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EXPOSING GREENWASHING: A CATALYST FOR GREEN ECONOMY DEVELOPMENT

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Purpose: Two closely related research objectives have been constructed, aimed at exploring scientific studies dealing simultaneously with the issues of greenwashing and the green economy. The first objective is to identify the most frequently undertaken research areas in the indicated area. While the second objective of the study is to identify the green research areas highlighted by researchers through the author's keywords.
Design/methodology/approach: The study used two research methods (systematic literature review and classical literature review). The bibliometric queries created allowed the exploration of two databases (Scopus and Web of Science). The result of the exploration carried out in the research procedure was the selection for analysis of 37 scientific papers that simultaneously dealt with the issues of greenwashing and the green economy.
Findings: The analyses carried out showed that the issue addressed is a relatively new research area, and thus further development of research in this area can be expected in the future. Conclusions of the analysis lead to the conclusion that greenwashing is a very unfavorable phenomenon that contributes to the problem of correct verification of the scale of greening the economy. Hence the need to expose this type of practice.
Research limitations/implications: Conducting research based on other databases can lead to different results in terms of the green research areas identified. This issue is because the various bibliometric databases do not overlap. The indicated aspect is shown in the article by presenting the issue of Scopus and Web of Science databases. In the study, however, universal bibliometric queries were used. They can be applied to various bibliometric databases after their proper syntactic adjustment. The queries used (Q1 and Q2) can be reused in the future for comparative purposes of changes over time.
Originality/value: Promising future research directions around greenwashing and the green economy were identified. Such areas could be, especially, the question of the impact of greenwashing practices on the creation of quality green jobs, or the issue of the green skills gap. The article is aimed primarily at researchers addressing the issues of greenwashing and the green economy in their deliberations.
Keywords: green economy, green jobs, green skills gap, greenwashing, sustainable development.
Category of the paper: Literature review.

1. Introduction

Sustainable development is nowadays a very important and frequently taken up research thread in scientific considerations. The implementation of sustainable development in everyday socio-economic practice contributes to the gradual transition of economies to the path of sustainable development. This aspect is recognized in numerous studies (e.g. Sineviciene et al., 2021; Staniškis, 2022; Sulich et al., 2024). The process of implementing sustainable development into socio-economic practice is impossible, however, to put into a strict time frame, as dynamic changes are constantly taking place in this area. It is significantly influenced by the progressive growth of environmental awareness (e.g. Karuppiah et al., 2023; Ma et al., 2022) and knowledge in society about environmental protection (e.g. Kumar et al., 2019; Tan, 2018), as well as by the development of technologies (e.g. Ahmed et al., 2022; Fujii, Managi, 2019; Guo et al., 2020), which contributes to the development of increasingly resource-efficient and lower-emission solutions. Hence, the process is continuous, with the primary goal of offsetting the negative impact of the socio-economic activities undertaken by humans on the surrounding environment.

Some of the sustainable development practices being implemented are aimed at the green transformation of the economy. Such specific practices are called green practices by researchers of the subject (e.g. Fok et al., 2022; Rodrigues et al., 2023; Vachon, Klassen, 2006). In economic practice, more green solutions can be seen to replace those that are inefficient in terms of resource consumption, carbon-intensive and/or are based on non-renewable energy sources. In turn, the literature notes a multifaceted scientific discourse around the issue of the green economy (e.g. Sikhunyana, Mishi, 2023; Zhu et al., 2023). These considerations, as the authors of this article recognize, primarily attempt to identify key challenges and elements of the green economy.

The increase in interest on the part of researchers in the issues of the green economy is simultaneously resulting in a noticeable increase in the number of scientific considerations referring to the issue of individual green economic sectors (e.g. El-Haggar, Samaha, 2019; Phan, 2024; Zhao et al., 2024), or research areas directly related to the green economy to which include, for example, the issue of green job creation (e.g. Chabán-García, Hidalgo-Capitán, 2023; Kozar, Sulich, 2023), the development of green self-employment (Kozar, 2023) or green human resource management in various types of entities (e.g. Shah et al., 2021; Singh et al., 2020). At the same time, the direction of changing the current way of farming to a greener one has become part of many local, regional, national, and international policies. A reinvigorated public discourse is also evident, including the polarization of societies in some of its areas as, for example, in the context of the European Green Deal (e.g. Biedenkopf, 2021). As a result, managers of individual entities operating in the market may increasingly perceive that the green transformation is not only a kind of idea indicating further directions in the economy,

but it is also the direction of changes in the economy that are already taking place. Hence, the decision to implement green practices can influence the further functioning of a given entity, including the building of its competitive advantage in the market.

