How FM can improve organisations' ESG reporting: Compliance or Strategy as driver?

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Abstract

Environment, Social and Governance (ESG) reporting is the next step in sustainability frameworks and has now become mandatory for large companies in the EU. Facilities Management (FM) has a significant role in meeting the new legislative requirements through provision of documented data from FM-related activities and this calls for new capabilities and new practices. This paper will investigate how the EU ESG legislation relates to other sustainability frameworks and to FM to establish an understanding of the historical foundation. The paper will also discuss how ESG reporting can be a strategic driver for FM organizations based on a Danish survey, which found that most companies and FM organisations focus on compliance. An informative example of how a large company voluntarily have reported ESG in their annual report is also presented. A main result of the paper is a model and a guideline for how FM can contribute to ESG as a strategic driver for environmental, social and economic value creation. The authors argue that specifically managing the social aspect can be a competitive advantage.

Keywords: Facilities Management, ESG, sustainability, SDGs

1. Introduction

Sustainability reporting has become increasingly important in recent years and large organisations in EU must according to the CSRD directive (EU 2022) declare audited data about their Environmental, Social and Governance performance starting from the financial year 2024. As such, sustainability reporting is not new. The Trible Bottom Line (TBL) introduced in 1993 by Elkington (2018) was one of the first reporting frameworks that included environmental reporting. In Denmark, which is the local context of this paper, green accounts were introduced as mandatory for some types of companies in 1995. The legal requirement was removed in 2015, but several companies and municipalities continue to prepare green accounts as part of their sustainability reporting (Jensen 2021).

The understanding of sustainability has changed over the years due to the general development in sustainability and frameworks for working with it. The Brundtland report "Our common future" (UN 1987) states: "Sustainable development requires meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life." Thus, sustainability is about much more than the physical environment, and the quality of life is at the centre. Improving the quality of life is one of the two main purposes of FM according to the definition in ISO 41011 (2017) with the other being productivity of the core business.

The research questions directing our investigations were:

- 1. How do the EU ESG requirements relate to other sustainability frameworks and to FM?
- 2. How prepared are Danish companies and FM organisations to make ESG reporting and planning to comply with and possibly benefit from ESG reporting?

Based on this and the authors' theoretical and practical experiences from working with FM and sustainability the paper will propose a model and a guideline for FM to become not just compliant but also use the ESG reporting as a strategic driver for environmental, social and economic value creation.

2. Methodology

The authors are a mixed group of experienced researchers and practitioners, who strive to present practice-oriented research with a clear contribution to the FM profession in Europe and beyond. The paper applies a pragmatic, mixed-method approach in 4 steps:

- A literature and document review to set the background leading to the new EU requirements for ESG reporting, a review of guidelines for SFM and ESG, and a document analysis of the EU CRSD document to map the relevant KPI's to ESG related to FM.
- 2. A survey of FM practices in Denmark in 2023 on the preparedness to ESG reporting.
- 3. A case study of an example of an annual report with ESG-reporting.
- 4. A proposal for a model and a guideline for using ESG as a strategic driver by FM.

The literature and document review (section 3)

The paper presents a literature and document review on sustainability frameworks leading up to ESG. The aim is to show how the EU ESG relates to the former sustainability frameworks: The three pillars Environmental, Social and Economic (ESE), TBL, Corporate Social Responsibility (CSR) and Sustainable Development Goals (SDGs), and how SDGs relates to FM. The review resulted in a mapping. The review also included the ISO standard on FM and a comparison of its guideline on SFM with IFMA's ESG guideline, a mapping of FM relevant KPI's in the ESRS documents in EU ESG regulation, and a comparison on two guidelines.

Survey of FM-practices in 2023 (section 4)

A qualitative survey among Danish private and public companies was conducted in 2023. The purpose of the survey was to:

- 5. Analyse the companies' preparedness for ESG reporting and their compliance with the new ESG requirements set out in the CSRD and ESRS.
- 6. Define best practices for governing and managing FM operations with an ESG focus.

