 EMS's facilities

The company covers an area of 24000m^2. EMS has an office (1800m^2), workshops (8000m^2) and warehouse (2000m^2) buildings. Three buildings were built after 2017 over the

course of five years, following the newest building standards with a focus on climate, environment and working environment. By 2022, extensive renovations were finished on the older buildings elaborated as follows: All lightning in and outside the buildings are LED; ventilation system is updated with Genvex ventilation solution known for its durability, energy efficiency and high air quality; better indoor climate is ensured with better insulation solutions; big windows with low-energy glass allow the daylight to come into the office and production spaces; port doors with low U-value secure better energy efficiency; installation of water-saving showers; energy reduction in production and office facilities outside working hours. In addition, for supporting the employees well-being, small coffee areas were created for the production facilities as part of the renovations.

4.3 Production operations: Materials and fabrication

The majority of materials they work with are different metals (aluminum, stainless steel, carbon steel, brass, copper, alloy steel, Inconel and invar), steel being the primary material (EMS a).

The materials used in the production are utilizied nearly to the full extent. The materials are purchased according to each project, meaning they do not have materials stored at the location, but instead, they buy what they need. Furthermore, nearly all of the leftover materials are being recycled which is elaborated to the greater extent under the Environmental responsibility sub-chapter.

The design of the project can both come from their customers or from EMS engineering team, depending on the requests. When projects are designed in-house, they focus on effectiveness and optimization, both for financial reasons, for the easy use and maintenance of the product. Designing of the projects is supported by CAD/3D programs Autodesk Inventor, AutoCAD, AutoCAD Plant 3D, Autodesk Nastran, Mathcad and Rohr2.

EMS operates within a range of production processes, including welding, CNC milling, CNC turning (lathe), forming and bending, cutting and drilling. Among these, welding is the most relevant operation. High standard is secured by the use of CAD/CAM programming tool Mastercam in the production. To ensure machinery remains in optimal condition, EMS follows maintenance and servicing routine, being marked with year stamps to ensure compliance with servicing requirements.

When it comes to technological advancements or automation, EMS has not implemented any further initiatives in its production processes. Similarly, no formal tracking system is in

place to monitor energy efficiency across machinery and workflows. While there are no immediate plans to upgrade equipment for more sustainable alternatives, the company remains open to future improvements.

4.4 Quality control

Quality is a cornerstone for EMS – they follow industry regulations and provide material certifications, hot work certificates and offshore welding certificates. Specifically, they own FORCE Certification for Quality Management System (complying with ISO 9001:2015), Conformity of Factory Production Control (complying with ISO 3834-2) and Production Management Quality Requirements for Welding (complying with ISO 3834-2:2021). Apart from the certificates, EMS provides thorough in-house quality inspection/testing to secure that the product's specifications, as well as quality standards, are followed (EMS a).

4.5 Environmental responsibility

4.5.1 Energy consumption

EMS primarily sources its energy from Norlys – during last financial year EMS consumed 440MWh of electricity. Additionally, a small part of the energy consumption is covered by on-site solar panels which contributes with 2MWh additional renewable energy. While there is no formal green energy agreement with Norlys yet, it is recognized as a potential opportunity for the future.

From energy efficiency point of view, several improvements have been made in the older buildings through a climate shell investment during 2022-2023, aimed at creating better insulation and indoor climate control. In addition, new buildings built around the same time are following the latest building requirements which is further elaborated under the EMS's facilities sub-chapter. The company has also implemented Central Condition Monitoring and Control (CTS), an automation system used to monitor energy usage and optimize efficiency. However, no concrete plans for further efficiency measures have been established yet.

Apart from electricity, EMS is purchasing also district heating, fuels, as well as gases. EMS is purchasing 730MWh of heating which is both used for heating, as well as together with electricity for cooling and ventilation to regulate the temperature. From fuels, 160MWh of diesel and 15MWh of gasoline is consumed. EMS has in total eight vans running on fossil fuel, one car running on fossil fuel, three cars are hybrid and two cars are electrical. From flammable gases propane (75kg) and acetylene (207kg) are used.

When it comes to energy reduction targets, EMS has no official goals in place. However, as of one of the solutions, there is a discussion about introducing more sustainable company cars as a step towards reducing environmental impact.

4.5.2 Pollution and emissions

In production, several chemicals and gases are used – the usage is within limits set by the industry. EMS ensures compliance with occupational health regulations by adhering to Arbejdstilsynet's list of limit values for air pollution and specific substances. This ensures emissions remain within safe thresholds and do not pose an environmental or workplace hazard.

Chemicals are briefly elaborated further under Waste management and recycling sub-chapter. From the gases, EMS is using flammable gases, welding protective gases, back shielding gases and oxygen. However, as EMS is not required to report on its pollutants emissions, their impact is not further elaborated within this thesis either as advised by the VSME Standard, point 110 (EFRAG 2024). Despite that, air pollution control is under focus for workers safety, particularly in welding operations. Smoke and fumes generated during welding are extracted and directed outside the facility.

Small, but positive impact of the company's own solar energy, is that it helped to save approximately 930kg of CO_2.

4.5.3 Waste management and recycling

EMS has thought-out waste management in place, which has been under focus since 2022. Their two main waste handlers are Marius Pedersen for the municipal waste and HJH Hansen Recycling for the metal waste. Within their last financial year, they produced approximately 124 000kg of waste. All the waste that can be recycled is recycled (91%) and the rest is either incinerated or sent to a landfill. Specifically, all the metal used in the production, as well as glass, wood, cardboard and paper, bio waste and different packaging, are recycled. In addition, cardboards and pallets that are intact, are reused. From the hazardous waste, oils with particles from the machining processes and contaminated packaging are also recycled or recovered. The main waste materials recycled are steel scrap (43%), mixed/treated wood (12%), mixed contaminated packaging (11%), stainless steel scrap (8%) and aluminium scrap (8%).

In addition, in terms of heat waste, EMS has taken steps to optimize energy use by recycling heat through a Genvex ventilation system, which channels recovered heat back into the building.

4.5.4 Water use and management

At EMS, water consumption is relatively minimal and not a major operational issue – specifically 306,6m^3 of water was withdrawn during the last financial year. Therefore, water is supplied through the municipal water supply system.

The company primarily uses water in everyday usage (bathrooms, kitchen, etc.), testing, cleaning and milling processes. A relatively new, 1000-liter pool of water-chemicals mixture and ultrasonic cleaning is used for pipe cleaning, However, due to its newness, this is not yet significant in terms of water consumption. In milling, cooling oil mixed with water is used for the process.

To minimize environmental impact, EMS has an oil separator tank with sand filtration, securing that after chemical use, water is cleaned before it enters the sewage system. Metal particles along with other collectable waste from the cleaning tank are separated, with hazardous waste collected by Marius Pedersen, while additional metal residues are sent to a recycling company. Thereby, water pollution is controlled and EMS ensures that all wastewater is treated before discharge. As water consumption is low and the company does not operate in an area with high water stress, additional water efficiency technologies, such as closed loop systems, are not considered necessary.

4.6 Social considerations

4.6.1 Workforce structure and employee data

EMS has 90 employees across the Danish-based office and production, of which 97% are hired permanently. From a gender distribution point of view, 88% of the employees are male and 12% are female. Employee turnover during the last financial year was 22% and the frequency of registered accidents at work was 8,9. In addition to the latter, EMS is also looking at the LTI (Lost Time Injury) rate where some data was provided – out of 8 incidents, 5 caused absence from work. Lastly, in EMS, all employees receive a salary that is at least at the level of the minimum wage and are covered by a collective agreement.