The pressure imposed by implemented regulations, adopted policies, as well as from the social side can, however, also have a negative impact on the pro-environmental decisions of individual entities and lead to building their green image by using various types of green lies. In research to date, activities aimed at inducing a misconception in consumers that given products, services or entities are green are called phenomena falling under the common name of greenwashing (e.g. Delmas, Burbano, 2011; Wodnicka, 2023; Yu et al., 2020). Such actions not only mislead potential consumers, but also have a negative impact, as the authors of this article recognize, on the entire process of green transformation of the economy. Above all, it comes to:

- falsification of data to determine the level of green transformation in specific areas of the economy,
- displacing green products and/or services with those that are not, but are called green,
- loss of revenue for further development of green products and/or services by those who produce them (part of the revenue is scraped by unfair competition),
- building fake green entities in the socio-economic environment (negative role models are created).

In view of the essence of the problem both socially and economically, as well as environmentally, which is greenwashing, this issue was chosen in this article as an area for further consideration in the context of green economy issues. The article sets two complementary and at the same time equal research goals. The first objective is to identify the most frequently undertaken research areas in scientific studies dealing simultaneously with the issues of greenwashing and the green economy. In turn, the second objective of the analyses undertaken is to demonstrate the green research areas highlighted by the author's keywords by researchers in scientific studies addressing greenwashing and the green economy simultaneously. Two databases containing bibliometric information (Scopus and Web of Science) were explored in the study. The systematic literature review (SLR) and classic literature review (CLR) methods were used. Thanks to the construction of Q1 and Q2 queries, the study is reproducible, which means that it can be conducted again in the future for comparison purposes. In addition, it should be emphasized that the bibliometric queries constructed (Q1 and Q2) represent the original author's approach to the analyses performed. The bibliometric analyses performed were supported by the VOSviewer software (version 1.6.20). The use of the CLR method allowed us to identify and deepen the discussion around the identified green research areas.

The article was structured in four parts. The introduction explained the relevance of the research issue undertaken. The purpose of the considerations undertaken was also presented here. In addition, the introduction notes in a general way the research assumptions made and

the selection of databases for further analysis. These issues are explored in detail in the second part of the article, which is devoted to the research methodology. This part is presented in detail. This procedure is expedient on the part of the authors, as this makes it possible to conduct identical studies in the future for the purpose of demonstrating the changes taking place. Also, other researchers get the opportunity to relate their results to the indicated studies based on the similarities or differences of the methodology used. The penultimate section presents the results obtained and provides a discussion. Future promising, in the opinion of the authors of this article, research directions related to the issue of greenwashing and the green economy are also indicated here. The last part of the article contains a summary of the analyses undertaken.

2. Research methodology

The scientific considerations presented in this article are the result of the research undertaken during the period December 2023 - March 2024 (Figure 1). Three research stages were distinguished at which research activities were undertaken aimed at achieving the established research objectives. The first stage of the research was related to the planning and conceptualization of the research around the issue of greenwashing. A review of the literature helped to point out that the issue of greenwashing is a multi-faceted research area. The issue is addressed by researchers both from the perspective of the products and services offered by the market players in question, as well as their interaction with the socio-economic environment. Based on a review in databases such as Google Scholar, Scopus and Web of Science, various forms of writing the word greenwashing were observed simultaneously. As a result, in addition to the classic form (the most common form of writing), i.e. greenwashing, the phenomenon is also sometimes written in scientific papers as green-washing (e.g. Schons, Steinmeier, 2016; Squier, Booth, 2023; Walker, Wan, 2012), green washing (e.g. Owens, Conlon, 2021; Ozili, 2023), green-wash (e.g. Rejikumar, 2016), green wash (e.g. Basu et al., 2022; Font, 2002; Lim, Ting, 2011), greenwasher (e.g. Ferrón-Vílchez et al., 2021; Kapitan et al., 2019), green-washer (e.g. Agustini et al., 2021; Liu et al., 2023), green washer (e.g. Arisandi, Frisko, 2011; Sensharma et al., 2022), green washed (e.g. Jakobsen, 2022), green-washed (e.g. Aptekar, 2016; Biggott, 2023) or greenwashed (e.g. Ende et al., 2023; Lee et al., 2018; Teichmann et al., 2023). Regardless of the form of writing, as the authors of this article recognize, such practices contribute to the misconception that the products, services, or entire business entities in question are green. In addition, based on the literature review, it was found that there is a lack of comprehensive analysis in the context of greenwashing in an area such as the green economy. In the authors' opinion, this is still a kind of research gap in the scientific considerations carried out so far.