Fifteen companies and organisations participated in the survey with an almost even distribution on the following four types:

- Private global companies: Private companies operating in multiple markets within Europe and the rest of the world.
- Private local companies: Private companies operating only in Denmark.
- Public authorities and companies: Governmental, regional, or municipal entities.
- Facility Management service providers: Private companies delivering FM services, either global or local

The survey was conducted through interviews with FM and ESG representatives from the participating companies, typically the heads of FM and heads of sustainability. These interviews were based on a questionnaire distributed prior to the interviews. The survey took place from April to June 2023, before the ESG legislation was implemented in Danish law. Therefore, this survey can be considered a baseline study for assessing the impact of ESG legislation in a Danish context.

Case study of an example of ESG reporting in an annual report (section 5)

The case concerns the global engineering company Ramboll, which was selected due to their commitment to sustainability. Ramboll became a signatory to the United Nations Global Compact in 2007 and is part of other international sustainability ratings and rankings. ESG reporting is voluntarily included in their annual report for 2023: "The Partner for Sustainable change", which is also the company strategy. It provides as an informative example of ESG reporting.

A model and a guideline for ESG reporting in the context of FM (section 6)

Various guidelines have been developed to communicate the appropriate steps in ESG reporting in a company. We propose a model and a guideline for FM not just to become compliant but also use the ESG reporting as a strategic driver for environmental, social and economic value creation, which includes the interactions with the external environment.

The mixed-method approach has been appropriate to connect sub-studies and has enabled the sharing of knowledge and experiences from practice and research. The

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outcome and the new knowledge created in this collaboration is the new model and guideline to use in ESG-reporting. The intended users are FM organisations with responsibility for facilities and support services.

3. Literature and document review

3.1 Development of Sustainability Frameworks

ESG is the current framework, that unifies the way EU countries work with sustainability reporting, but a lot of companies have a foundation and internal knowledge from former sustainability regimes to build on. The literature review in this sub-section shows essential developments of sustainability concepts and frameworks leading up to the present EU ESG as shown in Fig. 1.



Fig. 1: Development of sustainability concepts and frameworks

A broader focus on sustainability than just the environment became common after the Brundtland report (UN 1987). This report did not in fact introduce the three pillars: Environmental, Social and Economic sustainability, although they often are referred to originate from the report. According to Purvis et al. (2019) the triplet emerged gradually since the first global UN Environmental Summit (The 1972 UN Conference on the Human–Environment in Stockholm) and the publication of the book "The Limits to Growth" (Meadows et al. 1972). The common figure of the triplet with three interwoven circles was first introduced by Barbier (1987).

The focus on corporate ethics and accountability for social aspects goes even further back and can be traced to the book "Social Responsibilities of the Businessman" by

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Howard Bowen from 1953 (Macesar 2024). However, it was not before the 1990's that Corporate Social Responsibility (CSR) became more generally recognized. The UN Global Compact was launched in 2000 "to bring business and the United Nations together to give a human face to the global market" It is the world largest CSR initiative with more than 20.000 businesses in more than 160 countries (UN Global Compact 2024).

An initiative under the UN Global Compact resulted in the report "Who Cares Wins" (The Global Compact 2004), which coined the term "Environment, Social and Governance" (ESG) and established a crucial link between ESG actions and financial performance. That same year, the UNEP Finance Initiative (UNEP/fi) highlighted the relevance of ESG issues in financial valuation and the launch of the <u>Principles for Responsible Investment (PRI)</u> in 2006. According to ISO/TR 41019 (2024), CSR is a precursor to ESG: "CSR provides a qualitative assessment of an organisation's effects on its stakeholders and society. ESG measures an organization's impact on the environment and society, using quantitative measurement methods with the aim of delivering long-term stakeholder value."

The SDGs were developed at the UN Conference on Sustainable Development, held in Rio de Janeiro, Brazil, 2012. Later, in 2015, the UN decided on 17 SDGs for the world sustainability goals towards 2030 (UN 2016). The concept of sustainability in the Brundtland report and in ESE mainly focuses on the societal level, while CSR and ESG mainly focus on the corporate level. The SDGs were developed to be primarily actionable by governments and countries, not investors and businesses.

