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SUSTAINABLE SUPPLY CHAIN: REVIEW AND DISCUSSION OF BEST PRACTICES

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ABSTRACT: Implementing sustainable environmental and social practices in supply chains is not an easy task. This article presents the results of research on practices supporting sustainable supply chain management (SSCM) in the field of environmental protection and social protection. The article provides insight into current trends observed in practical experience, prevention, and environmental and social protection in sustainable supply chains (SSC). In the research, a systematic review of published case studies was conducted using the PRISMA framework. The systematic review identified a set of 118 publications. In the research, six main thematic categories of published case studies related to the nature of the SC were recognised. For each thematic category, four groups of environmental and social practices were identified that support SSCM. Some of the highlighted practices are universal and comprehensive, occurring in every characterised supply chain. This presents a novelty compared to other available scientific works on similar topics. The study results can influence the experience of supply chain managers and contribute to improving the well-being of both the environment and society.

KEYWORDS: sustainable development practices, environmental practices, social practices, compliance practices, IT practices

Introduction

Business organisations around the world are constantly asked and sometimes even forced to meet the growing challenges of the economy and sustainable development. Sustainable development is one of the key goals that organisations need to achieve in the coming years.

The existing literature strongly emphasises the importance, among others, of sustainable development in the functioning of supply chains (SC). However, the term 'sustainable' is often used as a buzzword. Therefore, it would seem that collecting and analysing high-quality case studies on an SSC with the presentation of environmental and/or social practices will not be a major research challenge. However, it turns out that the term "sustainable" is often overinterpreted. When searching for aspects of sustainable development, it is not always possible to find them reflected in the texts to the extent that the reader would expect.

Findings indicate that the concept of "sustainable supply chain" is overinterpreted in case study studies, which relatively often ignore environmental and/or social practices. The research presented information on the currently used environmental and social practices supporting SSCM, depending on the nature of the SC and the adopted strategy for its operation.

In science, we can observe a significant increase in the number of publications in the form of systematic reviews based on the literature and theoretical issues. However, they most often refer to reviews of theoretical works, not practical studies. Hence, there is a need to conduct the research undertaken in the publication. Moreover, the reviews themselves, made on the basis of bibliometric analyses, are based on numerical, automated data. They do not reflect the actual nature of the publication or the essence of its content. The research conducted and the number of eliminated texts are a perfect example of the fact that a promising title, abstract, and keywords are not always reflected in the content of the article.

For the purposes of this work, the following research question was developed: what aspects are currently focused on good practices: environmental and social in the area of sustainable supply chains?

The paper assumes that social practices are actions taken by companies that consider social aspects in their activities. In contrast, environmental practices are actions taken by companies to minimise their negative impact on the natural environment.

To present the research and its results, the article is organised as follows. Section 1 presents the theoretical background and the most important terminology. Section 2 presents the research method used to conduct a study on current sustainability practices that support the management of environmentally and socially sustainable supply chains. The next section presents an extensive discussion of the findings and a discussion of limitations. Section 4 presents a discussion based on the research. Then, the conclusion is presented that complements the article.

Research background

Environmental issues in the context of the implementation of business processes have become the subject of great concern in recent years, and the answer to the ever-growing global environmental and social awareness is the concept of a sustainable supply chain (SSC). This is a strategy that requires an appropriate approach, implementation, and management of the materials, information and capital flows in the SC, as well as cooperation of all entities (Geng et al., 2017), taking into account economic, environmental, and social requirements. These aspects are also related to business ethics, law, and technology (Gurzawska, 2020).

The concept of sustainable development is the result of the growing awareness of the global links between mounting environmental problems, socioeconomic challenges, and the need for long-term economic stability. In practice, this new movement or socioeconomic development means a change in the way of thinking and acting not only in world economies, but also in entire societies. The change in business perception also applies to supply chains.

In the context of practices and activities related to SSC, it is essential to apply sustainable supplier selection criteria, establish appropriate cooperation standards, promote ethical conduct and responsible attitudes, and foster partnerships and interconnected collaboration to effectively achieve the objectives of sustainable development.

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Materials and Methods

To minimise bias in the selection of publications for the literature review and analysis, the PRISMA framework was implemented in this study. Various criteria for the inclusion and exclusion of publications are used to identify those that will be included in the review, and then the results will be analysed and synthesised on their basis (Moher et al., 2009). A scheme of the research procedure was discussed.

The first step in the research procedure was to determine the scope of the study and to select the method used to answer the research questions. In the second step, a preliminary search for publications was conducted (Figure 1). After removing duplicates in both indexing databases, 129 publications were identified. They formed the basis for building a local base. Having a list of publications, further detailed analysis and selection were carried out. The next step was a critical analysis of each publication and its content. During the second reading, the full texts of papers were taken into account. Based on the content analysis of the articles, additional publications were excluded, the description of which went beyond the thematic scope of the study. As a result, 53 papers were excluded. The most common reason for exclusion was the focus on applying and validating context-free mathematical models to the green and social aspects of SCs. Detailed quantitative results of the PRISMA protocol are presented in Figure 1.