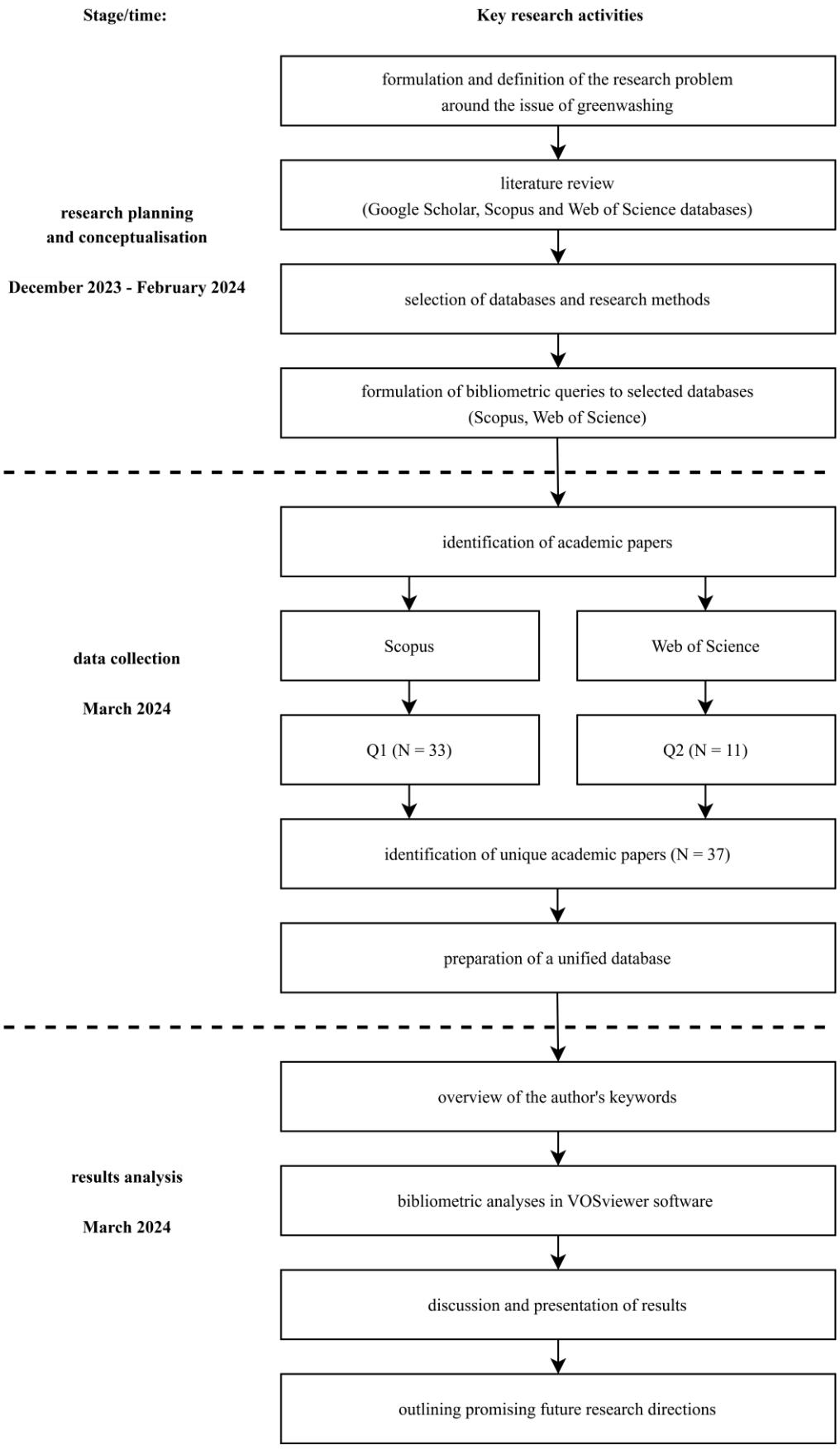

Figure 1. Research procedure stages and timeline.

Source: Authors' elaboration.