EU's Green Deal is a "package" of political initiatives from 2020, which are aimed to help restructure the European economy by channelling more investments into green sectors and companies and to make the EU carbon neutral in 2050. The EU's regulation on taxonomy translates the EU's climate and environmental goals into a series of criteria that determine when an economic activity is environmentally sustainable. The regulation entered into force on 1 July 2022 (EU 2020). ESG reporting includes key figures for non-financial activities. The regulation for ESG is called the Corporate Sustainability Reporting Directive (CSRD) (EU 2022). From 2024, all listed companies with more than 500 employees must report on their work with the sustainable transition, including in their value chain, as well as provide comprehensive information on consumption, emissions, etc. As something new, the reporting **COLOWING** Jensen P. A. et al. (2024): How FM can improve organisations' ESG reporting: Compliance or

requirements also include social conditions, information about employees, human rights, impacts on surrounding communities and information about corporate management (Governance). From 2025, other larger companies are covered and from 2026 listed SMEs will be included.

3.2 Sustainability Frameworks and FM

Lok et al. (2023; 2024) with reference to IFMEC (2018) claim that FM can contribute to all 17 SDGs. Similarly, ISO/TR 41019 (2024) shows how FM potential can contribute, directly or indirectly, to all the 17 SDGs. Furthermore, Annex B, Table B.2, in the standard shows examples of FM actions striving for sustainable development.

Jensen (2021) made an assessment for which of the 17 UN SDGs that FM mainly can contribute to. This includes SDG 3 Health and well-being, and it also applies to SDGs 6, 7 and 13 concerning water, energy and climate. As a business area, FM also plays a role in relation to SDG 8 Decent jobs and economic growth, SDG 9 Innovation and infrastructure, SDG 10 Reduced inequalities, and SDG 12 Responsible consumption and production. FM also has a very central role in relation to SDG 11 Sustainable cities and local communities. Finally, FM has good opportunities to contribute to SDG 17 Partnerships for action, for instance in collaboration with supplier companies.

Ballesty (2023), who has been involved in developing ISO FM standards, including the upcoming technical report on sustainability (ISO/TR 41019 2024), made a similar assessment. There is high commonality between the two assessments, and both show that FM can contribute to many of the 17 SDGs. Jensen (2021) includes 9, and Ballesty (2023) includes 8 SDGs. The only differences are that Jensen (2021) includes SDG 10 Less inequality and SDG 17 Partnerships for Action, while Ballesty (2023) includes SDG 16. Peace, justice, and strong institutions. The 7 SDGs which they agree on are listed in the first column in Tab. 1.

SDG		Environment	Social	Economy	Taxonomy	Governance
1.	Good health and well-being	Х	Х	Х		
2.	Clean water and sanitation	Х	Х	Х	Х	

Tab. 1: SDGs particularly related to FM and relations to ES	E and EU ESG + Taxonomy
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3. Affordable and clean energy	x	х	Х	Х	
4. Decent work and economic growth		Х	Х	Х	
5. Industry, innovation, and infrastructure			х	Х	
11. Sustainable cities and communities	x		Х	Х	х
12. Responsible consumption and production	x		Х	Х	х
13. Climate action	х		Х	Х	Х

Tab. 1 also includes the results of assessments of which of the 3 ESE pillars and the 4 EU ESG and Taxonomy dimensions that are important for the 7 SDGs. This is based on classification of ESE in relation to SDGs by Barbier & Burgess (2017) and one of the authors similar earlier assessment of ESE as well as the of EU ESG and Taxonomy (Jensen, 2023). In Barbier & Burgess (2017) each SDG is only related to one of the three dimensions: Economic, Social and Environmental. Jensen (2023)'s assessment was made before becoming aware of the assessment by Barbier & Burgess (2017) and only concerns the 9 SDGs that the author found were particularly related to FM. The main difference between Barbier & Burgess' (2017) and Jensen (2023)'s assessments is that the latter did not find that SDGs relate to just one of the three pillars. The only big difference is for SDG 3 Good health and well-being, which Barbier & Burgess (2017) see as related to economy, which Jensen (2023) disagree with. The difference might be due to Barbier & Burgess (2017) is published in the journal Economics, and it takes a predominately economic viewpoint, while the author has an FM perspective.

