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# TOWARD GREEN SOCIAL ENTERPRISES: IDENTIFYING KEY AREAS OF GREENING AND FUTURE RESEARCH DIRECTIONS

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**Purpose:** The main aim of the article is to identify key areas of greening social enterprises. An additional aim is to identify future research directions related to green social enterprises.

**Design/methodology/approach**: To achieve the stated research aims, a review of the scientific literature collected in the Scopus database was conducted. 433 scientific articles from the period 2000-2022 were analyzed. The methods adopted were a structured literature review (with the original author's Q1 query) and a classic literature review (based on previously defined green areas).

**Findings:** The ongoing transformation of the current economy (the brown economy) to a green economy presents both opportunities and challenges for social enterprises. Social entrepreneurs must realize that to survive in the changing economic reality, social enterprises must embark on a green growth path. This, in turn, raises the organizational and financial dilemma of how to simultaneously pursue the assumed social goals and make the necessary green changes in an uninterrupted manner. The analysis carried out has shown that the implementation of the idea of sustainable development based on green changes at various levels of the functioning of social enterprises can contribute to their gradual greening.

**Research limitations/implications**: The considerations presented here were limited to the results obtained based on the analysis of the Scopus database. The results of the scientific analyses undertaken may provide guidance to researchers for further in-depth research on the issue of the greening of social enterprises.

**Practical implications:** The greening of social enterprises can be based on the greening of various areas related to the operation of such entities. This process, however, in social enterprises should not take place at the expense of the social services provided.

**Originality/value:** The article is a critical review of the literature. It identifies key areas of greening social enterprises. Future research directions in the field of green social enterprises are also outlined. The article is addressed to all those interested in the issues of social enterprises. The information contained in it can serve researchers in taking up the direction of research around the issue of green social enterprises.

**Keywords:** green economy, green labor market, green social enterprise, green transformation, sustainable development.

Category of the paper: Literature review.

## 1. Introduction

Nowadays, one can observe the process of greening the economy taking place at various levels of socio-economic life, which is called green transformation by researchers of the subject (Holt, 2011; Liang et al., 2020). This process is related to the implementation of the idea of sustainable development in socio-economic practice and involves a gradual shift away from the so-called "brown economy" (among other things, based on non-renewable energy sources - especially fossil fuels) and towards a green economy (among other things, based on renewable energy sources) (Kozar, 2019). It should be pointed out here that the green economy in its assumptions not only draws attention to the need to increase attention to the hitherto downplayed impact of economic activities undertaken on the state and quality of the environment, but also emphasizes the problem of social and professional exclusion (D'Amato et al., 2017). Green transformation is conditioned by numerous factors, among which we can mention, for example, cultural conditions, access to modern technologies for business entities, or the knowledge and environmental awareness of society. Hence, the process may occur at different speeds and scales in different countries and their administrative areas.

Changes aimed at green transformation can be observed on the example of any type of business entities that operate in the market. Individual business entities, however, may differ from each other in the pro-environmental solutions adopted and the scale on which they have been implemented. The issue of greening business entities, as the author of this article sees it, is most often discussed through the prism:

- implemented technical and technological solutions discussing solutions aimed at minimizing an organization's carbon footprint (e.g. Lamptey et al., 2021; You et al., 2023), or green technologies (e.g. Fallah, Soori, 2023; Fernando et al., 2019; Mrkajic et al., 2019),
- products and/or services offered distinguishing categories of green products (e.g. Borin et al., 2013; Chen, Wu, 2015; Du et al., 2018) and/or green services (Majid et al., 2020), as well as referring to the issue of green consumption (e.g. Ogiemwonyi, Jan, 2023; Pimonenko et al., 2020),
- jobs creating green jobs (e.g. Kozar, Sulich, 2023a; Scully-Russ, 2015; Stanef-Puică et al., 2022), which are also called green collars by some researchers (e.g. Kozar, Sulich, 2023b; Vickers, Lyon, 2014),
- organizational management including in the context of human resource management, where the issue of sustainable human resource management (e.g. Macke, Genari, 2019), or green human resource management (e.g. Mishra, 2017; Wang et al., 2023) is pointed out.

