



Article Natural Environment Protection Strategies and Green Management Style: Literature Review

Letycja Sołoducho-Pelc^{1,*} and Adam Sulich^{2,3}

- ¹ Department of Strategic Management, Faculty of Business Management, Wroclaw University of Economics and Business, 53-345 Wroclaw, Poland
- ² Department of Advanced Research in Management, Faculty of Business Management, Wroclaw University of Economics and Business, 53-345 Wroclaw, Poland
- ³ Schulich School of Business, York University, Toronto, ON M3J 1P3, Canada

* Correspondence: letycja.soloducho-pelc@ue.wroc.pl

Abstract: The relationships between the Green Management Style (GMS) and Natural Environment Protection Strategies (NEPS) are rarely explored in scientific research. The nature of these relations is not fully explained in management sciences, and although these connections are important determinants for the choice between temporary and Sustainable Development (SD) in business organizations, they are accompanied by research gaps. The first research gap is recognized qualitatively in the literature review, which indicates the scarcity of theoretical research in the areas of NEPS and the GMS concerning Sustainable Development Goals (SGDs). The second quantitative research gap is dedicated to the rarity of empirical studies among business organizations engaged in NEPS and the GMS's implementation. The third qualitative research gap lies in the difficulty of translating scientific assumptions from the theoretical background into business practice. This paper aims to present and explore the indicated research gaps and propose a theoretical model of the relationships between the GMS and NEPS. The adopted method used in this article is a Systematic Literature Review (SLR) supported by a bibliometric study performed in VOSviewer software. The results of the present study of relationships between the GMS and NEPS are explained by the Green Integrity Model (GIM). The green integrity between the researched elements can influence organizations' decisionmaking processes related to development path directions, social and environmental responsibility, workers' engagement, strategy communication, and organizational performance. In terms of the relationships between NEPS and the GMS, this can be seen as a part of the manner in which business organizations self-regulate.

Keywords: environmental management; sustainable strategies; sustainable development; sustainable development goals; strategic integrity

1. Introduction

Environmental strategies are harbored in the European Union strategic documents [1,2] dedicated to Sustainable Development (SD) and the realization of Sustainable Development Goals (SDGs) [3,4]. Environmental strategies can have different names [5,6] depending on the country [7,8] or selected SDGs implementation area [9,10]. The environmental strategies names also reflect the strategic approaches [11,12] to Environmental Management (EM) in organizations [13,14]. The EM perspectives can be divided into Environmental Protection (EP) and Resource Management (RM), respectively [15,16]. It can be assumed that the length of the time horizon [17] and the attitudes of business leaders are the criteria that determine the nature of such strategies or their maturity [18,19]. The environmental strategies aim to balance EP and RM in organizations [20]. Therefore, they deal with the challenges of the natural environment, combining them with business environment. However, environmental strategies are often called natural environment conservation or protection



Citation: Sołoducho-Pelc, L.; Sulich, A. Natural Environment Protection Strategies and Green Management Style: Literature Review. *Sustainability* 2022, *14*, 10595. https://doi.org/10.3390/ su141710595

Academic Editors: Ming-Tsang Lu; Jung-Fa Tsai; Yi-Chung Hu; Ming-Hua Lin and Phi-Hung Nguyen

Received: 10 August 2022 Accepted: 23 August 2022 Published: 25 August 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). strategies [21,22]. This indicates that environmental strategies are focused on RM and EP scopes [18]. The business organizations' strategies can be collectively called the Natural Environment Protection Strategies (NEPS). Some researchers indicated that NEPS are part of sustainable strategies [23,24]. Others, on the other hand, put equality between the two in their research papers, indicating that sustainable strategies include a social, economic, and environmental components (including activities aimed at environmental protection) [25,26]. The NEPS in business management reflect the organization's engagement [27,28] in the achieving of SDGs [29,30]. Furthermore, the business practices' framework is based on legal documents, such as the European Green Deal, [31] and decarbonization programs, [32] which are formulated to achieve the EU goal of climate neutrality by 2050 [33,34]. Those documents push business organizations to more practical, [35] organizational, [36] and technological [37] solutions in the area of SD. The complementarity of rules, ideas, and actions in the organization is visible in its management style, [38,39] which is the basis for the decision-making process [40,41]. On the other hand, the relations between NEPS and management style are rare subjects of theoretical [12,42] and empirical studies [43]. Therefore, the subject of consideration presented in this article is the approach connecting NEPS and Green Management Style (GMS). The relations between the GMS and NEPS are crucial for organizational adaptations to the inevitable climate changes [6,44]. The GMS and NEPS relations are also the starting point for the organizations which aim toward a sustainable future and want to become sustainable or green organizations.

There are three identified research gaps that this paper addresses. The first research gap is recognized in the literature review, indicated by the rarity of theoretical research in the area of the relationship between NEPS and the GMS concerning SDGs [28,45]. This research gap is presented qualitatively [46] in the literature review. The second research gap is quantitative, and has been explored and presented. This research gap is dedicated to the scarcity of empirical studies among business organizations on NEPS and GMS implementation [47,48]. To fill this gap, bibliometric maps were used [49]. The third, qualitative, research gap lies in the lack of translations [18] from the theoretical background into business practice and the adoption of SDGs as business organizations' strategic goals.