3.3 Sustainable Facilities Management (SFM)

The ISO committee for FM standard has produced the technical report ISO/TR 41019 (2024) about FM and sustainability, which at the time of writing is out for public hearing. The technical report includes an illustration of how SDG's and ESG can provide input to the demand organisation's FM strategies, policies and operations to support the quality of life, see Fig. 2.



Fig. 2: SDGs and ESG as input to FM (ISO/TR 41091, 2024)

The technical report also includes a 10-step guideline to achieve sustainable FM by use of the ISO 41000 family of FM standards in Appendix B, Table B.1, as well as an overview of international reporting standards and frameworks in Annex B, Table B.3.

The international FM association IFMA has developed a 7-step guideline to integrate ESG into FM operations displayed as a cycle with input from and output to the demand organisation. These two guidelines are summarized in Tab. 2 and have been used as inspiration for the model and guideline we present in section 5.

3.4 Mapping ESG regulation to Facility Management

The CSRD does not define fixed KPIs for ESG reporting but requires in the directive's associated standards that the company prepares a double materiality analysis, based on which it is assessed and documented, which KPIs are relevant for the company in question in its specific context. The directive's standards are called ESRS (European Sustainability Reporting Standards) (EFRAG 2023). A mapping of all 82 disclosure requirements in the CSRD found that 21 of these requirements were FM-relevant, see

Tab. 3. The specific requirements for each company can vary, but these 21 requirements are a relevant starting point for most FM organisations.

Step	ISO/TR 41019: SFM	IFMA: FM + ESG		
Input		Input from to demand organization		
1	Define success criteria based on the demand organization's FM requirements.	Awareness: Develop your ESG awareness		
2	Identify the appropriate FM organizational design, culture and capabilities.	Knowledge: Understand your company's ESG ambitions		
3	Prepare facility performance assessments and service analyses by objective and location and across the organization's portfolio.	Resources: Identify the resources		
4	Prioritize required actions under the organization's FM strategy to identify the most important efforts in order to reach the organization's target.	Develop: FM and real estate plan		
5	Benchmark internally and externally across relevant sectors nationally and internationally to identify good practice and thought leadership.	Data management: Calculate your organization's current baseline		
6	Invest in preparation and planning to ensure a qualified base and data set for decision-making.	Application: Apply at scale		
7	Ensure knowledge development and a competence- based approach across stakeholders, FM professionals and end users as part of informed communications to develop ambassadors and minimize the risk of greenwashing.	Monitor: Monitor FM team and vendors in progress towards FM goals		
Output		Output to demand organization		
8	Document the organization's specific expectations for suppliers and require progressive reporting of SDG alignments, innovations and performance over time.			
9	Maintain the FM plan, and modify it to suit, based on actual results, changing requirements and communications feedback.			
10	Conduct strategic reviews, challenging the FM plan in terms of contributions to the organization's sustainability, reliance and adaptability.			

Tab. 2: Comparison of the ISO/TR 41009 and IFMA guidelines

Examples of KPI's are shown for Catering in Tab. 4. The KPI's and underlying initiatives are relevant to both internal FM organisations and outsourced FM contracts. Mapping the KPI's to match the ESG requirements makes it easily applicable to existing KPI procedures and thus easy to implement in existing FM structures.

4. Survey findings

The aim of the survey was to determine whether Heads of FM collected and monitored performance on some or all these 21 requirements, as a proxy to analyse the degree

of compliance with ESG regulations among the participating companies and organisations. The conclusion was that none of the participating companies were fully compliant, and overall, the degree of compliance was limited, especially among public sector companies. This conclusion may not be seen as surprising, given that the survey was conducted in 2023, before the ESG regulations had been implemented in Danish law.