In the literature, the solutions indicated above aimed at greening the economy are referred to regardless of their type as sustainable, pro-environmental (e.g. Ansari et al., 2021; Axsen et al., 2012) or simply green practices (e.g. Sayfuddin, 2022; Yousaf, 2021). In addition,

it should be noted that in scientific studies relating to the greening of economic entities, there is also a special attention to the essence of this process in the context of efforts to green transformation of the economy (e.g. Ge et al., 2023; Niu et al., 2022).

The result of implementing green practices in various business entities is their gradual greening. The indicated greening process is observed by researchers at least on the example of the activities of social enterprises (Davies, Mullin, 2011; Jayawardhana et al., 2022; Withisuphakorn, 2017). These entities are a rather specific type of business entity, as their purpose of operation is primarily to achieve the set social goals, and not to maximize the profits made. From such a perspective, the greening of social enterprises becomes an important challenge for social entrepreneurs, as the process should not come at the expense of the social goals pursued by such entities. Nevertheless, some social enterprises manage to enter the path of sustainable development and carry out the process of greening, which is also noted by some researchers of the subject in their scientific considerations, distinguishing the category of green social enterprises (e.g. Descubes et al., 2018; Osti, 2012; van Gils, Horton, 2019). Such specific considerations, in the opinion of the author of this article, are one of the pillars of the green labor market.

In the scientific studies to date, one can see analyses aimed at presenting research areas related to the issue of the operation of social enterprises in the context of sustainable development (Gupta, Srivastava, 2021; Jayawardhana et al., 2022). These are mainly various bibliometric studies based on a structured literature review. Some of such studies use the VOSviewer program (e.g. Contreras, Abid, 2022; Salido-Andres et al., 2022; Schlosser, Volkova, 2022). Still lacking, however, this type of analysis aimed at identifying areas of greening of social enterprises. In the opinion of the author of this article, this may be a result of the fact that the issues discussed are relatively "new", and therefore still in a small number of scientific articles in the titles, abstracts, or keywords there is a direct reference to green issues (these elements are a key area of searches of scientific databases for the purpose of extracting data for further analysis in bibliometric studies). Hence, recognizing the indicated research gap, identification of key areas of greening of social enterprises was set as the aim of the article. These areas will be identified based on the literature review.

The article distinguishes four interrelated sections aimed at achieving the stated research objective. In the introduction, the relevance and timeliness of the research issue undertaken is presented, and the aim of the research is indicated. The second section, in turn, presents a description of the research methodology. Attention is paid here to the selected research methods. An important element of this section is also an indication of the various stages of the research, along with their location in time. The second-to-last section describes the obtained results of the qualitative analyses undertaken, along with a discussion. Future research directions related to the issue of green social enterprises are also outlined in this section. In turn, the last section contains summary.

### 2. Research methodology

To achieve the set research aim, a review of scientific literature collected in the Scopus database was conducted. The main rationale for choosing this database for the planned research is the fact that by the scientific community this database is considered a high-quality digital bibliometric platform (e.g. Haba et al., 2023; Kozar, Sulich, 2023c). The reliability of this database is due to the strict procedure for indexing individual scientific journals in it (getting into this database does not guarantee continuity of being in it - one must constantly meet strict scientific standards). Hence, the Scopus database is widely used in bibliometric analyses, including those aimed at presenting the issue of sustainable development in the context of the operation of social enterprises. The aspects indicated make it clear that the Scopus database adopted for the analyses should be considered a source of information of adequate quality. Nevertheless, it should be borne in mind that the indicated positive considerations for the choice of the Scopus database for the planned analyses may at the same time contribute to some kind of limitation of the proposed research. Thus, while the process of indexation to the Scopus database is aimed at ensuring high scientific standards of the scientific journals entering the database, at the same time a significant number of journals remain outside the indicated database for various reasons. Thus, the restriction to a specific database adopted in the analyses means that it cannot be ruled out that some of the scientific articles covering the research issue addressed were outside the scope of analysis.