4.6.2 Work environment and employee well-being

At EMS, employee well-being and workplace conditions are taken seriously. The company ensures that staff have access to comfortable break areas, including kitchen facilities in production spaces. Employees are provided lunch, fruit, and they are encouraged to participate in company-organized social events through the staff association. An internal communication app helps keep everyone informed and connected in daily basis. EMS also provides

various employee benefits, including healthcare, insurance, retirement plans, discounts at some local shops, access to different museums and free access to Esbjerg Svømmestation. To enhance the sense of community within EMS, management is keen on supporting employee-led initiatives that contribute to a positive workplace environment.

Regarding ergonomics, EMS provides movable tables and the right chairs for their employees' workstations. An APV (*arbejdspladsvurdering* - workplace assessment) is in place, a tool for ensuring good physical and psychological working environment, covering more than just ergonomic needs. In connection to that, employees can request necessary equipment, for example noise-cancelling headphones and safety equipment, to improve their work environment.

Workplace safety is not just a compliance requirement, it is a priority. Therefore, safety inspections are conducted monthly for both office and production areas to ensure that all safety measures are in order. This is being done by following company-specific checklist, allowing to identify potential hazards before they become incidents. Some of the checkpoints are as follows: fire equipment, emergency exits, lifting equipment, machine guarding, storage and securing of gas cylinders, chemical labelling, workplace instructions, organized workplace, waste management and personal protective equipment (PPE). In addition, every second year, Esbjerg Kommune carries out an environmental inspection, ensuring compliance with municipality regulations.

EMS also supports employees' occupational health with health insurance coverage through Danmark Sundhedssikring, providing access to healthcare specialists and well-being. This insurance is often more effective than going to a family doctor as the help is provided fast, as well as advice given by different specialists can lead to the right treatment from a start, for example physiotherapist for specific muscle issues, etc. Health is also promoted via social events and team-building activities, including support for the Vestkyst Løb (West Coast Run), which is part of the company's efforts to build a healthy and engaged workplace culture.

EMS recognizes the importance of work-life balance. When extra hours are required, employees have the option to take time off as compensation, ensuring flexibility and preventing burnout, following the physical and psychological work environment goal. In addition, EMS offers flexible hours for a better work-life management as well as possibility of reduced hours in case of a milder health issues that would still allow to work to some extent.

In terms of workplace culture, EMS integrates initiatives aimed at fostering positive attitudes and teamwork. The company follows principles from Arbinger, a methodology focused on

mindset and attitude development, to create a constructive and cooperative work environment. Arbinger helps to understand why it is sometimes difficult to work together to achieve a goal, while everyone has good intentions. By creating awareness of what happens inside of us before we do anything in our behaviour is a key realisation at progressing in this. (Arbinger n.d.)

As an extra step, EMS is monitoring employee satisfaction and well-being through surveys which are conducted every one to two years. Specifically, the survey is based on GAIS which is Danish, research-based and valid model of what is important for work motivation. The last survey was conducted 2024 and it is combined in between EMS and Global Gravity. The overall work satisfaction score in EMS is 80, ranking above the benchmark, indicating a highly engaged workforce. Breaking it down further, leadership and colleague relationships are rated the highest, 84 and 83 respectively. Results (80), mastery (78) and decision-making influence (78) share the middle-ground. Least satisfying, but still ranked high, are purpose (77) and work-life balance (75). Overall, the survey results highlight a workplace where employees feel valued, supported, and engaged, with room to further strengthen work-life balance initiatives.

4.6.3 Diversity, equity and inclusion (DEI)

EMS is committed to fostering a work environment based on DEI principles. While technical and leadership roles are still male-dominated, there is a presence of women in key roles, including a welder, a project assistant, and two production planners. Fortunately, the company acknowledges the importance of increasing diversity, especially when hiring and promoting employees. While competences remains the priority, there is a general desire to bring more women into the office and production areas, as it is believed that this would introduce new perspectives and enrich the workplace environment.

Furthermore, DEI is supported by the company's brief personnel policy, ensuring that all employees have equal requirements, pay and benefits. This is partly achieved by the employee surveys, which is explained to a greater detail under Work environment and employee well-being sub-chapter. Other points made in the personnel policy is about trust and transparency; about inclusion, ensuring that everyone is treated with respect and where discrimination is not tolerated; about the employee right to organize freely; about ethics that is further supported by the company's Code of Conduct; and about expectations to the employees such as being professional, honest and service-minded. In addition, various social events are arranged throughout the year beyond daily work interactions to support the company's social goals.

4.6.4 Employee training and development

At EMS, employee training and development play an important role in ensuring professional growth and workplace safety. New employees are required to take onboarding training, which includes a facility tour and an introduction to all departments, conducted twice a month where new employees are gathered. Safety training is another component of onboarding – in cases of offshore work, mandatory certifications like hot work training are required. Besides onboarding trainings, EMS also provides first aid training and there is plan in place to start with cybersecurity training. Furthermore, EMS offers mentorships in collaboration with Business Esbjerg, specifically for apprentices and students in engineering and production fields. Moreover, career growth is supported by offering individual-based upskilling/training opportunities – this is often being done during low season in production. Average training hours per employee during last financial year was 110 hours, of which 90 hours was designated to school apprentices.

4.6.5 Community and social engagement

EMS is actively involved in supporting the local community. EMS is sponsoring local sports clubs, local running and cycling teams, supporting children's charities, and engaging in events like the annual Football Jersey Friday, which raises awareness and funds for children with cancer. Additionally, EMS is a hospital clown sponsor, further supporting children with cancer.

Collaboration with educational institutions is another focus area. EMS regularly takes students on facility visits and offers trainee, apprentice, and internship opportunities. As part of Education Esbjerg, the company has been mentoring students, and currently assisting a student with this thesis project, fostering a strong link between industry and education.

Employees are encouraged to participate in volunteer work, including charity events and mentoring programs. This includes support initiatives such as helping mothers in need and offering mentorship to students. Moreover, employees are expected to follow company initiatives such as taking first-aid training, adhere to waste sorting programs, and participating in employee wellness surveys.

4.6.6 Code of Conduct and supplier network

EMS adheres to the principles in its Code of Conduct and requires that employees and partners do the same. Code of Conduct determines compliance with legislation where laws,

regulations and industry standards must be followed. Furthermore, it determines that corruption, bribery, discrimination and coercion are in no way tolerated. Also, fair employment practices and ethical sourcing must be upheld, applying both internally and throughout network of suppliers. There is no separate Code of Conduct for suppliers, meaning they are expected to adhere to the same general Code of Conduct, which outlines the suppliers commitment to fair treatment, ethical labor conditions, and compliance with local laws. Code of Conduct is not currently public, however, after updating, it is EMS's plan to publish it on their website.

While EMS has conducted some supplier audits in the past, a structured auditing system is still in development. Plans are in place to make supplier audits a regular part of operations, as well as update the Code of Conduct to better fit for the suppliers. Currently, EMS primarily relies on supplier-provided information and requires certain certifications when necessary. Occasionally, trips are made to visit supplier sites, allowing for first-hand observation of working conditions. However, this process is informal, and further development is needed to establish a more systematic approach to supplier monitoring.