ESG Regulation as a Driver for Competitive Advantage

Unlike regulations such as GDPR, some participants viewed ESG regulations as a means to achieve new market opportunities, secure competitive advantages, or even redefine the company's purpose. This perspective was primarily observed among private global companies, in contrast to private local companies and public sector entities, which were mainly focused on legal compliance.

European Sustainability Reporting Standards (ESRS)		Disclosure Requirements (DR)		
	Climate change	DR E1 - 1	Transition plan for climate change mitigation	
		DR E1 - 2	Policies implemented to manage climate change mitigation and adaptation	
ESRS E1		DR E1 - 3	Action plans and resources in relation to climate change policies and targets	
		DR E1 - 4	The undertaking shall disclose its climate-related targets	
		DR E1 - 5	The undertaking shall provide information on its energy consumption and mix	
		DR E1 - 6	The undertaking shall disclose its Scope 1,2 og 3 GHG	
ESRS E2	Pollution	DR E2 - 1	The undertaking shall disclose its policies implemented to manage its material impacts, risks and opportunities related to pollution prevention and control	
ESRS E3	Water and marine resources	DR E3 - 4	The undertaking shall disclose information on its water consumption performance related to its material impacts, risks and opportunities	

Tab. 3: EU ESG reporting standards of relevance to FM

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	Biodiversity and ecosystems	DR E4 - 1	Transition plan in line with the targets of net zero loss by 2030, net gain from 2030 and full recovery by 2050
ESRS E4		DR E4 - 2	The undertaking shall disclose its policies implemented to manage its material impacts, risks and opportunities related to biodiversity and ecosystems
		DR E4 - 3	The undertaking shall disclose its biodiversity and ecosystems-related action plans and the resources allocated for their implementation
		DR E4 - 4	Targets related to biodiversity and ecosystems
	Resource use and circular economy	DR E5 - 1	The undertaking shall disclose its policies implemented to manage its material impacts, risks and opportunities related to resource use and circular economy
ESRS E5		DR E5 - 2	The undertaking shall disclose its resource use and circular economy actions and the resources allocated to their implementation.
		DR E5 - 3	The undertaking shall disclose the resource use and circular economy-related targets it has adopted.
		DR E5 - 4	The undertaking shall disclose information on its material resource inflows.
	Workers in the value chain	DR S2 - 1	Policies related to value chain workers
ESRS S2		DR S2 - 2	Processes for engaging with value chain workers about impacts
		DR S2 - 3	Processes to remediate negative impacts and channels for value chain workers to raise concerns
	Governance, risk management and internal control	DR G1 - 2	The undertaking shall provide information about the management of its relationships with its suppliers and its impacts on its supply chain.
ESRS G1		DR G1 - 6	The undertaking shall provide information on its payment practices to support transparency about these practices given the importance of timely cash flows to business partners, especially with respect to late payments to small and medium enterprises (SMEs).

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Tab. 4: FM KPI's for Catering