This paper aims to present and explore indicated research gaps and propose the GMS and NEPS relationships as a theoretical model. The main synthesis axis is the green perspective in strategic management [40]. In this matter, the research subject is important, because the relationships between management style and strategy type influence internal processes and decision making [50,51]. Usually, in scientific research, attention has been paid to both NEPS and the GMS separately [31,40] and concerning elements of EM practices independently [52,53]. The limitation of this study is the lack of normative grammar or linguistic studies of the different names for NEPS or their synonyms [45]. This study also indicates new directions for future cross-disciplinary studies among business organizations.

In this paper, the two complementary methods of the literature review are used [54]. The first adopted method is a Systematic Literature Review (SLR) [55,56] using inductive and deductive approaches to analyze the relationships between NEPS and the GMS. The second method used in this scientific paper is a Classical Literature Review (CLR), [57,58] which allows this paper to propose a theoretical model of the relationships between NEPS and the GMS. The theoretical part serves to present and order the strategy types which show the spectrum of EM activities. This paper is illustrated with the bibliometric maps proposed by the authors' figures, representing theoretical constructs.

The paper is organized as follows: after the introduction, where the paper's goal is presented, there is a materials and methods section. In the second chapter, the two research methods are explained in detail. Two research questions are presented which are used in the CLR, accompanied by the SLR variation of bibliometric study queries. Then, there is the third section of this scientific paper, presenting the results of both methods of literature review. This detailed section consists of three elements to ensure the reproducibility of results and clarity of the theoretical discussion. The first element is the SLR variation of bibliometric study results, performed in VOSviewer software. This

subchapter complements the first and second research gap and indicates the dimensions asked in the first RQ. In the second subchapter, the GMS is explained in the context of the SDGs. In the third subchapter of the results section, the NEPS levels and their consequences on business performance are presented. In the last part of the results section, the relationships between NEPS and the GMS as the green integrity are discussed. There is a results discussion section, and there are also formulated managerial implications of the relations between the GMS and NEPS. In this manner, the second RQ is answered and summarized. Then, the Green Integrity Model (GIM) was proposed and discussed. In the last section future promising research avenues are presented in the context of strategic integrity. Finally, this study explains management reality events and incorporates a sophisticated approach to provide theoretical and practical implications.

2. Materials and Methods

The methods adopted in this paper were a CLR and the presented bibliometric queries, obtained using the SLR method [49,56]. Those methods combined qualitative and quantitative research results [59] in the area of the relationships between NEPS and the GMS. Then, the combined deductive and inductive approaches [60] presented in this study, revolving around the green perspective as the synthesis axis, were used to answer the following research questions (RQs):

RQ1: what are the dimensions of relationships between NEPS and the GMS?

RQ2: what are the implications coming from the theoretical model of NEPS and the GMS relationships?

Along with the presented above RQs, the set of 7 queries (Table 1) was formulated to explore Scopus-indexed publications dedicated to the NEPS and GMS. The subject of the SLR method was the collection of scientific publications in the bibliographic database related to the NEPS and GMS [61]. The Scopus was chosen to be the explored scientific database due to its characteristics and L. Waltman's argumentation [62]. Information related to a bibliographic record is called bibliographic metadata, and this can be explored with visualization tools. The method adopted in this paper was a bibliometric study variation of SLR [49]. The SLR had its own procedure, which is not presented in detail in this paper [18,49].

No.	Query Syntax	No. of Results (10 August 2022)
1	(ALL (natural AND environment AND protection AND strategies)) AND ("management style")	164
2	(TITLE-ABS-KEY (natural AND environment AND protection AND strategies)) AND ("management style")	2
3	(TITLE-ABS-KEY ("environmental strategies")) AND ("management style")	1
4	TITLE-ABS-KEY (((environmental AND strategies)) AND (((management AND style)) AND (natural AND environment AND protection)) AND (conservation))	7
5	(TITLE-ABS-KEY (environmental AND strategies)) AND (((management AND style)) AND (natural AND environment AND protection)) AND (conservation)	345
6	(TITLE-ABS-KEY (environmental AND strategies)) AND (management AND style) AND (natural AND environment AND protection) AND (conservation) AND ("management style")	20
7	(TITLE-ABS-KEY (environmental strategies)) AND (((((management style)) AND (natural environment protection)) AND (conservation)) AND ("management style")) AND ("protection strategies")	0

Table 1. Queries used in the Scopus scientific database exploration.

Source: Authors elaboration.

In Table 1, the SLR queries used in Scopus exploration are presented. The formulated 7 queries with full syntaxes are presented, along with the numerical results of the bibliometric analysis obtained on 10 August 2022 (in the right column). There was no fixed classification in research in terms of the science domain (i.e. management sciences) or in terms of the explored time horizon [63,64]. The 1st query was applied to search all available

fields in Scopus (expressed as ALL in the syntax query in Table 1), whereas other queries were focused on the title, abstract, and keywords content (TITLE-ABS-KEY). Therefore, queries 1 and 2 differed in the scope of the search (Table 1). Direct and specific queries were formulated with the use of Boolean syntax rules, and they differ in their results [65]. The inverted commas (or quotation marks) in syntax indicated the precise query [66], otherwise, the query searched the collection by any of the words indicated (Table 1). Unspecified queries by definition gave more results, which then had to be analyzed by the bibliometric software [66,67]. The results obtained from queries from the Scopus database were downloaded in CSV format and, during export, all fields on the publication were marked [49]. For Scopus, the following fields were selected for export: citation information, bibliographic information, abstract, keywords, funding details, and other information.