4.7 Governance and CSR

4.7.1 Vision, mission and business strategy

EMS's vision is to be the preferred partner within its focus industries. This is achieved by continuously developing products and services in close collaboration with its best customers. Growth is a priority for EMS, however, it is not coming at the expense of reliability, quality, customer satisfaction, or financial stability. EMS believes in fostering strong, complementary relationships with its customers to create mutual benefits.

EMS's mission is to enhance its customers' products through innovative, tailored solutions that boost efficiency and competitiveness. This is achieved by recruiting competent employees who thrive in a demanding yet healthy work environment. EMS sets itself apart by its flexibility, close customer engagement, and strong entrepreneurial mindset. Regardless of its size or growth, EMS remains committed to a flat, flexible, and innovation-friendly organization.

There is no formal business strategy available at the moment, but EMS is working on it where the overall focus is on the company's core business as fabrication and service company.

4.7.2 CSR

At EMS, ethical business practices and CSR are guided by formal policies. As mentioned earlier, EMS has a Code of Conduct, outlining acceptable behaviour for employees and management, ensuring consistency and accountability across the company. In addition, EMS has a brief CSR policy documenting the key areas: employee well-being, workplace safety, giving back to the community and responsibility for the environment.

For transparency and integrity, EMS provides a confidential whistleblower mechanism, allowing employees and external stakeholders to report unethical behaviour safely and discreetly.

EMS communicates its ethical policies and quality requirements to suppliers and external partners through Code of Conduct and a specific supplier form (*Leverandøroprettelse* – Supplier registration). This supplier form requires to comply with relevant ISO standards and other quality expectations EMS have. Since EMS is primarily purchasing through Danish agencies/suppliers rather than from direct suppliers, this approach ensures indirect control and alignment with their ethical values across their supply chain.

4.7.3 Risk management

EMS does not currently have a formal, company-wide risk management framework for general operations, apart from IT and cybersecurity policies. However, departments manage their own risks individually – for example, finance department ensures economical risks are monitored, engineering department ensures risks are evaluated for each project, and the company has general insurance coverage and risk handling related to physical security (e.g., alarms for fire and theft).

From an IT and data security perspective, EMS is in a good track. General Data Protection Regulation (GDPR) compliance is in place, and technical measures such as two-factor authentication, firewalls, VPNs, spam filters, virus scanners, backups, and disaster recovery systems are implemented. The company also follows practices connected to CIS18, and there is an ongoing effort to build cybersecurity awareness among employees, including phishing training and general IT and data risk education.

When it comes to sourcing and the suppliers, there is no detailed policy for supplier risks, however, suppliers are expected to comply with EMS Code of Conduct. Furthermore, EMS is not actively partnering with eco-friendly suppliers, at least not knowingly.

From the sustainability risks perspective, the company is still in the early stage. As the goal of this thesis is to help them build and start up their ESG framework, specific ESG-related risks are not yet formally mapped out.

4.7.4 Compliance with laws and regulations

As mentioned in previous sub-chapters, EMS is following general laws and regulations within the industry. When it comes to internal practices, there are regular audits in place, especially around workplace safety. Code of Conduct, CSR Policy, HSE (Health, Safety and Environment) Policy and Personnel Policy are the official internal documents followed when managing the company and complying with laws and regulations.

Regarding suppliers, EMS relies on their general Code of Conduct, essentially depending on Danish suppliers/agencies to ensure that suppliers further down the tiers act within legal and ethical boundaries. However, the company sees that a separate Supplier Code of Conduct is necessary, being among future plans.

4.7.5 Sustainability strategy

At the moment, ESG efforts are focused mostly on the social aspects, such as employee welfare and giving back to the community. However, there is a clear intention to broaden the focus and give more active attention to environmental aspects as well. For example, there are opportunities for EMS to support broader industry transitions like Power-to-X (PtX) and carbon capture and being involved in testing CO_2 capture technologies.

Current sustainability efforts in EMS are supported by a few local networks and sustainability-related programs, such as Klimaklar, Klimakompasset, and initiatives from Erhvervshuset Sydjylland.

Fortunately, leadership at EMS is open and positive toward sustainable initiatives, but also careful as the sustainability initiatives should not burden the business economically. EMS has intentions to become more transparent with their sustainability performance, especially in response to growing customer interest and expectations. Transparency is seen not just as a compliance issue, but as part of building trust with stakeholders.

Starting up ESG framework is EMS's voluntary choice to strengthen the company, as well as be better prepared for the future and adhere to customers demands. The first goal with ESG is to map company's impact on the environment and from there on perform strategies to mitigate energy consumption and enhance recycling, as some of the sub-goals. Another goal is to establish baseline across ESG principles, identifying strengths and gaps before

the ESG report is formally introduced. In the future, the intention is for business strategy and ESG objectives to be aligned and complementary.

EMS has decided to align its ESG reporting with the VSME Standard elaborated throughout this thesis and eventually, EMS plans to include ESG reporting as a formal part of their Annual or Sustainability Reporting.

5 ESG findings and baseline framework for EMS

5.1 Systematic ESG data framework based on VSME Standard

This sub-chapter, mostly providing the quantitative data, is gathered from EMS which is the main outcome required by the company. This is a clear overview and data baseline for EMS to update annually. It is gathered based on VSME Standard, but the table format that was used to be filled out is coming from the Danish organisation Virksomhedsguiden (Virksomhedsguiden n.d.). Virksomhedsguiden, directly translated The Business Guide, is a reliable source used by Danish companies, including EMS.

The following Table 2 is illustrating the information points on Basic module under VSME Standard. Furthermore, it clarifies which information point is mandatory and which is optional. Most of the optional information points have not been considered necessary for EMS, therefore these are being left out.

Table 2. Information points on Basic module.

General information	
	Basis for preparation
Must	• Legal form of the company
Must	• NACE sector code(s)
Must	• Balance sheet
Must	• Turnover
Must	• Number of employees
Must	• Addresses and geolocation of significant assets and facilities that the company owns, leases or controls
Must, if applicable	• Possible omissions due to confidentiality
Must, if applicable	• Brief description of your company's ESG certificate or environmental labels, if any
	Efforts, policies and initiatives for the transition to a more sustainable economy
Must, if applicable	• If your company already has concrete initiatives, policies or initiatives that support the transition to a more sustainable economy, this must be stated by answering YES/NO in the information form

E-data	
	Energy consumption
Must	• Electricity: renewable/non-renewable
	• Fuels: renewable/non-renewable
	CO_2e-emissions
Must	• Scope 1 CO_2e emissions
Must	• Scope 2 CO_2e emissions
Must	• CO_2e-intensity
Can	• Scope 3 CO_2e emissions
	Pollution of air, water and soil
Must, if applicable	• Only a disclosure requirement if your company already reports pollution as a result of legal requirements or on a voluntary basis
	Biodiversity
Must, if applicable	• Inventory of the company's areas near or in 'biodiversity-sensitive areas'
Can	• The company's land use
	Water
Must	• Water withdrawal
Must, if applicable	• Water consumption
	Resource consumption, circular economy and waste management
Must	• Application of circular economy principles (YES/NO). If YES: Description of how to work with principles from circular economy
Must	• Total amount of waste annually (hazardous/non-hazardous)
Must	• Total amount of waste sent for reuse or recycling
Must, if applicable	• If your company operates in a material-heavy sector, information must be provided about the annual mass flow for the company's key materials

S-data	
	Own workforce
Must	• Contract type
Must	• Gender composition
Must, if applicable	• Employment contracts in other countries besides Denmark
Must, if applicable	• Employee turnover (only reported for more than 50 employees)
	Health and Safety
Must	• Own workforce: Registered accidents at work
Must	• Own workforce: Work-related deaths
	Remuneration, collective agreements and training
Must	• Information on remuneration above/below minimum wage
Must, if applicable	• Pay gap between male and female employees (only reported for more than 150 employees)
Must	• Percentage of employees covered by a collective agreement
Must	• Average training hours per employee

G-data	
	Corporate governance
Must, if applicable	• Number of convictions and fines related to corruption and bribery

5.1.1 General information

The following paragraphs with Table 3, 4 and 5 are about the general information about the company.