The research procedure conducted consisted of three main research stages (Figure 1). Conceptualization of the study constituted the first stage of the research. During this stage, a review of scientific publications related to the issue of the operation of social enterprises in a sustainability-oriented economy was conducted. This review was aimed at identifying new areas of research on the issue at hand. As a result, a research gap was observed in the form of the need to identify key areas for the greening of social enterprises. To implement the research direction outlined in this way, a structured literature review (SLR) method was chosen, which allows for a synthetic and reproducible extraction of data related to the explored research problem. Hence, an authoritative research query was constructed to the Scopus database to generate scientific articles for further analysis.



Figure 1. Research procedure stages and timeline.

Source: Authors' elaboration.

The second stage of the research involved data extraction. Based on the Q1 query (Table 1), the titles and abstracts of scientific articles indexed in the Scopus database were searched. Because the third stage of the research analyzed the content of entire scientific articles, it was assumed that only articles written in English would be taken. In addition, to ensure the possibility of repetition of the indicated analyses by other researchers and their future comparison, it was assumed that scientific articles must be indexed until 2022 (inclusive). The query allowed the initial selection of 433 scientific articles for further analysis. These studies were subjected to a preliminary evaluation procedure aimed at removing repetitive publications. Attention was also drawn here to the fact that three publications were incorrectly attributed to English-language articles (only in this language were the abstracts). Next, access to the full contents of scientific articles was verified. The content of 21 scientific articles was found to be unavailable, resulting in a final database of 408 scientific articles for further analysis.

#### Table 1.

Search	<i>queries</i>	syntax	detail	S
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Database	Symbol	Query syntax	No. results
Scopus	Q1	TITLE-ABS (("social enterprise*") AND (sustainability OR "sustainable development" OR green)) AND PUBYEAR > 1999 AND PUBYEAR < 2023 AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (LANGUAGE, "English"))	433

Source: Authors' elaboration.

The final stage of the research presented in Figure 1 was based on a classic literature review (CLR). It was assumed that articles would be searched for the occurrence of the term "green" in the context of the following 10 categories: products and services, production and industry, jobs and workplaces, consumption, innovations, technologies, management, marketing, supply chain, unfair practices (greenwashing). The indicated categories at the same time should be considered, in the opinion of the author of this article, key areas for the greening of social enterprises. In addition, the selected scientific articles verified whether a social enterprise implementing various types of green practices is sometimes called a green social enterprise.

The analyses carried out indicate that the issue of a greener approach to business (Dixon, Clifford, 2007), or green entrepreneurship outright, is raised in the literature referring to the issue of the functioning of social enterprises (Marjerison et al., 2021; Rahdari et al., 2016). As a result, it can be noticed that some of the researchers directly address the issue of green social enterprises (Descubes et al., 2018; Osti, 2012) or green social entrepreneurship (Jayawardhana et al., 2022) in their deliberations. An important issue raised is the attempt to indicate the role of social enterprises in the transition to a green economy (Hillman et al., 2018). For example, Charles (2021) points out that social economy entrepreneurs play a pioneering role in responding creatively to environmental issues. In addition, it is important to note academic studies that draw attention to the issue of green niches in the context of social enterprise activities (Bretos et al., 2020; Vickers, Lyon, 2014). In some such focused studies, there is even a direct indication of social enterprises as pioneers of the green niche (Oliński, Mioduszewski, 2022).

Of the 408 scientific articles analyzed, 48 publications were assigned to at least one of the 10 analyzed areas of social enterprise greening. This attribution is shown in Table 2, where the original transcript of the identified 73 green words/phrases used by the authors of each scientific article is also indicated. In Table 2, for clarity, only the authors of each article are shown, not their full titles.