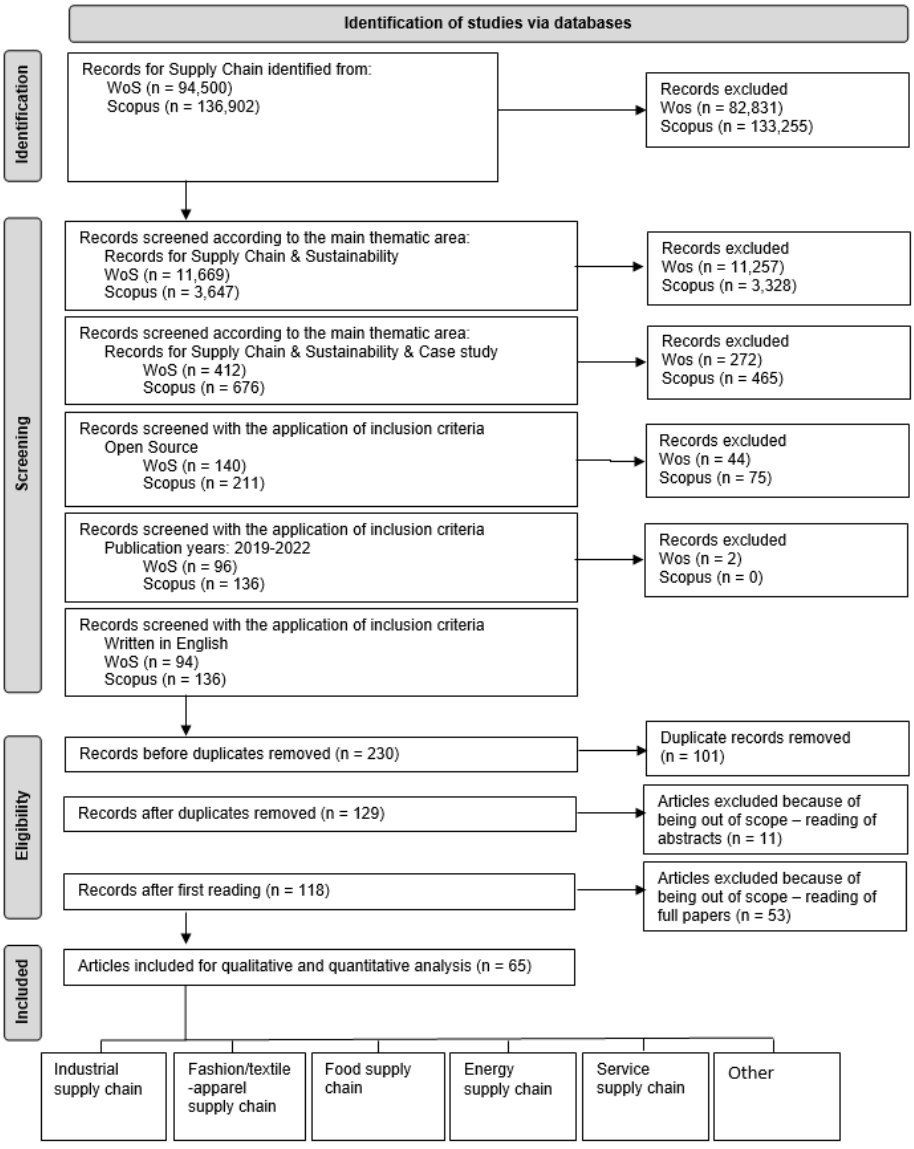

Figure 1. Research procedure according to PRISMA protocol

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The supply chains identified during the analyses were divided into 6 categories: Energy, Service, Industrial, Fashion, Food and Other. Within each category, the scope of activities and the specificity of activities were distinguished, within which analyses were performed and sustainable development practices were presented.

Results

The main thematic categories of publications related to the nature of the supply chain, specified as a result of the PRISMA study, were discussed together with the indication of groups of practices that support SSCM, in terms of both environmental protection and social protection.

Industrial Supply Chain

As a result of the analysis, 15 publications that discussed the so-called industrial SC were identified. Industry is one of the most important branches of the economy. At the same time, it raises great concerns about its impact on the environment.

For example, the metallurgical industry consumes a significant amount of energy and has a negative impact on the environment. On the other hand, it has the potential of Circular Economy (CE) due to the possibility of recycling raw materials (Piyathanavong et al., 2022). Recycling is also mentioned in (Bal & Satoglu, 2019). In the packaging industry, the environmental practices and the motivations for adopting the environmental practices are indicated by Kumar et al. (2019) and KPIs (Key Performance Indicators) (Laosirihongthong et al., 2019) and the monitoring of indicators through FMEA (Medina-Serrano et al., 2021). Researchers note that in building an environmentally and socially sustainable supply chain, it is necessary to evaluate suppliers (Dang et al., 2022) or select eco-friendly raw materials suppliers based on their ability to eco-innovate (Javad et al., 2020; Bai et al., 2019). In the practices analysed, researchers observed that if sustainability is a key procurement element, the configuration of SCs radically changes (Ciccullo et al., 2020).