Basis for preparation

Table 3. Basic information about EMS.

Basic information about EMS	
Type of business	Anpartsselskab ApS
NACE sector code(r)	25.99.00
Balance sheet (in Euro)	€9,278,900 (DKK 69,245,000)
Turnover (in Euro)	Not disclosed
Number of employees	90

Table 4. Addresses and geolocation of significant assets and facilities that EMS owns, leases or controls. EMS is leasing.

Addresses and geolocation of significant assets and facilities that EMS owns, leases or controls					
Place	Address	Zip code	City	Country	Geolocation (coordinates)
Office	Lillebæltsvej 37	6715	Esbjerg N	Denmark	55.507577, 8.463705
Workshops	Lillebæltsvej 37	6715	Esbjerg N	Denmark	55.507577, 8.463705
Warehouse	Lillebæltsvej 37	6715	Esbjerg N	Denmark	55.507577, 8.463705

Efforts, policies and initiatives for the transition to a more sustainable economy

According to the VSME Standard guidelines, EMS can position itself in the following table as a company actively working toward a more sustainable economy. Specifically, EMS contributes to circular economy with high waste recycling; to own workforce with high focus on employee wellbeing; and to business conduct by having internal Code of Conduct.

Table 5. Efforts, policies and initiatives for the transition to a more sustainable economy.

Area	The company has a specific policy/effort in the area (YES/NO)	Is the policy/effort publicly available? (YES/NO)	Does the policy/effort contain future objectives or initiatives? (YES/NO)
Climate change	NO	NO	NO
Pollution	NO	NO	NO
Water and Marine Resources	NO	NO	NO
Biodiversity and Ecosystems	NO	NO	NO
Circular economy	YES	NO	YES
Own workforce	YES	NO	YES
Workers in the value chain	NO	NO	NO
Affected communities	NO	NO	NO
Consumers and end-users	NO	NO	NO
Business conduct	YES	NO	YES

5.1.2 Environmental metrics

The following paragraphs with Table 6, 7, 8, 9 and 10 are about the environmental metrics within the company.

Energy consumption

Table 6. Energy consumption in MWh.

Energy consumption in MWh			
	Renewable energy consumption	Non-renewable energy consumption	Total energy consumption (MWh) 2023/2024
Electricity (as shown on the company's utility bill)	-	440 MWh	440 MWh
Company own solar power	2 MWh	-	2 MWh
Fuels – diesel	-	140 MWh	140 MWh
Fuels – gasoline	-	14 MWh	14 MWh
Fuels – propane	-	1 MWh	1 MWh
Fuels – acetylene	-	3 MWh	3 MWh
Purchased heating consumption	-	730 MWh	730 MWh
Total	2 MWh	1328 MWh	1330 MWh

CO_2e emissions

Propane and acetylene are not included in the calculation due to complexity of the calculation. Calculating how much smoke and fumes are generated during welding processes is multifaceted, as this depends on several factors such as material type, welding technique,

shielding gas mixture, ventilation, etc. (Jilla 2019). Furthermore, CO_2e intensity is not calculated due to turnover being confidential.

Table 7. CO_2e emissions.

Greenhouse gas emissions	Year 2023/2024
Scope 1 CO_2e emissions	41 tons CO_2e
Scope 2 CO_2e emissions (location-based)	67 tons CO_2e
Total scope 1 and scope 2 CO_2e emissions	108 tons CO_2e

Water

Table 8. Withdrawal of water.

Withdrawal of water	Year 2023/2024
Total for all locations	306,6 m3
From locations in areas with a lack of water (high water stress)	0

Resource consumption, circular economy and waste management

Table 9. Information on the application of principles from the circular economy.

Information on the application of principles from the circular economy		
My company applies principles from circular economy	Yes	No
	X	

Table 10. Total amount of waste divided by non-hazardous and hazardous waste.

Total amount of waste annually		
Non-hazardous waste	**Total amount of waste**	**Waste sent for reuse or recycling**
Glass and metal packaging	270kg	270kg
Wood (untreated/clean) - A1	4420kg	4420kg
Biodegradable kitchen and canteen waste	2040kg	2040kg
Paper and cardboard packaging	2696kg	2696kg
Other wastes (including mixtures of materials) resulting from the mechanical treatment of waste	1660kg	1660kg
Wood (mixed/treated) - A2	15120kg	15120kg
Combustible mixed municipal waste	8070kg	-
Landfilled mixed waste (not specified)	2740kg	-
Mixed iron shavings/scrap	53076kg	53076kg
Aluminium shavings/scrap	9382kg	9382kg
Stainless steel shavings/scrap	10189kg	10189kg
Mixed metals	992kg	992kg
Hazardous waste		
Contaminated oil/water	1420kg	1420kg
Mixed contaminated packaging	13986kg	13986kg
Halogenated cutting oil emulsions and solutions	2880kg	2880kg

5.1.3 Social metrics

The following paragraphs with Table 11, 12, 13, 14, 15, 16, 17, 18 and 19 are about the social metrics within the company.

Own workforce: general characteristics

Table 11. Contract types.

Contract type	Number of employees (number of people or full-time equivalents)
Temporary employment	2,51 (Based on hours)
Permanent employment	87,84 (Based on ATP payment)
Total number of employees	90,35

Table 12. Gender overview.

Gender	Number of employees (number of people or full-time equivalents)
Men	79,22
Women	11,13
Other	0
Not registered	0
Total number of employees	90,35

Table 13. Employment contract by country.

Employment contract by country	Number of employees (number of persons or full-time equivalents)
Denmark	90,35
[Number of people or full-time equivalents]	90,35

Table 14. Employee turnover.

Employee turnover	2023/2024
	22,10%

Own workforce: Health and safety

Table 15. Registered accidents at work.

Registered accidents at work	Year 2023/2024
Number	8
Frequency	8,9

Table 16. Work-related deaths.

Work-related deaths	Year 2023/2024
As a result of an occupational injury/accident	0
As a result of work-related ill health	0

Own workforce: Remuneration, collective agreements and training

Table 17. Minimum wage information.

Minimum wage information	Yes	No
In EMS, all employees receive a salary that is at least at the level of the minimum wage	X	

Table 18. Collective agreement.

Collective agreement	2023/2024
Percentage of employees covered by a collective agreement	100%

Table 19. Average training hours per employee.

Average training hours per employee	Year 2023/2024
Male employees	103,25 (hereof 86,29 school apprentices)
Female employees	6,29 (hereof 3,32 school apprentices)
Other	0

5.1.4 Governance metrics

EMS do not have anything mandatory to declare here as the only metric required here for the VSME Standard Basic Module is the Number of convictions and fines related to corruption and bribery, which of EMS has none.