#### Table 2.

Search category	Articles (authors)	Green words/phrases*	
	(Siqueira, Honig, 2019)	green product	
	(Ketprapakorn, Kantabutra, 2019; Miemczyk et al., 2016)	green product development	
	(Gumulya et al., 2022a, 2022b)	green product innovation	
	(Holt, 2011)	green product lines	
products and services	(Ambati, 2019; Holt, 2011; Rowan, Casey, 2021;		
	Salido-Andres et al., 2022; van Gils, Horton, 2019;	green products	
	Vohra, 2017; Wu et al., 2022)		
	(Rahdari et al., 2016)	green products and services	
	(Holt, 2011)	green services	
	(Bandyopadhyay, Ray, 2020)	greener products	
	(Blancas, 2016)	products' green aspect	
production and industry	(Descubes et al., 2018; Osti, 2012)	green production	
	(Satar, 2022)	green production methods	
	(Campos-Climent, Sanchis-Palacio, 2017)	green production processes	
	(Gao et al., 2021)	green-production technologies	
	(Rowan, Casey, 2021; Withisuphakorn, 2017)	green industry	
	(Withisuphakorn, 2017)	green industry certification	
	(Withisuphakorn, 2017)	green industry conceptual model	
	(Withisuphakorn, 2017)	green industry promotion	
	(Descubes et al., 2018)	green manufacturing	
	(Alonso-Martínez et al., 2020)	greening of industries	

Assignment of scientific articles to explored categories and identified green words/phrases

		1.1	
	(Descubes et al., 2018)	candidate's green attitude into	
		account during the selection process	
	(Wirawan et al., 2022)	create green employment	
	(Bretos et al., 2020; Descubes et al., 2018; Gholami et al., 2018)	green collar army	
	(Descubes et al., 2018)	green efforts as employees	
jobs	(Simatele, Dlamini, 2020)	green job creating projects	
and	(Smith-Nonini, 2016)	promote green job creation	
workplaces	(Carberry et al. 2019: Colombo et al. 2019:	F 8 J	
	Gelbmann Hammerl 2015: Smith-Nonini 2016)	green jobs	
	(Conway et al. 2010)	green skills development	
	(Viekers, Lyon, 2014)	araption of 'groon collar' jobs	
	(Vickers, Lyon, 2014)	creation of green-conar jobs	
	(Vickers, Lyon, 2014)	green/sustainable job creation	
	(O'Neill et al., 2022)	green-friendly eco-innovative	
		activities for new employment	
	(Chang, Chuang, 2021)	consumers' green consumption	
	(Gholami et al. 2018)	green behavior among consumers	
		and businesses	
consumption	(Lane, Watson, 2012; Vickers, Lyon, 2014)	green consumerism	
consumption	(Alonso- Martínez et al., 2020; Lin et al., 2022)	green consumers	
	(Alonso-Martínez et al., 2020)	green consumption	
		classify and communicate products'	
	(Grofke et al., 2021)	"greenness" to consumers	
	(Alonso-Martínez et al., 2020; Colombo et al.,		
	2019; Eichler, Schwarz, 2019; O'Neill et al., 2022;	green innovation	
	Rahdari et al., 2016: Rowan, Casev, 2021)	8	
	(Alonso-Martínez et al. 2020: Rowan, Casey,		
	2021)	green innovations	
	(Rowan Casey 2021)	green-innovative projects	
innovations	(Gumulya et al. 2022a, 2022b)	green product innovation	
	(Lambert et al. 2019)	green technological innovations	
		green friendly aco innovative	
	(O'Neill et al., 2022)	activities for new employment	
	$(O^2N_0)$ at al. 2022)	developing group inpovetion	
	(O Nelli et al., 2022)		
	(Rowan, Casey, 2021)	innovative green research	
	(Vickers, Lyon, 2014)	green or low carbon technologies	
	(Eichler, Schwarz, 2019)	green revolution-based technologies	
	(Lambert et al., 2019)	green technological innovations	
	(Cavada et al., 2021; Ketprapakorn, Kantabutra, 2019)	green technologies	
	(Cavada et al., 2021; Duncan-Horner et al., 2022;	green technology	
	Holt, 2011; Rowan, Casey, 2021; van Gils, Horton,		
technologies	2019)		
	(O'Neill et al., 2022)	framework model for supporting	
		new green technology development	
		developing potentially disruptive	
	(Rowan, Casey, 2021)	green technologies	
	(Gao et al., 2021)	green-production technologies	
	(Lambert et al., 2019)	incorporating new green	
		technologies	