The VOSviewer (version 1.6.18; Centre for Science and Technology Studies, Leiden University: Leiden, The Netherlands) was used to explore data obtained in the queries. The results of query 1 (Table 1) were the subjects of the bibliometric analysis. Based on 164 results, the keywords list of the exploration scope was expanded (Table S1 in Supplementary Materials File S1) and used in the next 2–7 queries presented in Table 1, in the order which reflects the process of queries development. The final 7th query, also due to very specific syntax, gave 0 results from the explored Scopus database.

The bibliometric map creations were also performed in VOSviewer with the use of the data downloaded from Scopus. The bibliometric maps represented the co-occurrence of the indexed keywords indicated in Table 1 (chosen queries). The full counting method was chosen for use in bibliometric software and the default number of five keywords co-occurrences was primarily used to draw the bibliometric maps. Then, the number of keywords co-occurrences was changed to achieve better bibliometric maps clarity that was more related to the research results [68]. This number also influenced the number of clusters and of items (keywords) recognized in them [69]. When the number of co-occurrences was low, then the bibliometric map consisted of more irrelevant but often-used keywords appearing in the title, abstract, or indexed publication keywords [70].

Due to the small number of results from queries 2, 3, and 4, there was no bibliometric analysis performed for those queries results as part of the SLR method variation. However, those papers were analyzed in detail in the CLR section. Only the results of queries 5 and 6 were used in the VOSviewer program analysis and presented as bibliometric maps. The results of the SLR were then analyzed qualitatively and summarized by the authors in graphical constructs with the CLR method [49,71]. Those figures corresponded with the research gaps and presented RQs in the theoretical, empirical, and then combined dimensions. The answers for the given RQs, which are presented in the conclusions section, can exemplify the theoretical and empirical implications of the relationships between NEPS and the GMS.

3. Literature Review Results

This section is divided into two subsections that reflect the two method approaches, quantitative and qualitative [54]. The first subsection contains a bibliometric analysis of the SLR variation, with the queries and VOSviewer software results [49,72]. The second subsection consists of the CLR results, and their discussion is divided into third-level subsection, which covers NEPS, GMS, and the green integrity concept.

3.1. SLR Results

Presented in Table 1, queries 1–7 were used for studying the Scopus database on 10 August 2022, with different numerical results depending on the exact syntax of each query. The full 164 results were the subject of a bibliometric analysis in the VOSviewer software, and the results of the most cited publication are presented in Table S1 in the Supplementary Materials File S1 section. This proves that among the analyzed 164 scientific papers, there are four directions of scientific interest (Figure 1). The first research avenue revolves around environmental protection and decision making, which are the biggest

nodes in a red-colored cluster among the other eight items analyzed in the bibliometric map in Figure 1. The second avenue is the green group with eight keywords, and this cluster is oriented toward agriculture and management practice. The third cluster distinguished in the VOSviewer program is dedicated to conservation management, resource management, and adaptive management [73,74]. The yellow part of the bibliometric map covers the other randomly indexed keywords co-occurring in the analyzed 164 publications. The most interesting is "conservation of natural resources", represented by the yellow node in the center of Figure 1; however, was not directly named by the VOSviewer software.

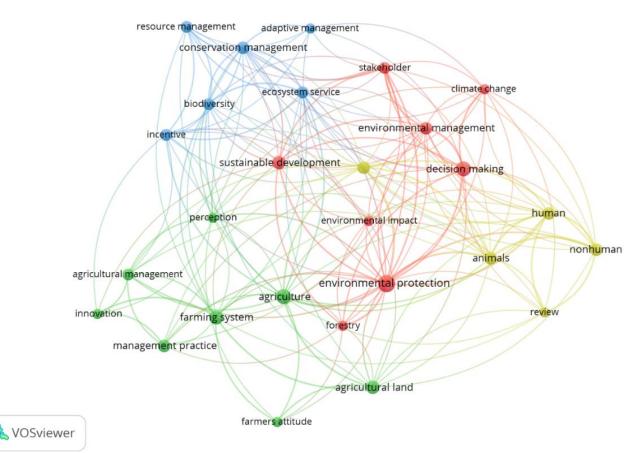


Figure 1. Bibliometric map of index keywords co-occurrence results from Scopus based on query 1. Counting method: full counting. Minimum keywords co-occurrence was 5, the default value. Source: Authors' elaboration performed in VOSviewer (version 1.6.18).

Although the NEPS (as in Table 1, syntax in Boolean style) and the exact keyword "management style" were explored by the query 1 syntax in Scopus, the keyword "management style" is not present in Figure 1. The keywords which were selected and used by the VOSviewer program are gathered in Table 2. Keywords are separated by semicolons. Despite the original writing form, the keywords in Table 2 are written in small letters, as in the VOSviewer software. In Table 2 there are clusters identified by colors, as in Figure 2, established automatically by the bibliometric software. The order of the clusters presented in Table 2 was caused by the number of keywords identified by the VOSviewer and represented as nodes in Figure 1.