During the planning and conceptualization stage of the research, databases were also selected for further analysis. Since it was decided to base scientific considerations on bibliometric analyses using systematic literature review (SLR) and classical literature review (CLR) methods, the Scopus database and Web of Science database were selected for analysis. The choice of these two databases was determined by two key considerations. The first was the observation made during the literature review stage that the Scopus database (e.g. Moodaley, Telukdarie, 2023; Pendse et al., 2023), as well as the Web of Science database (e.g. Lane, 2010; Wang et al., 2023), are used by researchers to conduct various types of literature reviews around greenwashing issues, including using VOSviewer software (e.g. Montero-Navarro et al., 2021; Santos et al., 2023). In contrast, a second important consideration is that these databases do not overlap. Of course, some publications due to the indexing of a given journal can be assigned to both databases simultaneously, but there are publications indexed only in the Web of Science or Scopus database. In addition, both databases are characterized by international coverage and recognition in the scientific world.

To the indicated databases, due to the choice of SLR as a research method, research queries differing in form of writing (due to differences in syntax between databases) but searching the same area were formulated (Table 1). These were, respectively, query Q1 (Scopus database) and query Q2 (Web of Science database). The design of the syntax of bibliometric queries distinguishes the study from those previously conducted by other researchers. In addition, the content of the syntax follows from the above-mentioned observation at the planning and conceptualization stage of the study that the phenomenon of greenwashing is sometimes recorded differently by researchers.

Table 1.
Details of search query syntax for Scopus and Web of Science databases

Database	Symbol	Query syntax	No. results
Scopus	Q1	TITLE-ABS-KEY ((greenwashing OR "green-washing" OR "green washing" OR "green-wash" OR "green wash" OR greenwasher OR "green-washer" OR "green washer" OR "green washed" OR "green-washed" OR greenwashed) AND "green econom*") AND PUBYEAR > 2009 AND PUBYEAR < 2024 AND (LIMIT-TO (LANGUAGE , "English"))	33
Web of Science	Q2	Results for ALL=((greenwashing OR "green-washing" OR "green washing" OR "green-wash" OR "green wash" OR greenwasher OR "green-washer" OR "green washer" OR "green washed" OR "green-washed" OR greenwashed) AND "green econom*") and 2024 (Exclude – Publication Years) and English (Languages)	11

Source: Authors' elaboration.

The constructed research queries allowed exploration of the selected databases for the second stage of the research. Both Scopus and Web of Science databases were searched only for papers attributed to the English language and published up to (and including) 2023. The indicated limitations were intentional. The first was due to the adoption of the CLR method in addition to the SLR method, based on which it was decided to identify, in the form of original

entries, the green areas presented in studies referring to greenwashing and the green economy by individual authors on based on the keywords they formulated. In turn, the second limitation (regarding the analyzed period) is a good practice in this type of analysis (considering full years for analysis). As a result, the data obtained will be more comparable in the future. Based on the Q1 query from the Scopus database, 33 scientific publications meeting the accepted search criteria were selected (article = 23, book chapter = 6, book = 1, conference paper = 1, editorial = 1, review = 1). On the other hand, the Q2 query directed to Web of Science allowed us to select 11 scientific papers (article = 8, editorial material = 1, proceeding paper = 1, review article = 1), of which 7 scientific papers simultaneously also belonged to the Scopus database. In both cases, the extraction was made on 11.03.2024. Considering the indicated mutual affiliation of the two databases, a total of 37 different scientific papers were selected for the final stage of the study. The second stage, due to the use of two different databases, ended with the preparation of a unified database for further use in the VOSviewer software (version 1.6.20).

In the third, which is the final stage of the research, which is shown in Figure 1, bibliometric analyses were conducted using the VOSviewer software (version 1.6.20) based on the author's keywords. Hence, prior to conducting this study, a general review of keywords was conducted with the aim of standardizing them. A total of 142 author keywords, different in their form of writing, assigned to 37 analyzed scientific papers were subjected to this procedure. Standardization was carried out when a given author's keyword occurred in at least two different scientific articles. As a result, the following issues were noticed:

- different notation of the same meaningful words (replaced "green-washing" and "greenwash" with greenwashing, and the word "greenhouse gas emissions" with greenhouse gas emissions),
- the occurrence of acronyms ("ESG" has been replaced with environmental, social, and governance, and the acronym "REDD+" has been replaced with reducing emissions from deforestation and degradation),
- occurrence of the same word in the singular and plural (replaced the word "capital market" with capital markets).