KPI	Objective	Measure	Initiative	Ambition (1-3)	ESG
Food waste	Reduce food waste	% of food waste / total food purchased	New technology What type of food is being wasted -> Avoid in future meals Clear the buffet initiative Weight vs fixed price	1	E5-6
CO2 emissions	Reduce CO2 emissions related to catering services	CO2 emissions (baseline) vs CO2 emissions (result)	Measure CO2 emission in entire value chain from production via transport and storage to consumption in canteen	1	E1-6
Organic food ratio	Increase ratio of organic produced food	Fødevarestyrelsens Bronze/Sølv/Guld*	Measure baseline and set target	1	(E4-1)
Meat ratio	Reduce ratio of meat to other foods	% meat consumed / total food consumed	Measure baseline and set target. Potentially set individual targets for chicken, pig and cow.	1	E1-6
Local produce	Increase ratio of locally produced food	% af local produced / total food produced	Measure baseline and set target Individual targets for continent (eg Europe), country (eg. DK) and local region	2	E1-6
Animals protection	Acceptable living conditions for the animals used in production	Dyrevelfærdsmærket*	Measure baseline and set target	2	G1-1
Sustainable fish & shellfish	Only use sustanable fish+shellfish	WWF's categorisisation of "green" fish	Measure baseline and set target	2	(ESRS2 /E3-1)
Efficiently use of ressources in kitchen	Reduce water & electricity consumption	Co2 neutral operation in kitchen	Seperate meters in kitchen to meassure consumption. Initiatives to reduce	2	E3-4
Biodiversity from farmers	Enhance biodiversity	Reduce m2 used to produce /kg food	Dialogue with selected farmers	3	E4-1
Plastic and single use materials	Reduce use of plastic and single use materials	Volume consumed plastic + single used materials (baseline) vs Result	Requirement of sustainable packaging of foods and drinks	3	E5-6

*Danish certifications

FM Service Providers Responding to Client Requests Rather Than Leading

The survey found that the drive for ESG initiatives and investments primarily comes from customers rather than FM service providers. Most FM service providers plan to follow and react to customer requirements. The only exception was one global FM service provider that planned to invest heavily in ESG initiatives, even if not yet in demand. Thirty-three percent of the participants see the development of ESG solutions as a joint responsibility between customer and service provider, thus in line with the partnership approach to FM sourcing.

ESG data is primarily managed manually or via stand-alone IT systems

Complying with all 82 ESG disclosure requirements involves reporting on more than 1,000 data points. Many of these data points will potentially be new and not currently reported in the company's ERP system. This suggests that ESG regulations will lead to significant IT investments to ensure structured and audit-approved data collection and reporting. The survey shows that ESG data is currently managed manually (e.g., by Excel or similar tools).

FM contracts include ESG data requirements - however data is often not used proactively

Existing FM contracts between customers -and service providers include some ESG requirements and data points. However, all respondents viewed these data points as insufficient, see Fig. 3. Not only is the ESG data from service providers limited, but many customers also reported that the available ESG data is often not used proactively.



Fig. 3: Survey results concerning ESG data clauses in FM contracts

5. Case study - Informative example from an annual report

The global engineering, architecture and consultancy company Ramboll is strongly value driven and has the mission: "Create sustainable societies where people and nature flourish". For this paper the Ramboll annual report 2023 was chosen as an informative example of the FM challenges addressed in the paper, as Ramboll chose to align with the EU ESG requirements already in 2024 to prepare the reporting in compliance with the CSRD and ESRS in the future. The Ramboll approach might not be unique but could inspire others, who have not yet found an appropriate way for their future annual reports to meet the CSRD requirements of reporting and documentation of verified data.

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The annual report (Ramboll, 2024) is lengthy with 129 pages about the company's financial and ESG performance, and the impact on clients and key stakeholders through the year. The dedicated section on sustainability reporting is divided in following 4 sections:

- 7. ESG governance
- 8. Assessing material impacts
- 9. Group policies
- 10. Accounting policies.

The mandatory reporting requirements are provided in the format of a table informing the reader about the compliance requirements according to Danish law and a reference where to find the specific information in the report, e.g. share of women in top management. Along with the table is also an organisational chart to inform that sustainability is governed and implemented across group functions and business units.

A double materiality assessment has been conducted to identify, which sustainability matters are most relevant for the company and its stakeholders by valuating their impact on environmental and social factors (inside-out perspective), while also considering how these factors influence the organisation (outside-in perspective). The materiality boundary is set to be the companies own operation namely their office buildings and assets and the projects under the corporate strategy "The partner for Sustainable Change". The conducted double materiality assessment identifies 6 material ESRS out of 10. The six (E1, E4, E5, S1, S4 and G1) having material impact and financial impact, while the four (E2, E3, S2 and S3) are assessed to be in the category non-material or out of materiality boundary.