The identified clusters are related to similar areas of scientific interest of the analyzed scientific publications' authors, visible in Table S1 in Supplementary Materials File S1. The numerical results of the queries are presented in Table 1 together with the detailed syntax of the queries. The results of queries 2, 3, and 4, indicate both the importance and the low number of pieces of literature dealing with NEPS and GMS relationships. Presented in Table 1, queries 5 and 6 yielded interesting numbers of scientific publications results,

345 and 20, respectively. These results were also the subject of the bibliometric analysis in the VOSviewer program, and are presented in Figures 2 and 3.

Table 2. Clusters of keywords co-occurrences in Figure 1 for Scopus.

Cluster	Color	Keywords
1	Red	climate change; decision making; environmental impact; environmental management; environmental protection; forestry; stakeholder; sustainable development
2	Green	agricultural land; agricultural management; agriculture; farmers attitude; farming system; innovation; management practice; perception
3	Blue	adaptive management; biodiversity; conservation management; ecosystem service, incentive; resource management
4	Yellow	animals; human; nonhuman; review

Source: Authors' elaboration.

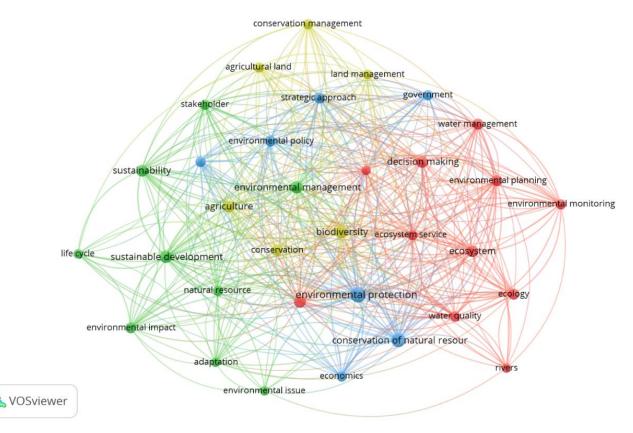


Figure 2. Bibliometric map of index keywords co-occurrence results from Scopus based on query 5. Counting method: full counting. The minimum keywords co-occurrence was 10. Source: Authors' elaboration performed in VOSviewer (version 1.6.18).

In Figure 2, four clusters distinguished automatically by the VOSviewer program are visible. This figure was drawn by the software based on the results for query 5 in the VOSviever software. The names of countries or organizations, together with the keywords, were deselected from the list proposed by the software. Also excluded were the keywords presented in the yellow cluster in Table 2 or keywords representing the research method, article type, or names of countries.

In Figure 2 there are four clusters visible, as connected into a single network with colored nodes and edges. The nodes are the indexed keywords co-occurring in the analyzed query 5 results. The edges are the scientific publications that consist of these keywords. The sizes of the nodes represent the higher or lower number of co-occurrences. Presented in Figure 2, sub-networks or groups correspond with the groups presented in the Table 3.

The most numerous is a red cluster with 11 keywords revolving around climate change, ecology, and ecosystems associated with adaptive management and decision making. The second cluster is green with nine keywords with a minimum number of 10 co-occurrences among the 345 analyzed scientific publications. The green cluster is similar to the red one, especially in terms of the distinguished keywords "adaptation" and "environmental management". There is also a blue cluster in Table 3 which is dedicated to the conservation and protection of the natural environment [75,76]. This cluster also consists of such keywords as "strategic approach" and government". These results support the scientific literature that distinguished the EM elements: EP and RM characteristics for different kinds of organizations [77]. There is also a yellow cluster, which consists of similar keywords to the blue group (Table 3) but is also dedicated to agriculture, land management, and biodiversity.

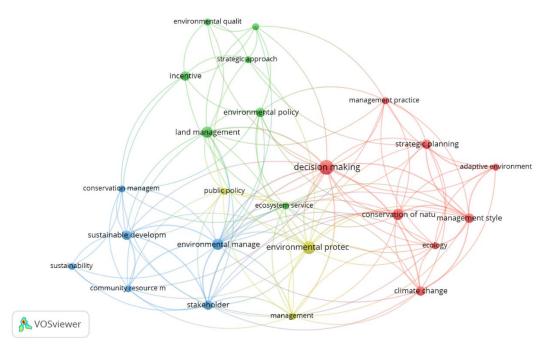


Figure 3. Bibliometric map of index keywords co-occurrence results from Scopus based on query 6. Counting method: full counting. Minimum keywords co-occurrence was 2. Source: Authors' elaboration performed in VOSviewer (version 1.6.18).

Table 3. Clusters of keywords co-occurrences based on query 5.

Cluster	Color	Keywords
1	Red	adaptive management; climate change; decision making; ecology; ecosystem; ecosystem service; environmental monitoring; environmental planning; rivers; water management; water quality;
2	Green	adaptation; environmental impact; environmental issue; environmental management; life cycle; natura resource; stakeholder; sustainability; sustainable development;
3	Blue	conservation of natural resources; economics; environmental economics; environmental policy; environmental protection; government; strategic approach;
4	Yellow	agricultural land; agriculture; biodiversity; conservation; conservation management; land management
		Source: Authors' elaboration.

There are similarities between the results obtained from queries 1 and 5, visible both in Figures 1 and 2 and Tables 2 and 3, respectively. Both results groups are numerous, with 164 and 345 scientific publications (Table 1). Similarities between the clusters inside Tables 2 and 3 suggest that the clusters can be merged or that the query can be more specified. The red and yellow clusters keywords in Table 2 are scattered among all four clusters in Table 3. The results gathered in Tables 2 and 3 are based on the two different syntaxes queries; however, there are common keywords presented in Table 4. In Table 4, there are the same keywords obtained as in the results of queries 1 and 5.