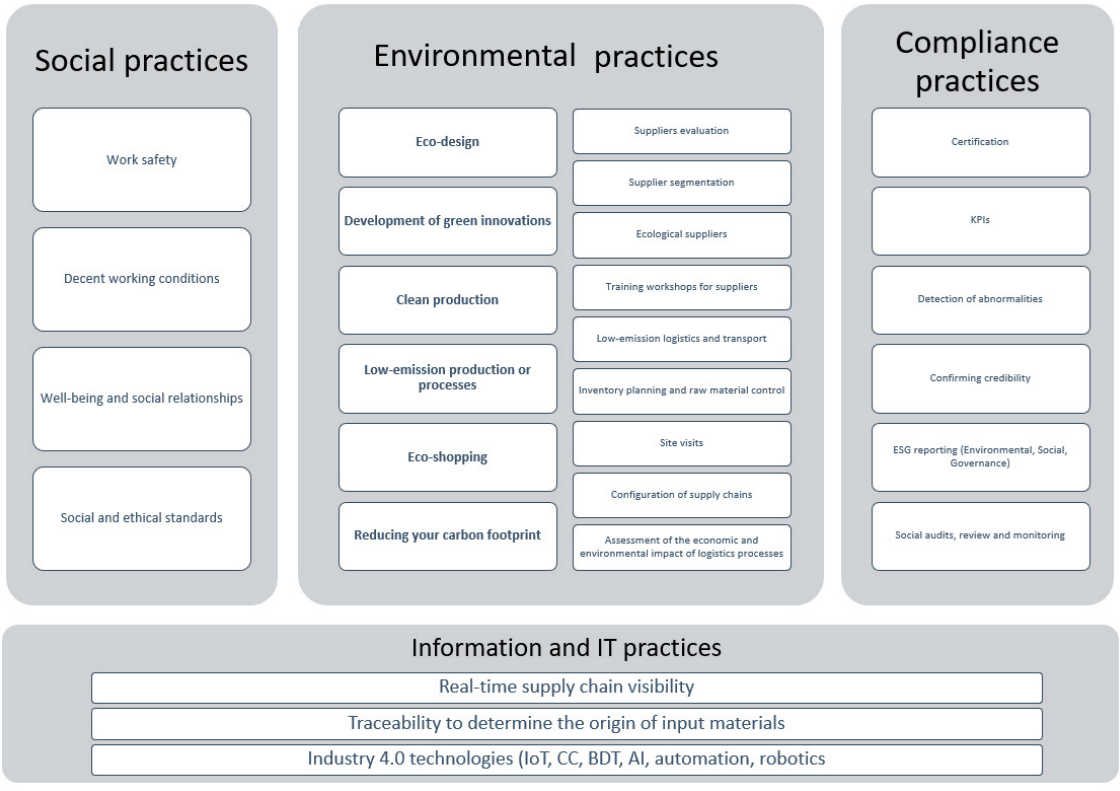

Figure 2. Practices supporting sustainable management in industrial supply chains

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Researchers also pay attention to SC transparency, indicating that it is a prerequisite for all activities in the field of SSC (Fraser et al., 2020), (e.g. the problem of excessive overtime or maintaining standards) (Zehendner et al., 2021; Xiao et al., 2019). Industrial SC are increasingly integrating decarbonisation into their operations. Three low-emission practices can be distinguished (Stefanelli et al., 2021) or the assembly line planning problem (Miranda et al., 2021). In the chemical industry, researchers are paying attention to raw material inventory planning and control. They emphasise the increased commercial interest in research on renewable chemical raw materials (Tsolakis et al., 2019).

Based on a review of publications in the field of industrial supply chains, 4 groups of practices have been identified that support SSCM (Figure 2).

Fashion Supply Chain

As a result of the analysis, 9 publications were identified that discussed the so-called fashion supply chain. The fashion industry is the second most harmful economic sector to the planet, after the fuel industry. One of the biggest problems of the fashion industry is the use of toxic substances and materials, as well as maintaining wages for clothing workers at the poverty line and creating unsafe and undignified working conditions.

Especially in the textile and apparel industry (T&A), cost pressure and shortening production time often conflict with environmental challenges and social challenges (Kaur et al., 2022). Social partners can support the pursuit of an SSC (Heuer et al., 2020). The researchers note that the certification system also provides support. The work of Warasthe et al. (2020) and Koksal and Strahle (2021) confirms the importance of standards and certifications, as well as transparency in sustainability (Warasthe et al., 2020; Brun et al., 2020; Oelze et al., 2020). The sustainability initiatives are seen as critical only by IKEA, not its suppliers (Gong et al., 2021). Additionally, the work of Bottani et al. focuses on assessing the economic and environmental impact of SC processes (Bottani et al., 2020). The work develops a model that is used to segment suppliers in terms of implementing SSCF and operating in an omnichannel system (Pawlicka & Ball, 2022).

Based on the review, 4 groups of practices were identified that support SSCM in fashion (Figure 3).

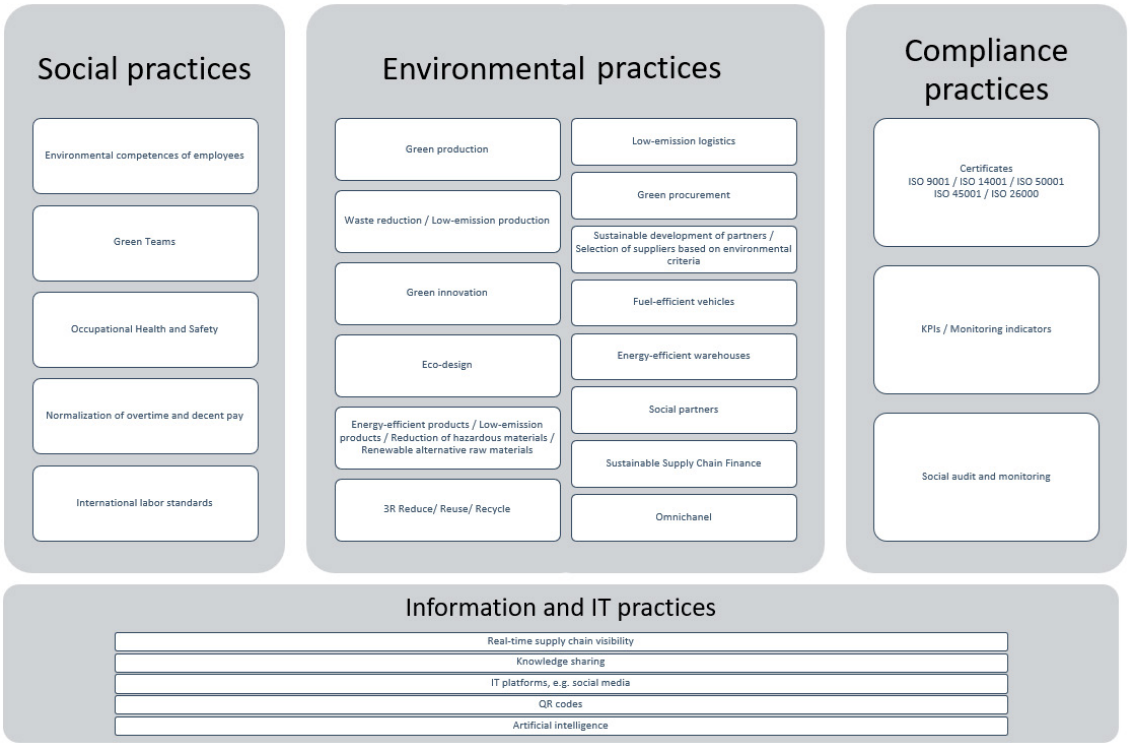

Figure 3. Practices supporting sustainable management of fashion supply chain

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Service supply chain

As a result of the analysis, 8 publications were identified that discussed the so-called service supply chain. Services are increasingly playing a key role in SC systems.