A page in the annual report is dedicated to group policies, which describe the global commitments and processes made available to all employees on their intranet. The following pages declare the accounting principles for ESG key figures and ratios. The selection of data has been externally audited by an independent third-party audit provider.

The operational boundaries of Ramboll's Green House Gas inventory for 2023 include scope 1, 2 and 3 emissions according to the GHG protocol, see Tab. 5. It is mentioned

in the annual report that it has been challenging to collect data and that data management needs to improve.

Scope	Company activities coursing emissions	
Scope 1	Stationary combustion including heat consumption from assets under operational control	
Scope 1	Mobile combustion from company vehicles including manager cars	
Scope 2	Purchased electricity and heat	
Scope 3	Category 1-Purchased goods and services	
Scope 3	Category 3 - Fuels- and energy-related activities (not in scope 1 or 2)	
Scope 3	Category 6 – Business travel	
Scope 3	Category 7 – Employee commuting	
Scope 3	Category 11 – Use of sold products	

Tab. 5: Ramboll activities causing emissions

The company has been prioritized to focus on the scope 3 categories, where Ramboll has an impact on influencing the financial spend to reach a manageable as well as meaningful level of reporting. This reduces the amount of data that needs to be managed. The intention is to continue to improve the reporting practices and associated data management as well as developing the sustainability-related practices within the company.

The Ramboll case is provided to exemplify the translation of the general ESG reporting requirements into the context of a specific organisation. A similar process is needed for all organisations. However, it is expected that EU and others will provide sector/branch specific standards and guidelines to ease the implementation throughout Europe.

6. Discussion and Recommendation

In this section we discuss how FM organisations become compliant and use the ESG reporting as a strategic driver for environmental, social and economic value creation.

Environment

FM is directly responsible for managing the resources used during the operation of buildings and infrastructure like energy, water and materials for maintenance etc. as well as for handling waste. Therefore, FM is essential to provide data and KPIs for environmental reporting. This is particularly the case for CO₂ emissions related to scope 1 (caused by the company itself) and scope 2 (from the energy the company

buys). It is mostly for scope 3 (from the products and services the company buys) that there are other contributors to environmental reporting inside the company. By analysing energy consumption data, usage of buildings etc. FM can give critical insight to top management and thus be an important strategic partner for companies to find solutions to reduce the use of resources and the emission levels with minimal impact on the company's daily operations.

Social

FM is responsible for the workplace heavily affecting the well-being of the employees within the company, as well as external related people (e.g. employees in supplier organizations). This includes areas suchs as accessibility, e.g. access for disabled, health safety, e.g. indoor climate and ergonomics, and support services, e.g. office support, catering and welfare. FM employs thousands of people directly or indirectly providing a wide range of services and consisting of people with very different levels of education. FM represents many low-wage jobs, and the workforce often includes people from different cultures, ethnicity and religions. Because of the diverse group of people, FM must work with inclusion, equality, fair wages and to prevent discrimination. This also applies to the supply chain and FM often engage external service providers, so FM has an obligation and good opportunity to influence the providers working and employment conditions, e.g. by including social clauses in their procurement practice.

Taking a strong position on the social aspect will impact companies' ability to attract and retain employees. For a service provider, a stable and motivated workforce is a critical factor. End users often only meet the handyman or cleaning personnel, so the service provider depends on their employees being good ambassadors for the brand. Thus, in FM the social aspect can be a strong competitive advantage, because the service experience is often an interpersonal transaction rather than a transaction of goods.

Governance

Governance in a company is usually a concern for the top management, but if FM is going to be a proactive partner for the top management in relation to using ESG as s strategic driver for creating sustainability value, the FM organisation need to develop high competences in this regard. FM should include a sustainability manager, who can take the lead in organising the internal ESG process and develop internal and external networks to be able to continuously improve the process.