Table 4. Common keywords obtained from queries 1 and 5.

Common Keywords		
climate change; decision making; environmental impact; environmental management;		
environmental protection; stakeholder; sustainable development; agricultural land; adaptive		
management; biodiversity; conservation management; ecosystem service;		
Courses Authors' alpharation		

Source: Authors' elaboration.

Results of query 6, whose syntax is more specified than query 5, yielded 20 results of scientific publications from the Scopus database (Table 1). Those results were analyzed in the VOSviewer to draw a bibliometric map, presented in Figure 3. The obtained graphical network consists of nodes (keywords) and edges (scientific publications) divided by the VOSviewer into colored four clusters. There are three dominant subnetworks: red, green, and blue, which are connected by the yellow nodes of the fourth subnetwork. Figure 3 is less complex and less dense than Figure 2, due to the different number of analyzed results (Table 1). In both cases, there is a significant difference in the number of edges and nodes (indexed keywords).

There are four clusters, or subnetworks, presented in Figure 3. These clusters are based on the 20 results of query 6, presented also in Table 5. The four clusters were ordered according to the descending number of indexed keywords. The biggest cluster is colored in red, with eight keywords co-occurring in the analyzed scientific publications in Scopus. This cluster of keywords was organized around environmental management and management sciences, expressed in the keywords "decision-making", "management practice", and "management style" (Table 5). There is also a green cluster with seven indexed keywords that revolve around "ecosystem services", "land management", and strategic management or "strategic approach". The third, blue cluster was organized between RM and EP, which is indicated by the keywords "community resource management" and "conservation management", respectively. The VOSviewer analyses proved that relations between NEPS and GMS are a rare subject in the scientific literature (Figure 3). Those two elements combined create the EM, also visible among the keywords distinguished by the VOSviewer in the blue cluster "environmental management". The least numerous is the yellow cluster with four indexed keywords, and this cluster revolves around the EP directly indicated by the keywords "environmental protection" and "public policy" (Table 5).

Table 5. Clusters of keywords co-occurrences based on query 6.

Cluster	Color	Keywords	
1	Red	adaptive environmental management; climate change; conservation of natural resources; decision making; ecology; management practice; management style; strategic planning;	
2	Green	ecosystem services; environmental policy; environmental quality; incentive; land management; natural resource; strategic approach;	
3	Blue	community resource management; conservation management; environmental management; stakeholder; sustainability; sustainable development;	
4	Yellow	environmental protection; management; public policy	

Source: Authors' elaboration.

An analysis of the Tables 2, 3 and 5 proved that despite the chosen threshold of co-occurring keywords, there is a similar division into four clusters proposed by the VOSviewer software. Similarities occurred in the identified clusters, and those can be reduced if the minimum indexed keywords co-occurrences number is four. In effect, the similarities between the clusters indicate two sides of EM, the EP, and RM, respectively. The



results of query 6 were analyzed VOSviewer software and presented as the bibliometric map in Figure 4.

Figure 4. Bibliometric map of index keywords co-occurrence results from Scopus based on query 6. Counting method: full counting. Minimum keywords co-occurrence is 4. Source: Authors' elaboration performed in VOSviewer (version 1.6.18).

In Figure 4 there are two clusters isolated by the VOSviewer program, also presented in Table 6. The red cluster revolves around management and "environmental management", especially. The green cluster has two nodes dedicated to EP and RM. Only EP is mentioned in this cluster directly, whereas RM is represented by the "conservation of the natural resources". The combined clusters in Table 6 are dedicated to the EM actions covered in the analyzed scientific publications.

Table 6. Clusters of keywords co-occurrences presented in Figure 4 for Scopus.

Cluster	Color	Keywords
1	Red	decision making; environment management; land management
2	Green	conservation of natural resources; environmental protection;
Gource: Authors' elaboration.		

The results presented in Table 1 of the seven queries proved the observation that VOSviewer analysis provided more detailed keywords, not mentioned directly in the queries. However, the EM was represented directly in all query results, which were proved when presented in Table 4's common indexed keywords and Table 5's results. Therefore, this part of the research had explorative and quantitative characteristics. This part served to indicate the most influential and newest directions of the scientific discussion related to the GMS and NEPS exploration.

3.2. CLR Results

With the progress of the natural environment's deterioration, companies are under the pressure to implement pro-ecological actions in their strategies [25,78]. In the area of SD, business organizations depend on the law as well as business, economic, and social regulations [79]. Organizations respond to legal requirements and social expectations [78,80]

or take the initiative to start changes towards sustainability [81]. In the minimum approach companies reduce their contribution to environmental degradation, but in the best proactive approach they even help to solve environmental problems by implementing SDGs [82]. More responsible companies manage the business by serving not only owners and stakeholders (mentioned as the keyword in Figure 3), but also employees, society, and the natural environment [83,84]. Such companies incorporate sustainability considerations into their strategy and operations as a "strategic approach" (keyword in Figure 3) [85]. Regardless of the approach to environmental problems within the time frame set by the EU, companies have to implement strategies to achieve climate neutrality and widely understood sustainability before the year 2050 [86].