The standardization of the author's keywords, carried out in the above manner, led to the final selection of 138 unique author's keywords, which were used to generate bibliometric maps in the VOSviewer software (further described in the results and discussion). In addition, at the third stage of the research undertaken, using the CLR method, the selected scientific studies were reviewed, which allowed to deepen the discussion around the obtained results covering the issues of greenwashing and green economy. An important element of the presented research process is, on the part of the authors, the presentation of promising directions for future research combining the issue of greenwashing and green economy. The indicated research areas do not, of course, exhaust the possibilities for the development of research directions in the

analyzed area, but they represent research issues that are worth looking into in exploring the issue of the greenwashing process of the economy.

All the different stages of the research adopted, the specificity of the individual research procedures carried out and the bases adopted for analysis constitute a limiting element of the study. At the same time, the methodology used demonstrates the author's approach to analysis around the issue of greenwashing and the green economy. The methodological description presented allows the study to be repeated in the future. It will then be possible to analyze the changes occurring over time in the context of the approach to the issues discussed presented in the analyzed databases together.

3. Results and discussion

In the analyses conducted, the minimum number of co-occurrences of a keyword adopted to generate the bibliometric map was two. Such a threshold was adopted due to the novelty of the research area. The indicated indicator was met by 19 different authorial keywords. Of the authorial keywords thus selected, three authorial keywords relating to the name of the country (China), the research method adopted (systematic review) and the word gender were excluded before generating the bibliometric map. These deletions were intentional and were intended to remove vague references to gender, country names, geography, or research methods from the analyses. In the end, a bibliometric map was generated consisting of 16 author's keywords related to each other and assigned exclusively to one of the five automatically generated clusters (Figure 2). In the resulting bibliometric map, author keywords are visualized as nodes. In turn, the lines between each node mark links, and thus indicate with which authorial keywords the keyword co-occurred. At the same time, it should be observed that the larger the node on the bibliometric map, the given word occurred as an author keyword in more of the 37 scientific papers analyzed.

The clusters presented in Figure 2 vary in size. The detailed structure of each cluster is further presented in Table 2, where the order of the assigned author keywords is listed by using alphabetical ordering. Three bibliometric measures generated in the VOSviewer software were assigned to each author keyword. Hence, links (L), total link strength (TLS) and occurrences (O) were indicated. The former measure indicates how many authors keywords a given analyzed author keyword is linked to in the bibliometric map. Total link strength, on the other hand, is a measure that sums up the total number of links of a given author keyword with other author keywords on the bibliometric map presented. The last measure presented, that is, co-occurrence, indicates the number of analyzed scientific papers in which this word occurred as an author keyword (out of the 37 scientific papers analyzed).

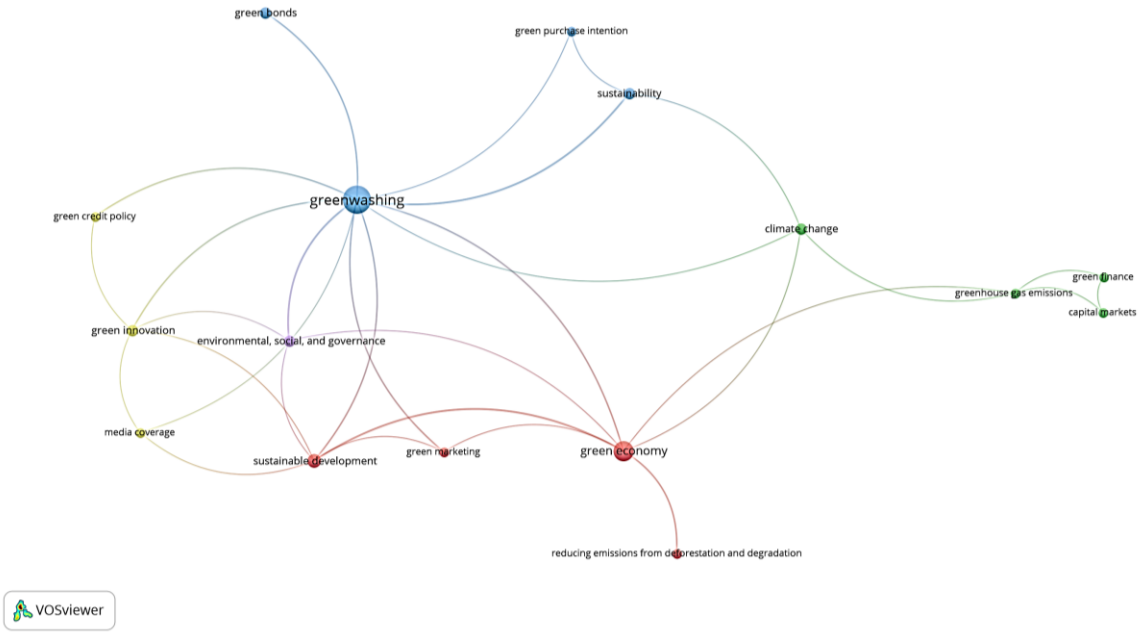

Figure 2. Bibliometric map of co-occurrence results of author's keywords based on the generated database for bibliometric analysis.