Cont. table 2.

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management	(Descubes et al., 2018)	green human resources management	
	(Campos-Climent, Sanchis-Palacio, 2017; Descubes et al., 2018)	green management	
	(Shah, Naghi Ganji, 2019)	green project management	
	(Shah, Naghi Ganji, 2019)	green project management processes	
	(Miemczyk et al., 2016)	green supply chain management	
	(Holt, 2011)	green (environmental) and social branding	
	(Wu et al., 2022)	green brand	
marketing	(Wu et al., 2022)	build green brand relationship and green brand trust	
	(Wu et al., 2022)	green brand benefit	
	(van Gils, Horton, 2019)	invest in green brands	
	(van Gils, Horton, 2019)	support green brands	
	(Guo et al., 2022)	green industrial chain	
supply chain	(Ketprapakorn, Kantabutra, 2019)	green supply chain	
	(Miemczyk et al., 2016)	green supply chain management	
	(Bandyopadhyay, Ray, 2020)	greener supply chain	
	(Carberry et al., 2019)	greening of the supply chain	
unfair practices (greenwashing)	(Wirawan et al., 2022)	green washing	
	(Grimes et al., 2018)	greenwash monitoring	
	(Bandyopadhyay, Ray, 2020; Bello-Bravo, Amoa- Mensa, 2019; Dahles et al., 2020; Gidron et al., 2021; Gröfke et al., 2021; Gumulya et al., 2022a; Opatrny-Yazell et al., 2021)	greenwashing	
	(Miemczyk et al., 2016)	green-washing	

Cont. table 2.

\* indicated green words/phrases appeared in the given articles in the indicated form, but it should be borne in mind that the authors may not be the authors of the indicated words/phrases (e.g., they are quoting an issue after someone).

Source: own elaboration based on (Alonso-Martínez et al., 2020; Ambati, 2019; Bandyopadhyay, Ray, 2020; Bello-Bravo, Amoa-Mensa, 2019; Blancas, 2016; Bretos et al., 2020; Campos-Climent, Sanchis-Palacio, 2017; Carberry et al., 2019; Cavada et al., 2021; Chang, Chuang, 2021; Colombo et al., 2019; Conway et al., 2019; Dahles et al., 2020; Descubes et al., 2018; Duncan-Horner et al., 2022; Eichler, Schwarz, 2019; Gao et al., 2021; Gelbmann, Hammerl, 2015; Gholami et al., 2018; Gidron et al., 2021; Grimes et al., 2018; Gröfke et al., 2021; Gumulya et al., 2022a, 2022b; Guo et al., 2022; Holt, 2011; Ketprapakorn, Kantabutra, 2019; Lambert et al., 2019; Lane, Watson, 2012; Lin et al., 2022; Miemczyk et al., 2016; O'Neill et al., 2022; Opatrny-Yazell et al., 2021; Osti, 2012; Rahdari et al., 2016; Rowan, Casey, 2021; Salido-Andres et al., 2022; Satar, 2022; Shah, Naghi Ganji, 2019; Simatele, Dlamini, 2020; Siqueira, Honig, 2019; Smith-Nonini, 2016; van Gils, Horton, 2019; Vickers, Lyon, 2014; Vohra, 2017; Wirawan et al., 2022; Withisuphakorn, 2017; Wu et al., 2022).