The sustainable company can be threatened by inappropriate sustainability practices on the part of some elements of the supply chain (suppliers) (Rosa et al., 2020). Hence, the introduction of penalties for suppliers who do not meet the conditions of sustainable development. Transparency and visibility of the SC are helpful in this regard (Shamsuzzoha et al., 2020). The obligation to report non-financial results results in more responsible behaviour (Taliento et al., 2019).

Researchers pay attention to the transition to a green service, such as partnership management, selection of ecological suppliers and subcontractors (Aghazadeh Ardebili et al., 2020). The authors of the next work point to the BCT model (blockchain technology), f.e. tracking waste and integrating the recycling chain (Gong et al., 2022); tracking a company's water footprint (Forin et al., 2020) improve waste management (tracking application) with full visibility and tracking of waste (Mastos et al., 2021) or designing an optimal waste management network (Šomplák et al., 2019).

Based on the review, 4 groups of practices were identified that support SSCM in services (Figure 4).

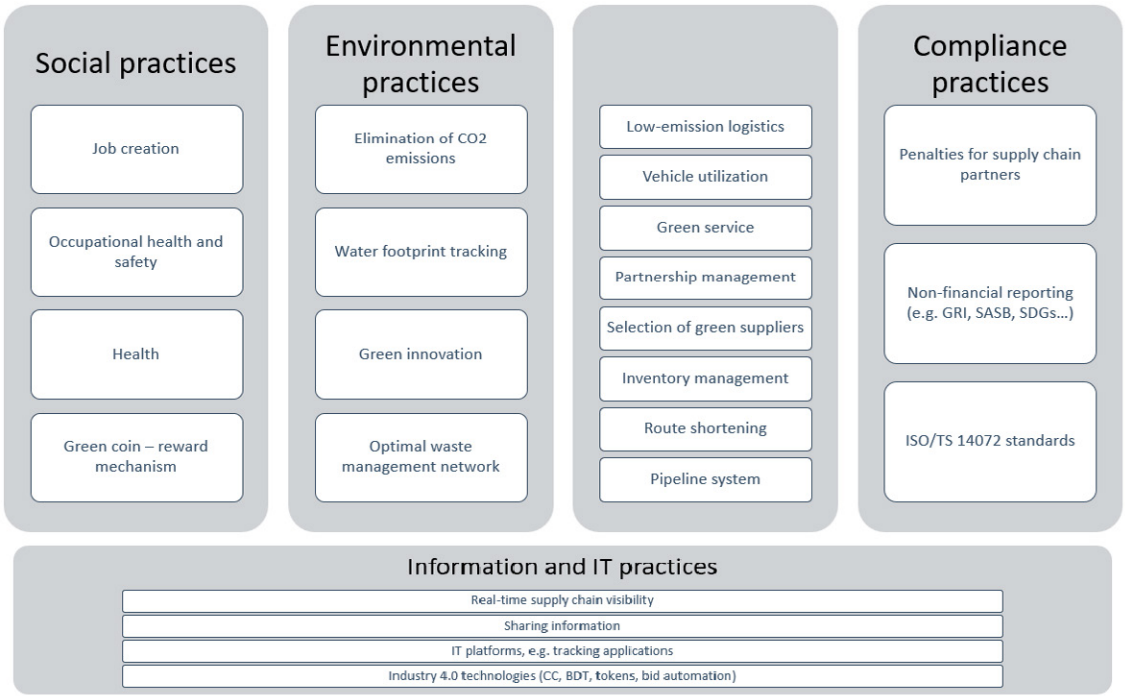

Figure 4. Practices supporting sustainable management of service supply chain

Food supply chain

Another type of supply chain analysed is the food supply chain. In this regard, after an in-depth analysis of the full texts, 14 articles were identified. Food SC companies operate under very specific conditions (short expiration dates, safety, and quality of the delivered food products).

Food supply chains are integrating decarbonisation into their operations (Jiang et al., 2019) and carbon footprint research (Jiang et al., 2019). Photovoltaic systems are an important decarbonisation strategy (for refrigeration facilities in the fresh fruit SC) (du Plessis et al., 2022). The aspect of evaluating and ranking sustainable third-party logistics service providers is often undertaken in food SCs (Dadashpour & Bozorgi-Amiri, 2020; Phochanikorn & Tan, 2019). An important element related to good practices is certification and standardisation (Bravo, et al., 2021; Morais & Barbieri, 2022) and KPIs (Khair et al., 2020).

In coffee SCs, social partners, non-profit organisations, can also support the pursuit of a SSC. These organisations support companies in implementing various strategies to take on a proactive

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organising role (van Hille et al., 2020). The development of sustainable products/ecodesign is an important element (Manocha & Srai, 2020). Innovation for environmental sustainability can fundamentally change the environmental, social, and governance (ESG) footprint of an organisation and its product SC (Manocha & Srai, 2020). Environmental practices are also supported by the use of information technology and IT support; automatic identification technology can help the SC reduce losses and transaction errors (Elmsalmi et al., 2021) and GS1 standard, which concerns the exchange of information related to events in the SC (Filippi & Chapdaniel, 2021). In the SCs of fresh products (e.g. fruit), the practice of reducing the consumption of natural resources, water and energy deserves attention (Baghizadeh et al., 2022; Miguéis et al., 2022). López-Santos and others pointed to social practices: occupational health and safety, no exploitation and child labour (López-Santos et al., 2020).

Based on a review of publications in the field of food supply chains, 4 groups of practices supporting SSCM have been identified (Figure 5).