3.2.1. Green Management Style

Green or ecological decision-making and environmental practices are related to environmental strategies and EM components [87,88]. The strategy and management style relationships are visible in the bibliometric research part of this scientific study among publications dedicated to management style as indexed keywords in Figure 3. The SD context of the relationships between environmental strategies and management styles is understandable [80,89] and visible when the chosen management style [90], especially the GMS, is analyzed [91,92].

There are many propositions in the descriptions of management styles in business organizations [93]. Business management uses storytelling, metaphors, myth, and narratives to reflect the relations between organizational elements [94]. Those elements are decision-making processes, management styles, and strategies which, normally, create a complex image of an organization [95]. To present a clear vision of the organization typology, G. Morgan [96,97] proposed the eight organizational metaphors [98,99]. For this research, the most important were metaphors of the living organism and the political system, as a set of strategies that complement the management styles [100]. G. Morgan also proposed the graphical illustrations of distinguished metaphors. In this context, the triangle shape of the political system metaphor is interesting, which reflects the different levels of the business policies or developed strategies [30,101]. Living organism and political system metaphors are both close to the environmental perspective and the dependencies between NEPS in business organizations. On the other hand, the metaphor characteristics proposed by G. Morgan are close to the recently gaining-popularity color typology proposed by F. Laloux [102].

Color-based taxonomy is often used to analyze the management style in organizations where particular styles are related to strategies [95,103]. The GMS is described as the most open to change, focused on building an organizational culture based on high employee involvement and shared values, as well as on synergy between the organization's declarations and its activities [102]. The research studies indicated that there was an interplay between management style, performance measurement, and organizational culture [104,105]. However, the GMS is related to the complex three SD dimensions, environmental, economic, and social [95,103]. GMS's color metaphor does not reflect the whole spectrum of activities of organizational performance hidden behind SDGs (presented in Figure 5) [106]. This is due to the fact that when the GMS is chosen in the organization, then its engagement in the natural environment issues and SDGs become an important element of the NEPS [5] associated with Corporate Social Responsibility (CSR) [107]. The GMS leads to organizations' better environmental performance and also to better care for the organization's survival [108]. Associated with the GMS is the development of the organization through meeting financial goals, which are standard activities in each organization [109]. There is a growing importance of achieving SDGs due to the involvement of employees [110]. A healthy organization is based on employees' well-being [111,112] and communication about the importance of their work [113,114]. In the organizations where the GMS has been developed, a re-evaluation of the work of an individual towards the joint effort and cooperation of employees and stakeholders at various levels of the company take

place [115]. Therefore, it becomes necessary to introduce or develop a GMS into an organization that would respond to environmental and social challenges, as well as employees' expectations [116,117].

The adaptivity and flexibility of the organization are conditioned by the GMS [118]. The GMS focuses also on culture, re-engineering, and empowerment to boost employee motivation and strategic goals [83]. The key characteristics of the GMS are egalitarianism, participation, and stakeholder orientation. Therefore, it is often proposed to name this management style democratic green [39] because the consensus is achieved through open discussion [31]. This management style is recognized in the literature as inclusive and then fulfilling of the SDGs, which are synergic elements of the GMS. Within the GMS, the adoption of the SDGs is important to achieve the organization's specified goals. SDGs are often organized in a circle to reflect the equality of the goals [119].



Figure 5. The SDGs proposed by the United Nations and accepted by European Union. Source: [120].

Organizations can choose a set of specified SDGs and adapt them to their GMS [7,121]. On the other hand, the business regulations in some sectors force organizations to implement SDGs, and so they become obligatory as an element of decision making and NEPS [122].

3.2.2. Natural Environment Protection Strategies

The protection of the natural environment is the responsibility of governments [123] and political groups, which expect companies to get more involved in activities related to achieving the SDGs [106]. Businesses have the resources, potential, skills, and experience to meet such challenges [124]. Organizations respond to legal requirements and social expectations, or take the initiative and lead environmental change for SD [25,125]. The engagement of businesses in environmental problems [126] is determined by regulations and the individual approach of companies for which stopping degradation or reversing unfavorable processes are priorities [127,128].

An organization's strategies are classified according to the specific role of the organization in the NEP. Those strategies vary from legal compliance and conformance to proactive and green-excellence strategies. This adaptation involves the choice of different NEPS levels (Figure 6), which are fundamental, intermediate, and excellence strategies, respectively [129]. These strategies differ from each-other in terms of engagement with sustainability challenges. As proposed in Figure 6, the shape of the triangle is utilized based on the G. Morgan [97] approach to illustrate an organization [99] as a set of policies or strategies in a universal system [130,131]. There are two main NEPS dimensions presented in Figure 6. The first refers to the number of organizations. Second to the simplicity of solutions organizations can choose from the pools represented on each level [129].



Simplicity of solutions

Figure 6. Different levels of natural environment protection strategies (NEPS). Source: Authors' proposition based on performed literature review [129].

The NEPS vary from passive law protection to activities aimed to reduce pollution, reusing, recycling, restoring, or repairing damages to the environment [78,132]. A growing number of environmental processes are visible in higher types of NEPS [133]. With a higher level, the number of organizations decreases. In Figure 6, there is visible coherence among NEPS types, as the higher levels include lower levels. Then, all strategy types presented in Figure 6 aim to translate EM into sustainable management.