The greening of social enterprises, i.e., the process of gradually minimizing their negative impact on the environment, can take place at various levels of the functioning of this type of business entities and is a multidimensional aspect of closely interconnected areas, which is also indicated in Table 2. Nonetheless, social entrepreneurs in the face of the green transformation taking place in the economy face the dilemma of how to achieve their stated social goals and implement appropriate green solutions at the same time. This is because such solutions are, along with the increase in environmental awareness of consumers, increasingly demanded by them from business entities regardless of their type. At the same time, social enterprises, because they allocate their profit to the realization of social goals, do not have adequate financial capital to implement green solutions. Hence, the greening of social enterprises should be looked at much more broadly than just through the prism of specific cases of social entities.

Researchers of the subject recognize that among consumers it is possible to distinguish a subgroup of consumers characterized by green behavior (Gholami et al., 2018). These types of consumers, in their consumer behavior, pay special attention to the conditions under which the product in question was created and whether it is green. Hence, the challenge on the part of social entrepreneurs managing greening or already green social enterprises becomes how to properly communicate the green features of the products and/or services they offer to potential consumers (Gröfke et al., 2021). At the same time, the information provided should not bear the marks of greenwashing, which, as an unfair practice towards consumers, is increasingly recognized in numerous scientific considerations (Bandyopadhyay, Ray, 2020; Bello-Bravo, Amoa-Mensa, 2019; Opatrny-Yazell et al., 2021). Greenwashing as an unfair business practice, in the opinion of the author of this article, in the long term can contribute to the inhibition of the development of a social enterprise, and even the loss of trust on the part of potential consumers, which may consequently impinge on the existence of this type of business entity. Thus, it should be seen that social entrepreneurs managing social enterprises in the process of their greening should pay special attention to consciously build their green market brand based on social relations and mutual trust (Wu et al., 2022). At the same time, the indicated process of building green brands by social enterprises and the green strategies adopted in this regard is still insufficiently studied. This area, combined with the issue of greenwashing, can be an important area of scientific considerations undertaken in the context of green social enterprises.

Social enterprises, like other business entities operating in the market, can green their operations either through the implementation of new green products and/or services, or the process of greening existing ones (e.g. Bandyopadhyay, Ray, 2020; Holt, 2011; Rahdari et al., 2016). The implementation of green products in a social enterprise's offerings is usually preceded by changes in the manufacturing process. Such changes are associated with the implementation of appropriate green production technologies (Gao et al., 2021), or as some researchers note low carbon technologies (Vickers, Lyon, 2014), and green production methods (Satar, 2022), leading to the greening of the production process (Campos-Climent, Sanchis-Palacio, 2017). A part of such solutions involves the implementation of various types of green innovations (Alonso-Martínez et al., 2020; Colombo et al., 2019; O'Neill et al., 2022) in the operation of social enterprises. At the same time, it should be noted that green solutions implemented in the production and delivery of products to the consumer gradually also contribute to the greening of the supply chain (Carberry et al., 2019). Hence, in the opinion of the author of this article, at least a change in the materials used to fill packages sent to customers to a more environmentally friendly substitute may already constitute an initiated process of greening a social enterprise based on building a green supply

chain. An interesting research thread, but one that is still not fathomed enough in the field of green products and services, is the issue of the continuous pushing of the boundary of the possibility of calling them green because of the technical and technological development, which allows the designation of new, more environmentally rigorous green features of products and services. This raises the question of whether social enterprises are ready and able to cope with such pro-environmental changes in production and services offered.