5.2 Stakeholder analysis

To add further value to the outcome, a separate analysis from VSME Standard was created in cooperation with EMS – stakeholder analysis. As EMS puts high value to its stakeholders, especially to its employees and customers, it was relevant to draw an overview of the needs of each stakeholder divided by views in environment, social and governance. The following Table 20 is illustrating the findings of the analysis, giving input for the future steps within the ESG strategy in EMS.

Table 20. EMS's stakeholder analysis

	E	S	G
Authorities	The authorities require waste sorting and recycling.	The authorities require that the company has basic corporate practices for employee rights The authorities require that the company complies with human rights standards and international labor laws. The authorities require the company to adhere to collective agreements.	The authorities require compliance with guidelines for communication of ESG. The authorities require a whistleblower scheme.
Customers	Customers demand documentation for CO2e emissions. Customers demand reduction plans for CO2e emissions. Customers demand more use of green energy. Customers demand products that create less waste. Customers demand processes that manage and minimize environmental pollution. Customers demand products that promote or have less impact on nature.	Customers demand that the company acts responsibly towards employees. Customers demand transparent product information. Customers demand decent working conditions for employees. Customers demand social responsibility in the supply chain. Customers demand active promotion of gender equality.	Customers demand policies for ethical behavior. Customers demand a sustainability strategy. Customers expect company to communicate sustainability transparently.
Employees	Employees want to work for the company taking environmental issues seriously. Employees want to work for a responsible company.	Employees demand work-life balance. Employees demand safe working environment. Employees demand good social environment where they can thrive and develop.	Employees demand that the company takes environmental and social responsibility. Employees demand honest and responsible management of the company.

5.3 Materiality matrix

The materiality matrix in Figure 3 illustrates EMS's key sustainability focus areas, identified through the company analysis, internal dialogues, and stakeholder expectations. The matrix maps topics according to two axes. The vertical axis represents the level of impact on social matters, environment and people, while the horizontal axis represents the level of impact on business, economy, reputation and strategy.

The materiality matrix provides a structured overview of the ESG topics that are most relevant for EMS – both from the company's own perspective and in terms of what external stakeholders, especially larger clients in the energy sector, expect. The matrix helps to highlight where EMS is already doing well, and where more attention might be needed going forward. At the same time, it suits with the approach taken in the VSME Standard, which is about making sustainability reporting more relevant and realistic for SME companies like EMS.

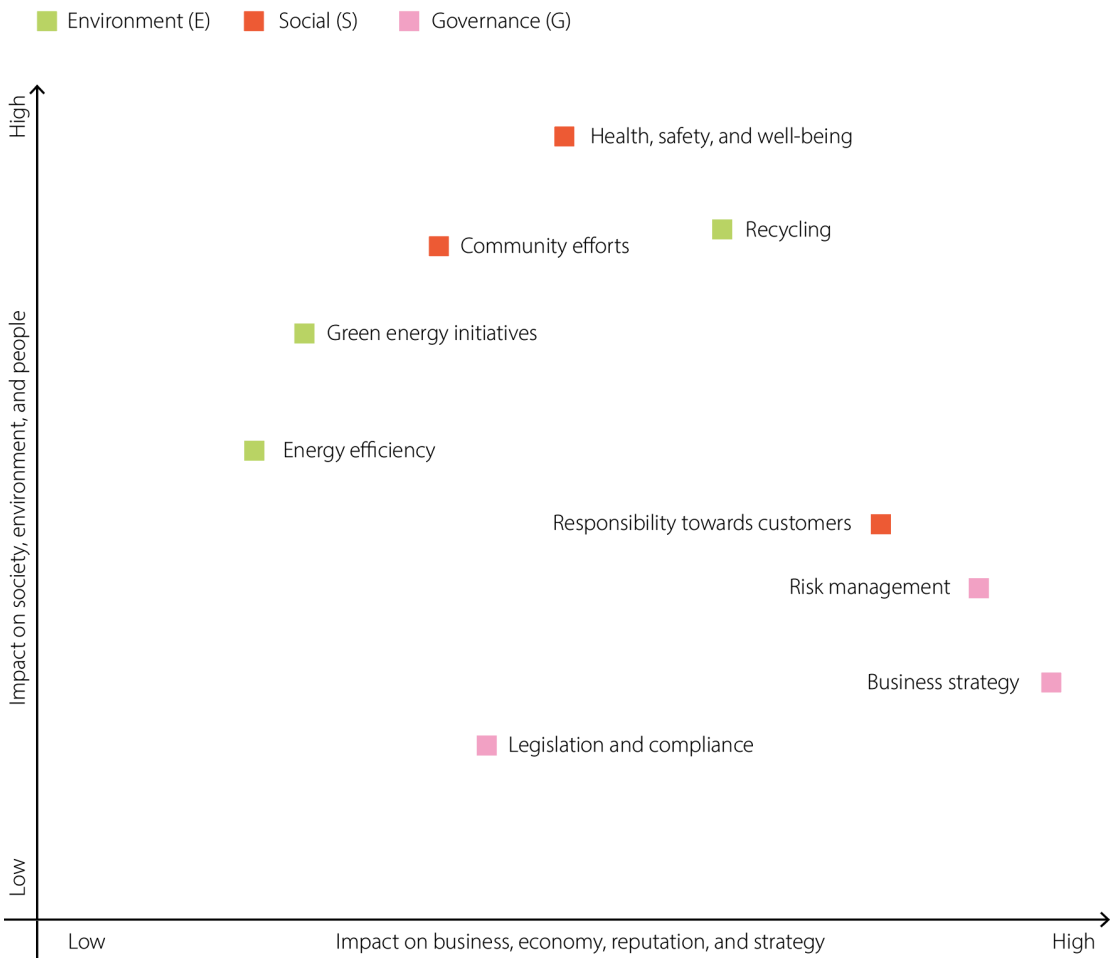

Figure 3. Materiality matrix.

Two topics stand out in EMS's materiality matrix for having both high social and business relevance: health, safety, and well-being and recycling. These are areas where EMS is already strong, being a firm foundation for its future ESG efforts. Health and safety are well-integrated in daily operations, with structured routines like monthly safety inspections, focus on ergonomics, and overall employee well-being. Similarly, recycling is a strong point. EMS has currently a 91% recycling rate, with internal sorting and collaboration with external partners for responsible waste handling. This aligns well with both internal values and customer expectations, especially in industries where environmental responsibility is becoming a standard requirement.

Other areas are emerging as priorities and show potential for development. Green energy initiatives and energy efficiency are two examples within the environmental dimension. EMS has already shown initiative within it, such as installing solar panels and investing in energy-saving renovations for its buildings. However, the next step is to consider, for example,

setting up more solar panels, invest in green-fuelled company cars and make a green energy agreement with their electricity provider. Furthermore, monitoring scope 1 and 2 emissions will help to evaluate the impact and set clear long-term targets. From the social side, EMS is involved in community efforts, including local sponsorships, supporting student projects, and donations to various causes. These actions reflect genuine commitment to local community – it is something EMS takes pride in, and which at the same time supports the company's overall reputation.