Source: Author's elaboration in VOSviewer software (version 1.6.20).

Table 2.
Keyword co-occurrence clusters presented in Figure 2

Cluster	Color	Keywords
1	red	green economy (L = 7, TSL = 11, O = 9); green marketing (L = 3, TSL = 4, O = 2); reducing emissions from deforestation and degradation (L = 1, TSL = 2, O = 2); sustainable development (L = 6, TSL = 9, O = 4)
2	green	capital markets (L = 2, TSL = 2, O = 2); climate change (L = 4, TSL = 4, O = 3); green finance (L = 2, TSL = 2, O = 2); greenhouse gas emissions (L = 4, TSL = 4, O = 2)
3	blue	green bonds (L = 1, TSL = 2, O = 3); green purchase intention (L = 2, TSL = 2, O = 2); greenwashing (L = 11, TSL = 21, O = 17); sustainability (L = 3, TSL = 5, O = 3)
4	yellow	green credit policy (L = 2, TSL = 3, O = 2); green innovation (L = 5, TSL = 6, O = 3); media coverage (L = 3, TSL = 3, O = 2)
5	violet	environmental, social, and governance (L = 4, TSL = 6, O = 3)

L – links, TSL – total link strength, O – occurrences.

Source: Authors' elaboration in VOSviewer software (version 1.6.20).

It is important to note the diversity of areas highlighted by author keywords in articles that referred to greenwashing as well as green economy issues in the title, abstracts and/or keywords. In the bibliometric map presented in Figure 2, the dominant areas are greenwashing and green economy (most often cited as author keywords in the scientific papers analyzed). They belong to two different clusters. Important elements, as might be expected given the area of consideration undertaken, are references to sustainable development. In the red cluster sustainable development (Borel-Saladin, Turok, 2013; Firsanova et al., 2022; Ivanchenko et al., 2023; Zhang et al., 2022), while in the blue cluster sustainability (Lu et al., 2022; Marrucci et al., 2022; Ruiz-Blanco et al., 2022). Greenwashing in the context of the green economy is also discussed by researchers when addressing climate change (Amankwah-Amoah et al., 2023; Brockington, Ponte, 2015; Marrucci et al., 2022). While on the subject, attention should be paid

to the issue of reducing emissions from deforestation and degradation (Pham et al., 2017; Wilkinson, 2014), or greenhouse gas emissions (Amankwah-Amoah et al., 2023; Pomare, 2018). Greenwashing activities can undoubtedly contribute to the false perception of supporting emission reductions of various types of pollutants through consumer choice of given products and/or services. Thus, consumers characterized by given green attitudes and behaviors are misled and unconsciously make market choices contrary to their green beliefs. Already on this ground, the need to develop solutions to protect consumers from actions that take the form of greenwashing becomes apparent. Especially, consumers should be protected from marketing activities that contain greenwashing content. The issue of developing effective instruments to protect against greenwashing activities is an important and frequently addressed research area in scientific discourse (Almeida, Casal, 2022; Goffetti et al., 2022; Mutarindwa et al., 2024).

In Figure 2, as further confirmed by Table 2, other green research areas have emerged in addition to the green economy. One should note, for example, the issue of green marketing (de Freitas Netto et al., 2020; Firsanova et al., 2022). As already indicated, activities in this area should not include greenwashing content. Some of the identified research areas are also related to financial issues. For example, green finance (Geetha, Biju, 2023; Pomare, 2018), green bonds (García et al., 2023; Hyun et al., 2023; Lau et al., 2022), or green credit policy (He et al., 2022; Yang et al., 2023). Supporting activities aimed at greening individual economic processes requires investing the necessary financial capital. In economic practice, more and more often individual financial institutions are singling out products to support pro-environmental transformations. It is important that such green financial products go to entities that invest in activities aimed at their green transformation, including the development of existing, or the creation of new green products and/or services. This aspect poses a challenge to financial entities on the side of hiring employees with the right competencies to effectively detect greenwashing activities in entities seeking green financial products. One of the futures quite interesting lines of research in this area should be an attempt to indicate to what extent greenwashing activities contribute to the decline in the flow of finance for green transformation of business entities.