Implementing green solutions, as shown by scientific considerations from various types of business entities, requires an adequate workforce with the right level of green competencies (e.g. Kim, 2019; Mehrajunnisa et al., 2022; Stucki, Woerter, 2017). In this area, the literature discusses green knowledge (e.g. Abbas, Khan, 2022; Sahoo et al., 2023), green skills (e.g. Di Chiacchio et al., 2023; Paterson et al., 2022), green behavior (e.g. Dumont et al., 2017; Norton et al., 2014), green attitudes (e.g. Gadenne et al., 2009; Schaper, 2002), green abilities (e.g. Awan et al., 2023; Yadav & Mathew, 2023), green awareness (e.g. Cabral, Lochan Dhar, 2019; Khalil et al., 2022). In terms of the reviewed scientific articles, in the context of the issue of greening of social enterprises, the focus on the development of green skills (Conway et al., 2019), as well as the issue of green attitudes during the selection process of job candidates (Descubes et al., 2018) were noticed first of all. Thus, the author of this article recognizes that the issue of forming green competencies among employees of social enterprises is still little explored and can be an important area of research undertaken in the future.

Social enterprises, by embarking on the green path of their development, can be a place to create green jobs (Wirawan et al., 2022). In the scientific articles reviewed, the green jobs (Carberry et al., 2019; Gelbmann, Hammerl, 2015) are sometimes called green collar (Gholami et al., 2018; Vickers, Lyon, 2014) or sustainable jobs (Vickers, Lyon, 2014). The discussion on the naming of green jobs taking place on the pages of articles on the operation of social enterprises in the perspective of sustainable development does not deviate, however, from the general scientific discussion taking place in the indicated area (e.g. Kozar, 2019; Kozar, Sulich, 2023a). Nevertheless, it is interesting to note the view presented in some of the analyzed articles that some social enterprises may adopt a model of operation aimed at creating green jobs (Bretos et al., 2020; Gholami et al., 2018). Hence, one of the future directions of research in this area may be to target what portion of social enterprises adopt such a focused model of their functioning. In addition, there is still a lack of research within social enterprises aimed at finding out the scale of the phenomenon of greening their workforce, the degree of greening of green jobs (distinguishing the green nature of these jobs from one another), assessing the quality of green jobs, or demonstrating the directions for forming green competencies among those employed in green jobs. The indicated areas, in the opinion of the author of this article, will certainly become an area of future consideration given at least the scale of green words/phrases identified with this area, and that considerations of this type are already being studied in terms of other groups of business entities.

The green solutions being implemented require a completely different approach to organizational management, which is referred to in the literature as green management (Abbas, 2020; Bartolacci et al., 2020; Raharjo, 2019). This aspect is also discernible in some of the reviewed articles, in terms of which green words/phrases were identified. For example, Descubes et al. (2018) highlighted the issue of green management of human resources. Thus, an important research question in the context of future research should be whether and to what extent social entrepreneurs are prepared to manage green social enterprises.

### 4. Summary

Conducted based on the SLR and CLR methods, a review of scientific articles indexed in the Scopus database made it possible to identify key areas of social enterprise greening that are already being explored within the framework of scientific research undertaken by the research subject. Green words/phrases were identified within all ten areas analyzed. Different researchers cite greening in the context of social enterprises to varying degrees and extents. In addition, the triangulation of the research methods used made it possible to show the complexity of the issue of exploring green words/phrases appearing in the context of social enterprises.

The analyses undertaken and the discussion carried out show the multidimensionality of the research problem undertaken. At the same time, correlations can be drawn between the various green areas identified. They make it not an easy challenge for social entrepreneurs to enter the green path by such specific business entities as social enterprises. In addition to the challenges of implementing various green solutions for social enterprises, social entrepreneurs face the challenge of not succumbing to the unfair business practice of greenwashing. In the opinion of the author of this article, greenwashing applied to other business entities can, in the short term, take away potential customers from social enterprises undergoing greenwashing in a fair manner. Nevertheless, in the long term, not succumbing to this negative business phenomenon, in the opinion of the author of this article, can contribute to the stability of a given green social enterprise in the market.

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Presents the theoretical considerations underlying the project's research: MINIATURA 6, "Social and professional reintegration in the perspective of the green transition of social cooperatives", project number 2022/06/X/HS4/00926, National Science Centre in Poland.

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