The **fundamental strategy** is a basic type of NEPS. This strategy is basic for reducing anthropopressure, which is defined as a negative human impact on the natural environment [47,134]. Moreover, the fundamental strategy has a functional and operational characteristic in the context of other NEPS [73]. The fundamental strategy provides a set of definitions and is a reference source for the EM used by an organization. The number of organizations, in a fundamental strategy, is big, but their activities represent the minimum required by law, and organizations usually do not formulate specified strategies but follow regulations and struggle to be compliant. Furthermore, on this level the state implements the EM processes to benefit citizens and formulates simple, regulative environmental strategies for other organizations to follow [78].

The **intermediate strategy** refers to the decisions-making process in terms of EM with a more sustainable attitude [135]. The intermediate strategy is closely related to social development and organizations' ecological activities, and concerns human and environmental needs over a long-term horizon. This strategy does not limit the basic activities of the organization but transforms them into the tactic level among all other NEPS types. Environmental laws and regulations can be initiators of actions in the intermediate strategy by improving resource productivity and pollution avoidance [1,121]. In this sense, the costs of this type of strategy decrease operating costs and increase profits. Under the pressure of the business environment, companies evolved from perceiving the natural environment as a cost to recognizing the intermediate strategy as a way of enhancing competitiveness. In the intermediate strategy, government environmental-imposed standards are beneficial not only for the natural environment, but also for companies due to incentives (indexed keyword in Figure 3). The intermediate strategic approach results in a sustainable competitive advantage due to the preventive character of the changes in the business processes [136]. The performance observed in the result of the intermediate strategy's implementation is a wide one, and can be developed in multiple directions [137,138]. This strategy assumes respect for natural resources, minimizing harmful activities essential for the natural environment and people [139]. The intermediate strategy can be also a source of green excellence strategy, and it is distinguished as a separate NEPS type.

The **excellence strategy**, or green excellence strategy, is based on education combined with stakeholders' awareness about the lower levels of environmental strategies implementation. Companies' managers often perceive the excellence strategy as a necessary combination to achieve sustainability and economic profits [1,140]. This strategy type takes into account the multidimensional nature of expectations and problems related to the environment [141]. Green excellence occurs if the NEP activities meet the organization's goals and vision expressed in the metaphor of GMS [85]. The green excellence strategy is related to the anticipation of further changes in regulations. This strategy is focused more on the reduction of emissions than pure EM. The excellence strategy allows organizations to invest voluntarily in technology dedicated to pollution reduction, recycling, and clean production and become pioneers of innovative solutions [142]. A green excellence strategy enhances the quality of life by using new technological and organizational solutions and supporting green industries. This type of NEPS is also associated with the creation of new workplaces [143,144] and innovation recognized as green jobs [145,146]. "Green excellence strategy begins with incorporating the green principles into a mission and vision of the company and translating the same into specific organizational and managerial processes" [142]. Implementing a green excellence strategy is a result of organizational values and vision priorities. The excellence strategy does not exclude profits in organizations, but is a broader concept as a strategy. The green excellence strategy results from organizations' requirements and generates new opportunities to reduce costs, increase efficiency, and create more revenues [147]. This strategy "essentially implies the integration of principles that develops into a seamless relationship between the environment and management" [78]. Companies can also reduce the excessive number of materials, waste, and energy used, and move away from hazardous production processes. As a result, they increase organizational efficiency and achieve cost savings. The idea of a green excellence strategy implies that governments are responsible for the use of natural resources, but this type of action should also be extended to the other business organizations [75]. Therefore, the green excellence strategy is a rare and sophisticated, type of NEPS, and is also the most developed type.

3.2.3. Green Integrity Model

In theoretical studies, strategic terms, such as [29]: agility, balance, congruence, compliance, coherence, consistency, fit, and flexibility, are used interchangeably with "integrity" to reflect the relationships between specific elements of an organization [129]. These components are defined differently because of their importance and research goals [148].

Sustainable strategic management considers integrity between the selected management style and environmental strategy type [148] as dominant interdependency occurring in the organization elements. However, integrity is required among different strategies and management styles due to different responses to the legal regulations which are part of the EM processes. There is integrity between the GMS and NEPS levels associated with laws and international regulations aimed at executing them in organizational activities. What is more, the relationships between NEPS and the GMS apply to companies in different sectors [99]. This transferability is important for EM practice, as it allows for greater efficiency coming from the implementation of NEPS to be achieved [104].

If the integrity aims to achieve adopted-strategy SDGs, it can be called green integrity, indicating its approach toward a sustainable future for the organization. Green integrity is the effect of complementarity between the GMS and NEPS, fulfilling the legal legislation and sectoral regulations which describe environmental standards for organizations' processes. This integrity is focused on the alignment of key factors, resources [114], and values with the NEPS type [149]. The theoretical construct of this integrity is presented in Figure 7, which combines the already-presented GMS and NEPS. The natural consequence of green integrity is the transformation of the business organization into a Green Organization (GO).

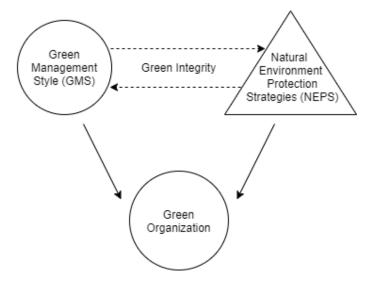


Figure 7. The green integrity model. Source: Authors' proposition based on the performed literature review.