The issue of green innovation (He et al., 2022; D. Zhang, 2023; Y. Zhang et al., 2022) is also evident in the bibliometric map generated. It should, however, be borne in mind here the dynamic development of technology and pro-environmental knowledge over time. This aspect means that, over time, the new innovative green solutions developed cease to be so (solutions appear that contribute, for example, to a greater degree to resource conservation and are significantly less carbon-intensive).

When performing bibliometric analyses in the VOSviewer software, an overlay bibliometric map was also generated (Figure 3). The information contained in the map indicates changes over time around the interest of researchers in particular issues expressed through author keywords. The brighter the color on the bibliometric map, the more topical the issue represents a more current area of scientific inquiry given the perspective of the period of analysis conducted.

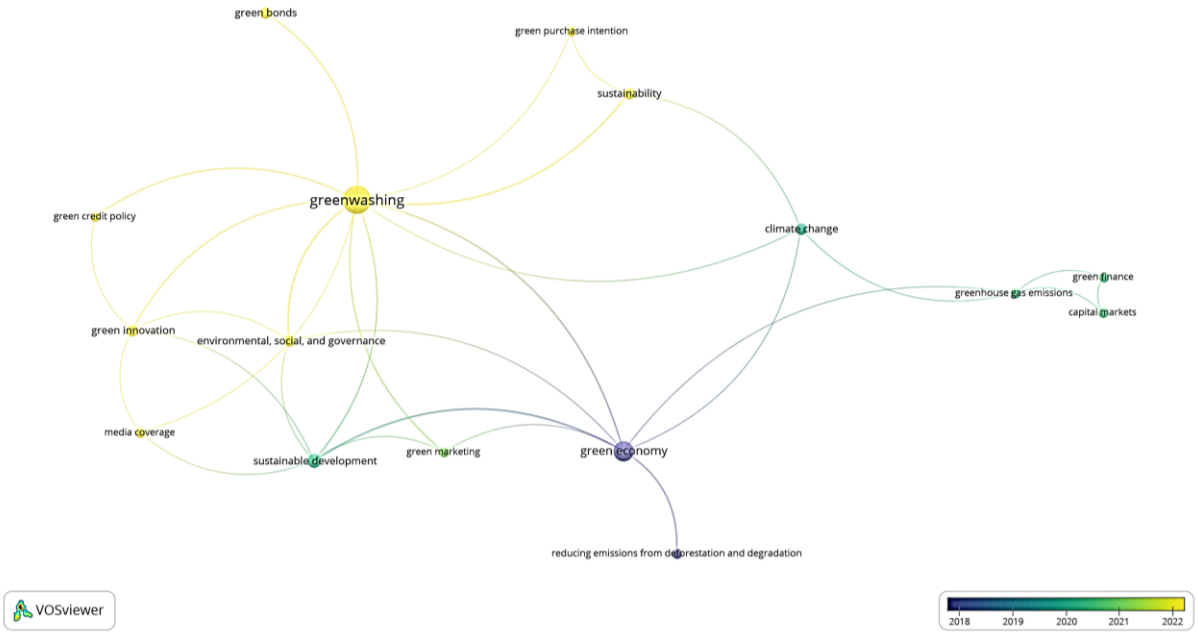

Figure 3. Overlay Visualization of co-occurrence results of author's keywords based on the generated database for bibliometric analysis.

Source: Author's elaboration in VOSviewer software (version 1.6.20).

The analysis of green areas was further supported by the CLR of all author keywords in the scientific papers selected for the study. As a result, a significantly higher number of green research areas were identified, which were, through keywords, highlighted by the authors of each research paper (Table 3).