A more strategic and governance-related topics are placed in the lower-right corner of the matrix, such as responsibility towards customers, risk management, business strategy, and legislation and compliance. Responsibility towards customers is becoming increasingly relevant as EMS faces growing demand from customers to document ESG-related initiatives. When it comes to risk management, there is currently no company-wide framework. Instead, risks are handled individually within departments, which works on a day-to-day basis, but lacks an overall view. The management is aware of this and acknowledges that it is an area to be improved in near future. Similarly, business strategy is not currently available in any writing form, but it is under development.

Legislation and compliance are considered under control in EMS as all the necessary regulations and compliance is being adhered to. However, there is room to improve, such as building on the ESG initiatives which they currently develop – even though it is voluntary work for EMS now, they secure themselves for the future.

Altogether, the materiality matrix offers a practical overview of which ESG topics EMS is interested to focus on. Some areas, like recycling and employee well-being, are already well developed. Others, especially on the environmental and governance side, show good intent but need monitoring and structure. This picture forms the basis for developing an ESG framework that feels both relevant and realistic for EMS going forward.

5.4 Opportunities and recommendations

The materiality matrix serves as a valuable tool for reflecting on EMS's current sustainability performance and identifying the areas most relevant for future development. As the matrix is developed in dialogue with the company, showing EMS's strengths and areas for further development, this chapter serves as the author's response to those findings. The opportunities outlined in this chapter build naturally on what EMS already does well and have been selected with the company's profile in mind – aiming to be realistic, cost-conscious, and tailored to EMS.

The opportunities outlined in the Table 21 focus on strengthening EMS's existing environmental and governance practices, while maintaining its strong social foundation. These include low- to moderate-effort actions such as switching to certified green electricity, improving documentation of purchased materials, and exploring for opportunities to collaborate with corroded steel recovery services. Other suggestions are about supplier engagement, for example, adding basic sustainability requirement or gathering data on recycled content in purchased steel, as a response to future value chain expectations. Additionally, the idea of communicating ESG efforts more openly, for example through a dedicated landing page or by integrating sustainability into existing training programmes, could help EMS position itself more clearly in the eyes of customers and future employees.

The key idea is not to do everything at once, but to select a few initiatives that fit the company's current capacity and can grow over time. These opportunities, if explored further, could make EMS's ESG strategy more tangible and help them remain competitive and credible in a market where sustainability is becoming a default requirement.

Table 21. Opportunities for boosting sustainability in EMS

Opportunity description	Why it fits EMS?	References and/or needs for further investigation
Switching to a certified green energy agreement. This could significantly reduce Scope 2 emissions.	* No major upfront investments * No new infrastructure required * Immediate CO_2 reduction	KlimaEl agreement from Norlys (https://norlys.dk/erhverv/energi/el/klimael/#bestil)
Collaboration with corroded steel recovery services. EMS fabricates steel-based constructions that after many years of use will degrade or corrode. EMS could initiate a partnership with specialized recyclers (companies handling corroded or dismantled steel) and offer its customers a take-back or repurposing option for their end-of-life products/constructions.	* By extending service, it will add value for customers * Expansion of circular economy initiatives	According to a Project leader in one of the biggest steel recycling company in Denmark, Stena Recycling, it is possible to recycle corroded steel in Stena Recycling.
Upskilling program in sustainable fabrication/welding techniques. EMS already invests in training, but it can add ESG value by incorporating “sustainable welding”, “energy-smart machining”, or similar, to training modules for its apprentices and production staff. This would align employee skills with sustainability goals and improve awareness in day-to-day work.	* Expands on a strength EMS already has (training culture) * Some resources needed: can be done internally or through industry partners focusing on sustainability * Differentiates EMS from less proactive competitors	It requires to first map out the precise methods and operations being done in production. Based on findings, industry professionals and theory from literature can support to investigate how to integrate the greener methods.
Eco-requirements for suppliers. While EMS relies heavily on Danish suppliers/agencies, it currently has no system to evaluate their environmental performance, mostly due to mutual trust. For a start, EMS could create Supplier Code of Conduct or enhance their current Code of Conduct with more advanced requirements, to secure their stance in a partnership. This would enhance transparency and prepare EMS for future value chain legislation, as well as possible future supplier-screening initiatives.	* High stakeholder value * Low cost * Improves readiness for future Scope 3 data	Examples of Supplier Code of Conduct among customers and competitiors: *https://campaigns.semcomaritime.com/hubfs/Code_of_conduct.pdf *https://www.vestas.com/en/sustainability/corporate-integrity/compliance *https://assets.new.siemens.com/siemens/assets/api/uuid:cbb1292b-f2d5-4f67-9bad-28e2823568b0/Code-of-Conduct-English.pdf
Developing a public ESG landing page. Many of EMS’s current sustainability efforts are invisible to outsiders. Creating a simple, dedicated ESG page on EMS’s website could help communicate their ambitions, policies, and progress. Even a basic version would support customer expectations and attract like-minded partners or employees.	* Low implementation cost * Increases transparency and trust * Can be updated gradually	Inspiration: *https://www.outokumpu.com/en/sustainability *https://sth-steel.fi/quality-safety-and-environment/ *https://swisssteel-group.com/en/sustainability *https://aurajoki.fi/en/sustainability/
Purchasing of recycled raw materials. It is currently unknown in EMS if and how much are they using recycled materials because they do not request that information from their suppliers. However, if that was made a standard dialogue in the start of the projects, data could be gathered which could lead to more use of recycled materials.	* Recycling steel saves virgin resources, saves energy and reduces emissions, boosting company's circular economy significantly * EMS already sorts and recycles its own waste materials – purchasing recycled materials would complement existing circular practices * Recycled steel is often cheaper and faster to make than virgin steel, offering a cost-efficient advantage for EMS (Yellishetty et al. 2011)	* Purchasing team would need to track material origin (recycled vs. virgin)

5.4.1 Circular economy alignment

The possibility to unfold broader alignment with circular economy in EMS could be significant. Firstly, most of the waste is already recycled, meaning the weightier effort for circular economy is under control. Secondly, finding out the precise compositions (virgin vs. recycled steel) for purchased steel would help to take informed decisions – in case of low recycled steel percentage, EMS could consider increasing it. Thirdly, small-scale partnerships with companies working with corroded scrap processing or exploring take-back options for corroded steel, could offer long-term value without requiring investments. EMS could position themselves as an advisory link between take-back solution partner and their customer. Meaning, once the product/construction has lived its life, there is a responsible solution for the customer's waste.

5.4.2 Outsourcing ESG support

As ESG requirements and expectations increasingly grow for SMEs, it is necessary to find solutions that are both professionally robust and resource realistic. EMS, like many other smaller industrial companies, has limited internal resources to build and maintain a full ESG reporting overview. Therefore, an external partner could be an economically friendly solution.

As an example, ESG Report, a recently emerged Danish platform, has been developed specifically for SMEs, offering structured support and sustainability reporting in accordance with the voluntary VSME Standard. The tool provides users with a step-by-step overview of which elements must, can and should be reported. This user-friendly approach makes the platform particularly suitable for smaller companies that do not have a sustainability department but want to act credibly and proactively towards customers and partners. (ESG Report n.d.)

The platform offers data-driven and structured alternative to manual spreadsheets, which saves time and minimizes the risk of errors or incomplete documentation. At the same time, ESG Report helps elevate ESG work to a strategic level, as it becomes easier for management to communicate progress, set goals and respond to customer demands and market developments. (ESG Report n.d.) This is particularly relevant in the context of EMS, where large customers in the energy sector are increasingly demanding documented sustainability practices.