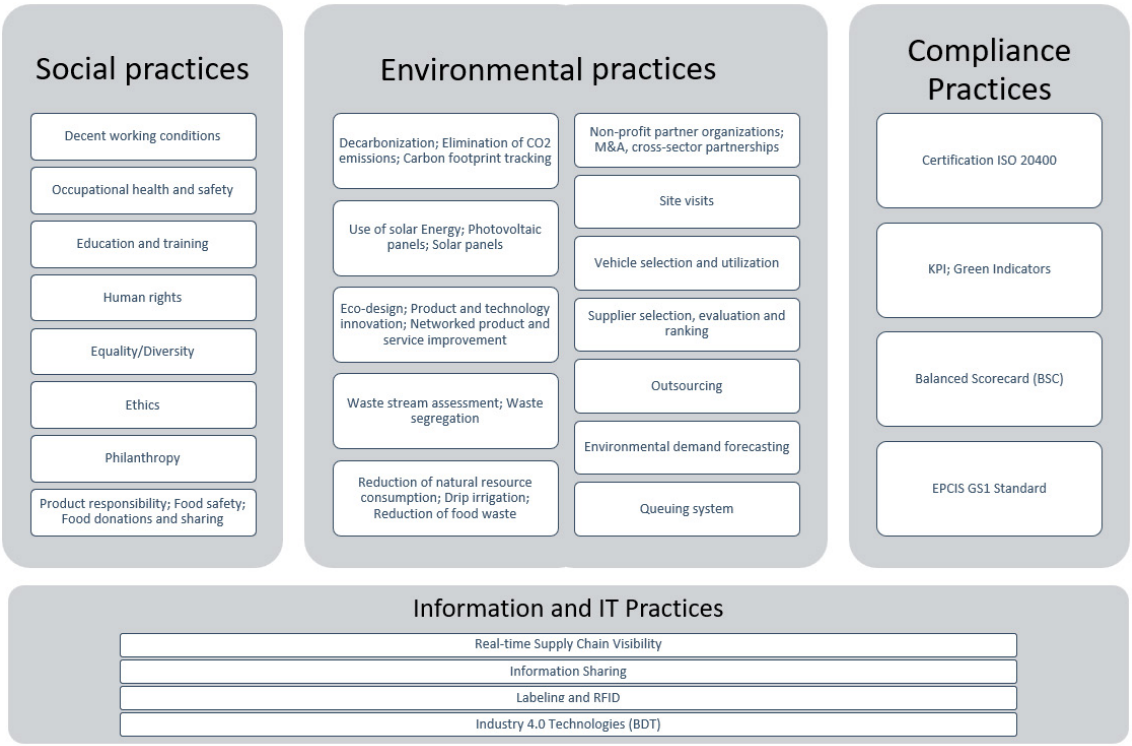

Figure 5. Practices supporting sustainable management of the food supply chain

Energy supply chain

As a result of the analysis, 8 publications that dealt with the energy supply chain were identified thematically. This industry is developing dynamically. Energy is becoming more and more environmentally friendly every year as a result of the energy transformation. Despite improvements, the fuel industry is still the most responsible for significantly burdening the environment with pollution and waste.

Anvari (2021) identified competitive advantage factors in the context of the triple bottom line (TBL). Bioenergy SCs have significant potential. Siems and Seuring (2021) show in a structured way the internal practices of bioenergy supply chains. In terms of good practices, measuring social responsibility according to ISO 26000 is also discussed by Bijarchiyan et al. (2020). Analysis of biomass SCs was conducted by Hew et al. (2021) and Rasekh et al. (2023). They pay attention to the issue of SC configuration by generating the optimal SC path based on technical, economic, and environmental aspects (Hew et al., 2021). Researchers promote the sustainable design of hybrid biomass supply chain networks by incorporating the WEC: water-energy-carbon nexus (Rasekh et al., 2023). The photovoltaic SC is different from commodity SCs or industrial SCs. The differences are mainly due to

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the clear contribution to energy conservation and the reduction of greenhouse gas (GHG) emissions (Mastrocinque et al., 2020). Another practice supporting sustainable chain management is eco-design (Longo et al., 2021). Chaabane et al. (2022) indicate the optimal integration of a production, distribution, and inventory plan that will be consistent with the company's preferences and at the same time with sustainable development goals.