Table 3.
Identified green words/phrases in analyzed scientific papers

Green words/phrases*	Author(s) and year
corporate green innovation	(Yang et al., 2023)
green advertising skepticism	(de Sio et al., 2022)
green bonds	(García et al., 2023; Hyun et al., 2023; Lau et al., 2022)
green claim trust	(de Sio et al., 2022)
green credit policy	(He et al., 2022; Yang et al., 2023)
green economy	(Amankwah-Amoah et al., 2023; Borel-Saladin, Turok, 2013; Firsanova et al., 2022; Harcourt, 2012; Ivanchenko et al., 2023; Nhamo, 2010; Pham et al., 2017; Ribeiro-Duthie et al., 2021; Wilkinson, 2014)
green finance	(Geetha, Biju, 2023; Pomare, 2018)
green FinTech	(Geetha, Biju, 2023)
green food	(de Sio et al., 2022)
green growth	(Pham et al., 2017)
green innovation	(He et al., 2022; D. Zhang, 2023; Y. Zhang et al., 2022)
green jobs	(Nhamo, 2010)
green marketing	(de Freitas Netto et al., 2020; Firsanova et al., 2022)
green performance	(Lapinskienė, Danilevičienė, 2023)
green pricing	(Cheng, Feng, 2023)
green purchase intention	(de Sio et al., 2022; Lu et al., 2022)
green recovery	(Hyun et al., 2023)

* indicated green words/phrases appeared in the analyzed scientific papers in the indicated form as author's keywords

Source: own elaboration based on Amankwah-Amoah et al., 2023; Borel-Saladin, Turok, 2013; Cheng, Feng, 2023; de Freitas Netto et al., 2020; de Sio et al., 2022; Firsanova et al., 2022; García et al., 2023; Geetha, Biju, 2023; Harcourt, 2012; He et al., 2022; Hyun et al., 2023; Ivanchenko et al., 2023; Lapinskienė, Danilevičienė, 2023; Lau et al., 2022; Lu et al., 2022; Nhamo, 2010; Pham et al., 2017; Pomare, 2018; Ribeiro-Duthie et al., 2021; Wilkinson, 2014; Yang et al., 2023; D. Zhang, 2023.

A promising research area still more widely not addressed simultaneously in terms of greenwashing and green economy issues is the issue of green jobs. As shown in Table 3 in the author's identified keywords, this area was only referred to in the study Nhamo (2010). In the opinion of the authors of this study, research in this area should be deepened. Especially as more and more studies are being produced aimed at showing the size, or importance, of green jobs in specific sectors of the economy (Apostel, Barslund, 2024; Kozar et al., 2022; Sulich, Sołoducho-Pelc, 2022; Sulich, Zema, 2018). To date, researchers, however, have not taken a broader interest in the question of to what extent greenwashing activities contribute to inflating the number of such jobs in the economy. This is certainly an interesting research area, as some of the greenwashing activities in entities (e.g. in the training area) can lead to skills gaps in employees, including the green skills gap. It is impossible, however based on research to date, to say how large the correlations are in this research matter. Thus, in the future, we should expect researchers to direct considerations from the field of greenwashing to the issue of green job creation, or to find out the extent to which greenwashing activities affect the deepening of the green skills gap.

4. Summary

The issue of greenwashing has been covered extensively in the literature. However, it should not be forgotten that practices bearing the mark of greenwashing contribute to slowing down the processes of green transformation in various sectors of the economy. In addition, they make it difficult to know the state of development of the green economy (it is impossible to indicate to what extent the data is falsified by greenwashing activities). Hence, countering such negative practices becomes an important challenge in the process of greening the economy. Greenwashing practices, in the opinion of the authors of this article, are undoubtedly serious obstacles on the path to achieving a green economy. Therefore, it becomes necessary to develop appropriate solutions (especially of a legal nature) that would effectively allow to fight against greenwashing practices. Exposing such negative practices, in the opinion of the authors of this article, can have a positive impact on the development of the green economy. Nonetheless, it is essential to develop ways to effectively reach consumers with such information, who draw information from many sources (including those that may be misleading).

Considering the issues cited in the considerations undertaken, from a scientific and practical point of view, it becomes important to develop effective tools that would allow not only to verify whether greenwashing is taking place, but also to effectively protect potential consumers from such practices. In addition, one can see the need to raise public awareness of such practices. In addition, green competence should be raised among those employed especially in jobs where various types of green financial products are granted.

The development of research focused on the issues of greenwashing and the green economy is inevitable, as interest in the issue of green transformation in specific economic sectors grows year by year. Thus, it is worth starting a broader discussion than before on how greenwashing interacts with cognitive issues around the issue of green competence or green job creation. Research directed in such a direction would certainly add to the current knowledge of the emerging green labor market. In addition, in the future, given the limitations of the research presented in this article, it would be appropriate to focus on analyzing the entire content of articles addressing greenwashing to search for green research areas.

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