Model and guideline for how FM can work strategically with ESG

ESG can be seen as just another bureaucratic EU legislation, which companies of a certain size need to comply with. However, society as whole as well companies and citizens must face the threat that our current way of producing, consuming and living has for the sustainability of our planet and civilization. ESG should therefore be seen as one of many tools to create sustainable development. ESG is here to stay, and we can get the best out it by using it as proactive, strategic tool. FM has an essential role to contribute to a more sustainable built environment. In this paper we have investigated the relation between FM, ESG and former sustainable framework and how prepared Danish companies and FM organisation are to comply with ESG reporting and use ESG to their benefit.

To support companies and FM organisations to work with ESG as a strategic driver, we have developed a model and a guideline. The model and guideline have 6 phases as shown in Fig. 4 and detailed in Tab. 6.



Fig. 4: Model for strategic driven ESG in FM

Tab. 6: Detailed description of the 6 phases in model shown in Fig. 4

 Scoping strategic ambitions for FM in the context of the organisation Understand the Company ESG strategy and identify how FM can contribute to fulfilling the goals Be curious and investigative – can the ESG goals go beyond compliance and turn into strategic ambitions for the FM organization? Know your numbers – set targets according to high level internal or external benchmarking Prioritize – What now, and what later? 	 4. Action plan Identify actions and project targets based on insights from current data Prioritize the actions and projects in accordance with the strategy Be aware of the FM organizations internal need for development in ESG context
 2. Organizational Leadership Human resources. Educate and attract a strategic mindset and demand a strategic engagement from your suppliers. Digital resources and procedures. ESG reporting and strategic work needs a lot of data, prioritize making data management easily accessible and connected with existing procedures. Continuous learning and optimization based on increasing data – it's a journey 	 5. Supplier engagement FM suppliers deliver important data input to your ESG-report, so engage and motivate them Reflect the ESG data demand in FM contracts and incorporate ESG follow up activities in the FM supplier governance structure
 3. Data Management and analysis Identify relevant ESG data through spend analysis, existing reports such as GHG-reports and double materiality assessment Define a data strategy including data collection, storage, verification, analysis, benchmarking and reporting 	 6. Development of the profession Explore eventual synergies with other FM-professionals. Share lessons learned and benefit from others experiences via networks, peer benchmarking etc. Gather lessons learned from external and internal sources and improve the organizations internal FM ESG approach

The model in Fig. 4 is like the IFMA model centred around an annual cycle or wheel, but it also includes interactions with the external environment. This is for simplicity shown by the curved arrows from outside-in, but the impact could also to a certain degree be from inside-out. We recommend that companies and FM organisations engage in public and professional activities to influence regulations, standards and guidelines of relevance to their business.

7. Conclusion

Sustainability has over the years to a high degree been driven by the UN with an initial focus on the societal levels. Later with CSR and ESG a more business-oriented sustainability focus was developed. The SDGs were also mostly focused on the societal level. In Europe the EU has been the main driving force and the Green Deal from 2020 meant a strong focus of sustainability reporting for companies, including ESG.

By mapping the ESG requirements in an FM context and by illustrating several Catering relevant KPI's this paper concludes that FM is an important input provider, as well as a strategic partner to companies working with the sustainability agenda. The survey shows that the Danish companies were unprepared in 2023 and most the participants aim at compliance. A few global companies and a large FM service provider had decided on a more strategic approach. The paper presents a model and a guideline for companies and FM organisations to help follow such a road.

This paper is limited by the fact that it is based on a Danish survey, which is conducted before the law was in force. The authors suggest a follow-up survey in a few years to gather inspiration for best practice guidelines for FM. Environmental reporting is well developed but the authors suggest further research and development of methods for managing social sustainability.

Contribution by the authors

The first author initiated the paper and is the main author of section 2.1 and 2.2. The second author was responsible for conducting the survey as partner in the management consultancy firm Konsulentgruppen Strandgade. Together with the third author he was the main author of sub-section 3.4 and section 4. The fourth author is the main author of section 5 with a case study of ESG reporting in an annual report from the company Ramboll, where she is now employed, but she was not involved in producing the annual report, which the case is mostly based on. The other sections, including the guideline and model in section 5, were developed and written jointly by all authors.



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