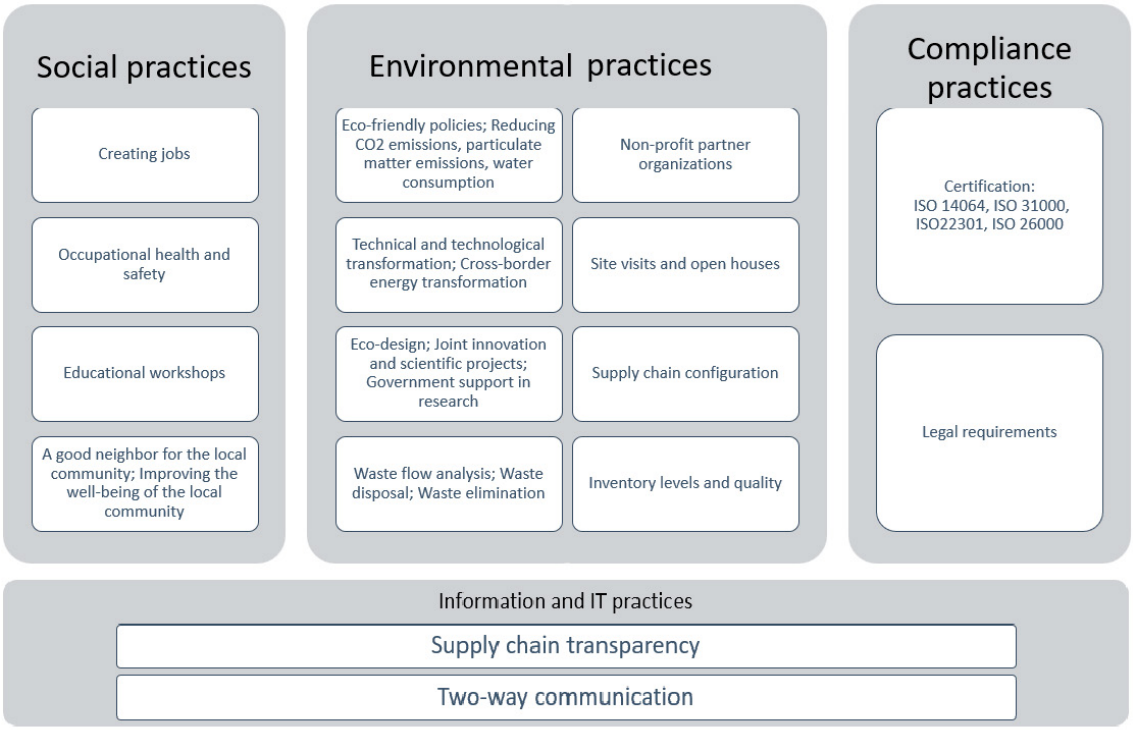

Figure 6. Practices supporting sustainable management in energy supply chains

Based on a review of publications in the field of energy supply chains, 4 groups of practices have been identified that support SSCM (Figure 6).

Other

Content analysis showed the need to isolate a fairly large group of articles, marked as other, which, after analysing the abstracts and full texts, could not be classified into any of the previous groups. The difficulty of the analysis in this area was that it was impossible to clearly indicate the nature of the SC (11 articles were accepted for analysis).

An important element related to good practices in this group of scientific works is the identification of indicators KPIs and evaluation of results in the field of sustainable social development, related to occupational health and safety and product safety in order to assess the working conditions of employees (Guo & Wu, 2023; Abbasi et al., 2022; Choudhary et al., 2021; Cole & Aitken, 2019). Gurzawska (2020) writes about reporting guidelines and regulations, as well as the legal framework. Publications also look for opportunities to obtain a competitive advantage of a SSC using the support of IT systems for this purpose (Stroumpoulis et al., 2021): the possibility of calculating the "carbon footprint" or obtaining temperature measurement of transported goods, e.g. in cold stores. This problem is also addressed by Homayouni et al. (2023). An interesting approach is to highlight environmental aspects in the field of value stream mapping (Gargalo et al., 2021) and it is important to deal with undesirable products, such as bad or unwanted products that adversely affect the environment (Moghaddas et al., 2021). Moreno et al. (2019) indicate that implementing resource tracking with digital intelligence use can further improve business models by avoiding the use of primary resources.

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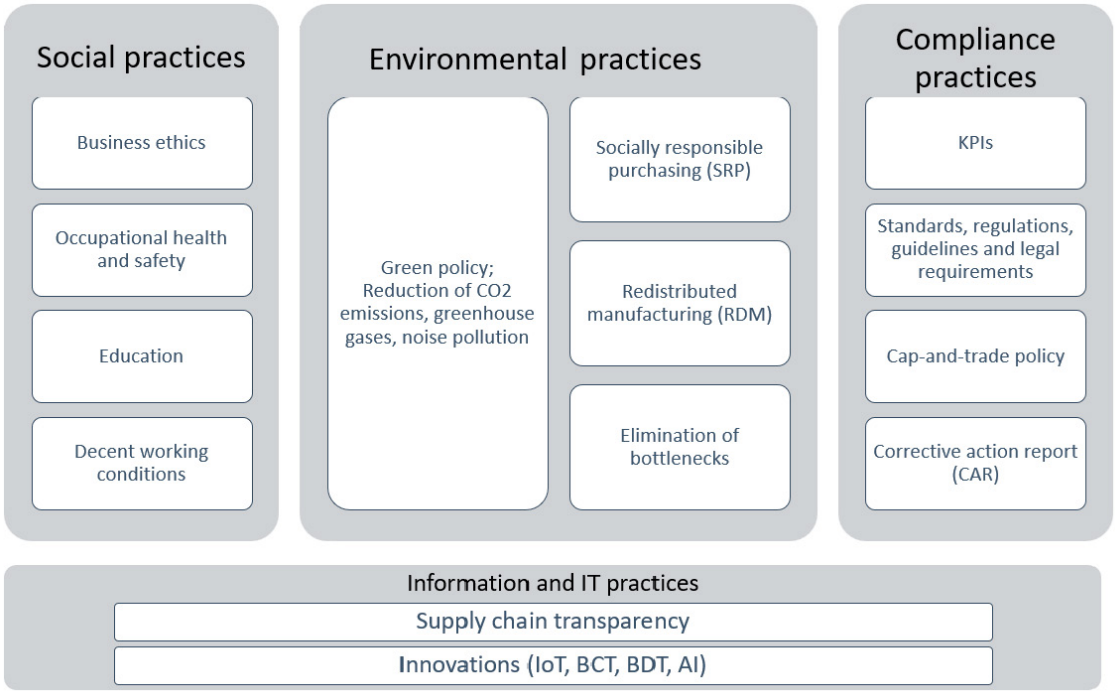

Figure 7. Practices supporting sustainable management in energy supply chains

Based on a review of publications in the field of other SCs, 4 groups of practices supporting SSCM have been identified (Figure 7).

Discussion

Identified practices supporting sustainable management of SCs have been grouped into areas: social, environmental, compliance, and information and IT.

A total of 20 social practices were identified. Twelve of them concern the food supply chain and eight concern the fashion SC (Table 1). We observe that the food industry operates based on the social principles of sustainable development. It ceases to be an image-related activity and becomes a necessary activity.