Overall, ESG Report is a scalable and affordable tool that can help EMS operationalize and document ESG efforts without having to build extensive internal systems. For a company

of EMS's size and industry, it can be a strategic advantage to let a specialized tool handle the complexity – allowing management to focus on implementation and continuous improvement instead.

5.5 Challenges in implementing ESG

Although EMS already has a strong foundation in several sustainability areas, there are some challenges associated with implementing a structured ESG. These challenges are typical for SMEs and were also reflected in the internal discussions.

A key challenge is resource availability. EMS is a smaller company, thereby having limited administrative resources, making it difficult to maintain systematic ESG data collection and develop detailed policies without extra support. This thesis provides a foundation for ESG, but once the baseline is established, EMS will need to allocate time and resources to ensure the framework is kept up to date and integrated into daily operations.

In addition, challenges were also identified in relation to emission data complexity. Although most indicators were mapped during the project, some remained incomplete. A particular problem area was the calculation of emissions from gas consumption. Thereby, it is necessary for EMS to develop more detailed methods for monitoring and calculating emission data if full transparency in this area is to be achieved in the future.

Organizational readiness and governance are also areas with development potential. ESG responsibility is not yet clearly integrated in management roles or operational processes. EMS currently does not have an overall risk management framework, and the absence of a written business strategy makes it more difficult to link ESG efforts to the company's long-term goals. Notably, this area is currently under development.

In addition, collaboration with suppliers poses a challenge. EMS relies primarily on suppliers' own certificates and informal assessments but lacks a formal process for assessing or influencing sustainability practices further up the value chain. As stakeholder expectations increase, this will become a more important area – but it may require new tools, competencies and possibly also changes to supplier agreements.

Cultural and communication challenges may also arise as ESG work progresses. Although there is a positive approach to sustainability in the company, awareness of ESG varies internally, and responsibility is not yet embedded across departments. It will therefore be important to create ownership among employees and ensure good internal communication channels so that ESG does not remain an isolated initiative.

Finally, market and regulatory pressure is increasing, especially from larger customers in the energy sector, who increasingly require documentation and reporting in the ESG area. The accelerating pace of regulatory developments, along with uncertainty surrounding future legislation, may complicate prioritization and strategic planning.

5.6 ESG readiness

EMS appears to be in a good position to begin working more actively with ESG. While the company does not yet have a formal ESG system in place, it already has many elements that point in the right direction. EMS is not starting from scratch – they already handle waste responsibly, look after its employees, and stay active in the local community, reflecting values that are closely linked to ESG.

One of the clear signs that EMS is ready to take on ESG work came through the data collection process itself. Getting information for this thesis turned out to be remarkably smooth as both employees and management were open, helpful, and genuinely interested in contributing. Whether it was interviews, casual conversations, or sharing internal documents, everyone was quick to respond and willing to help. This high level of engagement made the research significantly easier and revealed something important: when a company is truly ready to take its first ESG steps, it shows in its willingness to be transparent, cooperative, and involved. EMS demonstrated all of that.

At the same time, being ready for ESG also means being able to respond to growing expectations from customers, partners, and upcoming regulation. Furthermore, as shared under the Challenges in implementing ESG sub-chapter, there are also areas that need further improvement and attention. Based on the latter, all the findings and opportunities, EMS has a set of tools and advice to make structured ESG plan and goals for the future.

That said, EMS has something many companies do not: genuine interest and openness at the management level. The fact that they supported this thesis work with time, input, and curiosity is a sign of their readiness to engage with ESG matters. There is an awareness that ESG is not just about compliance – it is about staying relevant, building trust, and creating long-term value.

While EMS may not yet be fully “ESG ready”, the mindset and engagement are already in place. With more structure, clear goals, and continued motivation, the company has a real opportunity to move forward in a way that feels both practical and authentic to who they are.

6 Conclusion

6.1 Answers to the research questions

This thesis set out to explore how a tailored ESG framework could be developed for EMS, a small steel fabrication company, in response to growing sustainability expectations from customers and the broader market.

How to set up a framework for reporting ESG efforts within EMS?

This thesis shows that it is possible to build a useful ESG reporting framework for EMS by using the VSME Standard as a foundation and supporting it with tools like stakeholder analysis and a materiality matrix. The result is a practical starting point that reflects EMS's current efforts and highlights where there is room to grow. As the framework is designed to be practical, scalable, and suitable for a small enterprise, it allows EMS to build on it over time and prepare for growing stakeholder and regulatory expectations.

What industry-specific features influence the nature of ESG reporting for EMS?

EMS's position in the steel fabrication sector and its role as a supplier to large energy companies significantly influence its ESG reporting needs. Although EMS is not currently subject to the CSRD, the pressure from customers and industry trends necessitates transparency and documentation of ESG performance. As a steel fabricator, EMS is tied to environmental impact, energy use, waste, and workplace conditions. These areas naturally suggest for clear and relevant ESG data, encouraging the company to adopt more structured practices, even without being legally required to do so.

What are the ESG reporting opportunities and challenges for EMS?

EMS shows several strengths within ESG, such as a thorough waste recycling system, focus on employee well-being, and active community engagement, providing a solid foundation for continued development. However, the company also faces challenges, some of them being limited resources, data complexity, a lack of formal governance structure, and the absence of a systematic supplier engagement strategy. On the other hand, EMS benefits from the leadership team that is open to sustainable development and willing to invest in building long-term ESG capacity. By taking concrete steps and seeking external support, EMS is in a strong position to strengthen and systematize its ESG work in the future.

6.2 Validity and reliability

The research relied on both primary and secondary data sources. Interviews with key managerial employees, internal company documents, and relevant literature formed the core data base. Validity is further strengthened using the VSME Standard. Although reliability may be limited by the fact that it is a single case study, the structured method and transparent presentation of the results contribute to strengthening the credibility of the work.

6.3 Recommendations for further research

After completing the thesis, it can be evaluated that one of the key limitations is the lack of external validation as the ESG baseline developed for EMS was not reviewed or tested by independent experts or industry stakeholders. That suggests that future cooperation with official sustainability expert can be beneficial as it helps to build credibility further.

Furthermore, future research could build on this thesis by applying the same framework to other SMEs in similar industries, which could enable comparisons and cross-cutting insights. It would also be valuable to follow EMS over time to track the implementation and impact of the ESG framework in practice. Lastly, research into how digital ESG tools can further support SMEs would add practical value, especially as reporting demands increase – it is strengthening the company's ESG journey as expectations grow.

7 Summary

This thesis aimed to support EMS, a Danish SME in steel fabrication industry, in starting up its ESG work by developing a tailored ESG baseline framework and areas of sustainability opportunities. Based on the VSME Standard, literature review, interviews and internal data, a structured overview of EMS' current sustainability practices were created along with areas for improvement. The results show that EMS is already performing well in areas such as waste management, employee well-being and community work, but that there are still shortcomings in terms of limited resources, formal governance, data complexity and long-term ESG planning. The proposed framework and the suggested tailored opportunities are intended to make ESG work realistic and tangible for EMS. By building on existing initiatives and strengthening the internal structure, EMS is well equipped to work more strategically and transparently with sustainability in the coming years.

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Appendix 1. Interview questions.