Table 1. Social practices identified

	Industrial SC	Fashion SC	Food SC	Service SC	Energy SC	Other
Social practices						
Occupational Health and Safety	X	X	X	X	X	X
Decent Working Conditions / Labour Standards	X	X	X			X
Well-being and social relationships	X	X				
Social and ethical standards	X	X	X			
Normalisation of overtime and decent pay		X				
Creating jobs				X	X	
Environmental competences of employees		X				
Green Teams (environmental teamwork)		X				
Health				X		
Education and Training		X	X		X	X
Human Rights			X			

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	Industrial SC	Fashion SC	Food SC	Service SC	Energy SC	Other
Diversity			X			
Equality			X			
Ethics			X			X
Philanthropy			X			
Product liability			X			
Food safety			X			
Donating and Sharing Food			X			
Increasing the well-being of the local community					X	
Green coin – reward mechanism				X		

Occupational health and safety play the most important role, which was reflected in all supply chains examined. This aspect is the most obvious. The standard in the workplace associated with decent working conditions is also an important practice. This is a practice that should basically be used everywhere. Training and education are also an important aspect, including the scope of self-fulfilment and improvement of the qualifications of employees or the introduction of appropriate social and ethical standards. These are universal and comprehensive practices.

The group of social practices that are characterised by a clearly limited application includes those introduced by the food industry. Food supply chains strive to achieve Sustainable Development Goal 11 by implementing various sustainable consumption patterns (food donations and sharing that limit food wasting) and production (food safety).

The largest number of practices was identified in the field of environmental practices. There are up to 60 of them in total, most of which have been identified in the food SC (28), fashion, and industrial SC (25). Green practices refer to different scopes and different areas of activity, ranging from eco-design to the development of green innovations. An important element, considered at a high level of generality, is the possibility of reducing the emission of harmful substances into the environment. This practice can be correlated with other activities and the effects can also be seen in other practices (Table 2).

Table 2. Environmental practices identified

	Industrial SC	Fashion SC	Food SC	Service SC	Energy SC	Other SC
Environmental practices						
Eco-design/sustainable product development	X	X	X		X	
Joint Innovative and Scientific Projects					X	
Development of green innovations/technical and technological transformation	X	X		X	X	
Government support for research					X	
Online improvement of products and services			X			
Energy-saving products		X				
Decarbonisation			X			
Low-emission logistics and transport	X	X		X		X
Low-Emission Products or Processes	X	X				X
Low-emission production (dependence on fossil fuels is minimised)	X	X				
Elimination of CO2 emissions/reduction of carbon footprint	X		X	X	X	X
Carbon footprint tracking			X			

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	Industrial SC	Fashion SC	Food SC	Service SC	Energy SC	Other SC
Ecological policy	X	X			X	X
Green Shopping / Eco Shopping / Socially Responsible Shopping	X	X	X	X		X
Supply chain configuration / Optimal network	X			X	X	
Ecological suppliers / Selection of suppliers based on environmental criteria / Selection of ecological suppliers	X	X	X	X		X
Selection of 3PL operators by: environmental criteria	X	X	X			X
Suppliers' Evaluation	X	X	X	X		X
Supplier segmentation	X		X			X
Training workshops for suppliers	X		X			X
Social Partners / Non-profit Partner Organisations		X	X		X	
Mergers and Acquisitions / Cross-Sector Partnerships			X			
Assessment of the Economic and Environmental Impact of Logistics Processes	X					
Site visits / Open doors	X		X		X	
Green/clean production	X	X				
Redistributive production (RDM)						X
Green service				X		
Pipeline system				X		
Energy-saving warehouses		X				X
Optimal inventory management/stock planning and raw material control	X			X	X	X
Environmental Demand Forecasting			X			
Fuel-efficient vehicles		X				X
Optimal use of vehicles / Vehicle selection			X	X		X
Transport Optimisation / Shortening Vehicle Routes				X		X
Outsourcing			X			
Omnichanel		X				
Queuing system			X			
Reverse logistics	X	X	X			X
Organising Water Consumption			X		X	
Limiting Noise Pollution						X
Reducing Particulate Emissions					X	X
Reduction of Hazardous Materials		X				
Renewable alternative raw materials		X				
Reducing the consumption of natural resources			X		X	
Reducing the amount of waste	X	X		X		
Segregation of waste	X	X	X	X	X	
Waste disposal				X	X	
Optimal Waste Management Network				X		
Waste tracing/ Analysis and assessment of waste flow		X	X		X	
Waterprint Tracing				X		

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	Industrial SC	Fashion SC	Food SC	Service SC	Energy SC	Other SC
3R (Reduce / reuse / recycle)		X				
Solar Energy Use			X			
Fotovoltaic panels			X			
Solar panels			X			
Drip irrigation			X			
Elimination of waste	X	x			X	
Elimination of Food Waste			X			
Elimination of Paper Documents				X		
Elimination of bottlenecks						X
Sustainable Supply Chain Financing		x				

Universal and comprehensive practices include, for example, waste segregation. It seems that this is both a simple and effective practice, as well as resulting from legal regulations and therefore obligatory. The group of universal practices also includes those related to eco-shopping. They actually constitute a comprehensive set of practices, from the assessment of suppliers through the selection of ecological suppliers or the selection of suppliers based on environmental criteria to the so-called green purchasing.

Practices with a clearly narrowed application include, among others, cooperation between science and business. Such projects are the domain of energy SCs. Unfortunately, science and business are still two separate worlds. Barriers to this type of practice also include excessive bureaucracy, lack of time of entrepreneurs, and lack of interest of university employees.

In terms of practices defined as compliance, it can be indicated that environmental certificates play an important role in all identified chains. Another very important issue is monitoring KPIs, some of which relate to the environmental aspect. As the practices analysed show, due to legal changes, ESG monitoring and reporting are becoming more and more important (Table 3).

A well-known, but rarely discussed and openly used mechanism for securing supply chains is partner penalties. It should be classified as a practice with clearly limited application.

Table 3. Identified compliance practices identified

	Industrial SC	Fashion SC	Food SC	Service SC	Energy SC	Other SC
Compliance practices						
Certyfication	X	X	X		X	X
Environmental certification (ISO)	X	X	X	X	X	
Legal Requirements					X	X
KPIs monitoring	X	X	X			X
Detection of irregularities	X		X	X		X
Confirmation of reliability	X					
Soacial auditing and monitoring	X	X				
ESG reporting	X			X		X
Corrective action report (CAR)						X
Balanced Scorecard (BSC)			X			
EPCIS GS1 standard			X			
Cap-and-trade policy						X
Penalties for Supply Chain Partners				X		

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An interesting issue is identifying information and IT practices in the context of sustainable development. In this respect, most of the identified SC distinguish aspects of transparency and visibility in the SC and information sharing. Analysis of practices also indicates an increasing role of practices using IT support, including AI (Table 4).

Table 4. Information and IT practices identified

	Industrial SC	Fashion SC	Food SC	Service SC	Energy SC	Other SC
Information and IT practices						
Full visibility of the supply chain in real time	X	X	X	X		
Transparency of Supply Chains	X	X		X	X	X
Sharing knowledge and information	X	X	X	X	X	
Internet platforms	X	X		X		
Social Media		X				
Kody QR		X	X			
RFID			X			
AI	X	X			X	X
IoT	X			X	X	X
BDT	X	X	X	X		X
BCT			X			X
CC	X	X		X		
Track&trace applications		X	X	X		X
Automation (of processes)	X	X	X	X	X	
Robotization	X			X		
Implementation of machine learning models			X			

Conclusions

The results of this research provide us with conclusions and information on how supply chains incorporate sustainable practices into their ongoing operations. Six main thematic categories of published case studies were identified, which are closely related to the nature of the supply chain: Industrial SC; Fashion Sc; Food SC; Energy Sc; Service SC, and Other.

Four groups of sustainable practices were identified, specified for each nature of the SC. Some of the highlighted practices are universal and comprehensive – which means that they occur in every characterised SC. Others are more specialised and have clearly narrowed applications, which means that they occur only in specific types of supply chain. The research questions posed in the work were answered.

Further directions for the implementation of sustainable practices, closely related to the nature of the SC were identified, which will expand the catalogue of practices and be increasingly based on solutions supported by information technologies.

The study has several theoretical implications. The theoretical foundations on SSCs are well covered in the literature. This is no longer so obvious with well-reported case studies of sustainable practices that support SSCM. It seems that the recent course of the COVID-19 pandemic and the growing number of conflicts (economic, military) in the world can negatively affect the interest in sustainable development or even threaten the implementation of sustainable development goals. In practice, companies undertake various types of activities and introduce several sustainable practices. However, they are not evenly distributed between environmental and social aspects. The integration of environmental, social, and economic criteria in supply chains is not as harmonious and obvious as expected.

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In terms of practical implications, the results of this research provide practical insights that are applicable to professionals. The study can provide some guidance to researchers and practitioners regarding sustainable practices. This knowledge can enable companies to implement environmentally friendly and socially responsible initiatives. Groups of practices that can be classified as universal and comprehensive were indicated. Groups of specialised practices with a clearly narrowed application to the nature of the SC were also indicated.

The research conducted has several methodological implications. It has been confirmed that the use of a systematic review of the literature minimises personal preferences related to the selection of publications for review. The study allowed for a reliable analysis and synthesis of the scientific works collected and the identification of the weaknesses of some evidence. We have seen that limiting research solely to a quantitative review of the literature distorts the research results. Only expanding the systematic review with a detailed PRISMA framework and reading the entire text of the work guarantees reliable research results. It turns out that a systematic review may include articles that contain search phrases that do not reflect the content of the article.

Future research may focus on trying to adapt proven practices to other types of supply chain, as well as expanding the catalogue of practices.

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The contribution of the authors

Conceptualisation, K.G.; literature review, K.G. and B.T.; methodology, K.G.; formal analysis, K.G. and B.T.; writing, K.G. and B.T.; conclusions and discussion, K.G. and B.T.

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ZRÓWNOWAŻONY ŁAŃCUCH DOSTAW: PRZEGLĄD I DYSKUSJA NAJLEPSZYCH PRAKTYK

STRESZCZENIE: Wdrażanie zrównoważonych praktyk środowiskowych i społecznych w łańcuchach dostaw nie jest łatwym zadaniem. Niniejszy artykuł przedstawia wyniki badań nad praktykami wspierającymi zrównoważone zarządzanie łańcuchem dostaw (SSCM) w dziedzinie ochrony środowiska i ochrony socjalnej. Artykuł dostarcza wglądu w aktualne trendy obserwowane w praktycznym doświadczeniu, zapobieganiu oraz ochronie środowiskowej i socjalnej w zrównoważonych łańcuchach dostaw (SSC). W badaniu wdrożono systematyczny przegląd opublikowanych studiów przypadków przy użyciu ram PRISMA. Przegląd systematyczny zidentyfikował zestaw 118 publikacji. W badaniu rozpoznano sześć głównych kategorii tematycznych opublikowanych studiów przypadków związanych z naturą SC. Dla każdej kategorii tematycznej zidentyfikowano pięć grup praktyk środowiskowych i społecznych, które wspierają SSCM. Niektóre z wyróżnionych praktyk są uniwersalne i kompleksowe, występujące w każdym scharakteryzowanym łańcuchu dostaw. Stanowi to nowość w porównaniu z innymi dostępnymi pracami naukowymi na podobne tematy. Wyniki badania mogą wpłynąć na doświadczenie menedżerów łańcucha dostaw i przyczynić się do poprawy dobrobytu zarówno środowiska, jak i społeczeństwa.

SŁOWA KLUCZOWE: praktyki zrównoważonego rozwoju, praktyki środowiskowe, praktyki społeczne, praktyki zgodności prawnej, praktyki IT

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