ENVIRONMENT QUESTIONS
ENERGY CONSUMPTION
Sources of energy used in production and office areas?
Are there any energy consumption efficiency measures in place or planned?
Cooling and ventilation systems? Is it running on some gas or electricity?
Use of automation or smart technologies for energy management?
Are there energy reduction targets or goals in place?
Is there an internal policy or commitment to increasing renewable energy use?
EQUIPMENT AND MACHINERY: Energy efficiency, Heat waste, Pollution
What are the different operations in the production? What are the sub-types of each?
Which of these operations are most relevant?
Maintenance and servicing routines for equipment?
Technological advancements or automation in production processes? If there is anything standing out?
Energy efficiency of machinery and workflows – is there a tracking system in place? Or any other type of observation?
Any plans to upgrade equipment for more sustainable/efficient alternative?
Is the heat waste collected and utilized?
How is air pollution managed? (gases from welding, more than that?)
What engineering systems are used - some automated CAD systems for smart engineering etc.?
WATER USE AND MANAGEMENT
General water usage in operations (e.g., cooling, cleaning, testing)?
Water supply sources and infrastructure?
Does EMS measure its water footprint? Numbers?
Measures taken to optimize water use and prevent wastage?
Are there alternative water sources available (e.g., rainwater collection)?
Water pollution?
Water in testing? Virgin water used every time? Is it calculated how much water is used per month/year for testing?
Does EMS operate in a high-water-stress area? If so, are there any special measures in place?
Is wastewater treated before discharge?
Is EMS investing in any water efficiency technologies (e.g., closed-loop water systems)?
WASTE MANAGEMENT AND MATERIAL USE
Types of materials used in production?
Waste types generated from production and office activities?
Handling and disposal methods for different waste streams?
Any recycling or material reuse efforts?
Are there initiatives to reuse scrap materials internally?
Does EMS purchase recycled raw materials? What amounts (estimate if needed)?
Does EMS have partnerships with recycling companies or waste management firms?
How much total waste is generated annually?
What percentage of waste is recycled, reused, or sent to landfill?
Are there any hazardous waste materials, if so, how are they handled?
Elimination of waste and pollution? (this can be done through process improvements and also through design considerations at the level of usability, reusability, repairability, disassembly and remanufacturing)
Does EMS have waste reduction targets?

SOCIAL
WORK ENVIRONMENT & EMPLOYEE FACILITIES
Office and production facility conditions (e.g., lighting, ventilation, space availability)?
Employee amenities (e.g., break areas, cafeterias, parking facilities)?
Ergonomic considerations for office and production staff?
Workplace safety measures and protocols?
Are there any occupational health programs for employees? (health screenings, access to occupational health professionals, mental health support, encouraging physical activity, etc..)
How often does EMS conduct safety audits and inspections?
Work-life balance for employees?
Is employee satisfaction and well-being monitored (e.g., surveys, feedback sessions)?
EMPLOYEE TRAINING & DEVELOPMENT
Does EMS provide training programs for employees? What types?
How frequently are employees trained on safety, skills development, and sustainability-related topics?
Is ESG/sustainability training included in employee development programs?
Does EMS have mentorship or apprenticeship programs?
What is the company's policy on upskilling employees and what are the career growth opportunities?
Is there leadership training available?
DIVERSITY, INCLUSION & HUMAN RIGHTS
What is the percentage of women in leadership/technical roles?
Does EMS have policies supporting diversity and inclusion?
Is EMS actively working to increase diversity in hiring and promotion? What is the mentality about it?
Are there measures in place to prevent workplace discrimination or harassment?
Are there equal pay and compensation policies in place?
Does EMS have a Code of Conduct addressing employee rights and behavior?
COMMUNITY & SOCIAL ENGAGEMENT
Does EMS support local community initiatives, charities, or sponsorships?
Are there partnerships with educational institutions (e.g., training programs, internships)?
Are employees encouraged to engage in volunteer work (corporate social responsibility activities)? Such as cleanup, charity events, mentoring programs
Does EMS offer corporate donations or sponsorships for sustainability-related initiatives? (reducing waste, energy-saving programs, first-aid training, mental health awareness etc.)
SUPPLY CHAIN & SOCIAL RESPONSIBILITY
How are fair labor practices secured across supply chain?
Is there a Supplier Code of Conduct?
Does EMS conduct any supplier audits to ensure compliance with human rights & labor laws?
Does EMS monitor/observe labor conditions at supplier facilities?
Are there any initiatives to improve social conditions for suppliers (e.g., fair wages, safe working environments)?
EMPLOYEE BENEFITS & WELL-BEING
What kind of employee benefits does EMS offer (healthcare, insurance, discounts)?
Does EMS offer flexible work arrangements (remote work, flexible hours, part-time options)?
Are there mental health, job satisfaction, and well-being programs for employees?
Are employees provided with wellness activities or gym access?
Number of absence?
How does EMS promote a healthy workplace culture?

GOVERNANCE
CSR & CODE OF CONDUCT & BUSINESS ETHICS
Does EMS have a formal Code of Conduct for employees and management?
Does EMS have a formal CSR policy? Values?
What are the main CSR priorities for EMS (e.g., community involvement, employee well-being, safety) and is it shared pubicly?
Are employees and management trained on ethical business practices?
How does EMS handle conflicts of interest, bribery, and corruption risks?
Is there a confidential reporting mechanism (whistleblower policy) for unethical behavior?
How does EMS communicate its ethical policies to external partners and suppliers?
ESG GOVERNANCE STRUCTURE & RESPONSIBILITIES
Who in EMS's management team is responsible for ESG and sustainability efforts?
Is there/Will there be a dedicated role or team managing sustainability and compliance?
How does/will EMS ensure that ESG responsibilities are included in its management and decision-making processes?
Will ESG-related responsibilities be included in leadership performance evaluations?
How would you describe the leadership's support/readiness on the sustainable initiatives?
RISK MANAGEMENT & ESG STRATEGY DEVELOPMENT
Why did you see the need for ESG reporting? What were the reasons for getting started with it?
What are your goals connected to ESG? Anything particular such as using less energy, raising the job satisfactory or safety, etc.? In other words, what are/will be the focus areas within ESG?
Does EMS have a Business Strategy?
Does EMS have a formal risk management framework apart from IT/cyber security? (reputation, climate change, competition, regulatory changes, safety, sourcing, ethics, etc.) If not, do you see it being necessary?
Are there specific ESG-related risks EMS is currently addressing?
How does EMS handle supplier risks (e.g., sustainability, compliance failures)?
Partnering with eco-friendly suppliers?
Is there a plan to integrate ESG considerations into future business strategy planning?
Does EMS participate in local business networks or sustainability-related industry groups/forums?
Does EMS have a data protection policy in place?
Are there security measures to protect employee and business data?
Has EMS implemented basic cybersecurity practices (e.g., access controls, secure networks)?
Is there a plan to improve cybersecurity awareness for employees? (Phishing, etc.)
TRANSPARENCY & ESG REPORTING
What KPIs are currently being monitored for ESG-related topics?
Are there any future plans for increased transparency in sustainability performance?
Is the future ESG Report going to be public? Or only for stakeholders and internal use?
COMPLIANCE WITH LAWS & REGULATIONS
How does EMS ensure compliance with environmental, labor, and governance laws?
Are there regular compliance audits or inspections related to workplace safety and sustainability?
How does EMS ensure supplier compliance with legal and ethical standards?
Is EMS bound to start the European Union's Corporate Sustainability Reporting Directive (CSRD) in the future?