It is assumed that a GO represents integrity between the GMS and green excellence strategy, the highest type of NEPS. Such a company can be described as double GO, with internal processes and externally recognized green actions and their effects. In the external view, the organization pursues strategic goals concerning the natural environment [116]. The green organization creates a positive and inclusive environment that is open to new challenges and changes towards sustainability.

The organizations decide which level of flexibility and freedom they have to achieve in management style [2], and they choose their type of leadership and decision making [150]. Therefore, organizations are free to choose their engagement in ecologic activities [55,151], which is reflected in a range of NEPS. Changes in the approach to the NEPS influence the way the company is managed. Such processes are not always calm and easy, and can be a source of conflict situations. This transformation leads to tensions and new problems, since management styles and strategies can be understood differently in an organization. However, the integrity between management style and strategy type can be a condition to achieve strategic goals in the organization, especially in the green context. In a crisis, the rapid change of management style can be a positive trait, although leads to obvious strategy dissonance.

The commencement of works on the NEPS requires identifying: future goals, ecological activities, areas important for green initiatives, and discordance issues. Such elements are directly related to the GMS. The implementation of the NEPS concerns the organization itself, but it should include partnerships with suppliers and customers who have a similar attitude to the environment and are described as environmentally friendly.

The process of creating and implementing the strategy covers many elements of the organization, therefore, knowledge about goals and strategies, their understanding and sharing of this knowledge, and commitment determine the success of this process [152]. It is

15 of 25

of key importance to ensure the integrity of management processes, as the implementation of goals and strategies requires commitment and cooperation at various levels within the organization and in the business environment [153,154].

4. Discussion

In a business environment characterized by volatility and complexity, the strategy is subject to more frequent changes, which may involve reformulating the strategy or adapting selected assumptions to new conditions [92]. It becomes necessary to integrate the strategy with new challenges, such as the SDGs and pro-ecological activities [155], which should concern the tasks of all organizations [156]. Increased ability to realize strategies and SDGs are possible through integration with the GMS. The GMS refers to the color metaphors proposed by F. Laloux [102] and organizations' images coined by G. Morgan [97]. The GMS is characteristic of organizations that are, to a minimum extent, hierarchical, with a flexible structure, open to changes, with a participation in management and decision making.

The choice of a green excellence strategy is also an option caused by internal factors, shaped by the commitment of the organization's management. One of the most important dilemmas regarding strategy-making is deciding whom to involve in the strategy [157]. The second one is how to encourage employees in the strategy process [134,158]. The process of developing and implementing the chosen NEPS type is difficult, as it requires the involvement of the top management focusing their attention on the decision-making process related to the environment [159]. The motivation and specific knowledge of managers are crucial in this case, but the influence of external stakeholders of the organization is equally important. Furthermore, the research results presented in this paper indicate that lacking or poor commitment of the management staff contributes to the failure of the implementation of the green strategy. Barriers to the success of this strategy include the lack of belief in the importance of this strategy and gaps in knowledge and skills, both among people holding senior positions and employees [160]. H. Moini et al. [160] pointed out that leaders in an organization shape the approach to green strategy, provided that they are advocates of greening the company, and initiate new strategic activities related to the NEP. Human resources management plays an important role in monitoring the successes and failures of the implementation of the NEPS [108] by using feedback in the performance evaluation. Controlling results is also important from the perspective of motivating leaders because satisfactory or unfavorable results strengthen or weaken the commitment of the organization's management to the implementation of the NEPS [161]. The proposed model of GIM relies on NEPS, which is a set of adaptive goals and organizational behaviors, where bottom-up initiatives come together and provide a positive impulse for change. Therefore, a strategy should be known and accepted by company leaders, managers, employees, and stakeholders [162]. From this perspective, a large number of people should be involved in the development and implementation of the NEPS [163].

The coherence and complementarity between NEPS types are conditions for the integrity between the GMS and NEPS constructs. The proposed model is illustrative as it relates to an exemplary situation, where the GMS and NEPS shape an organization by building a green integrity [164].

Management style is present not only in the internal business environment of the organization (Figure 8), it also has a direct impact on the development direction and decision making. Therefore, an organization can have specific management types related to the adopted general strategy [78]. If this strategy aims to improve the organization's activity, it is a specific functional strategy [165]. One strategy that can influence the organization's public image is the chosen NEPS type. Implementing such a strategy requires the organization to maintain its image consistency, which is essential for relations between the organization and its stakeholders. In the case of the difference between management style and strategy type, especially in the green sector, the 'green lies' are observed [166]. This problem is visible in strategy communication when internal and external information leads to a contradiction [167]. This can be a case even when the organization cares about the natural environment but fails in relations with stakeholders, especially employees.

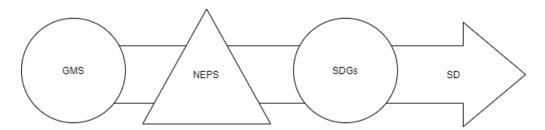


Figure 8. Relations between explored elements on the path to Sustainable Development. Source: Authors elaboration.

The strategic goals, or SDGs, are important for the organization because they set the general direction and development approach. In GOs the SD is achieved through the combination of SDGs and the GMS, which have to be integral with NEPS (Figure 8). On the path to SD in the organization, the initial point is the adoption of the SDGs into the management style [168]. The transformation of the management style into a democratic and inclusive GMS is followed by the choice of engagement with natural environment issues reflected in the NEPS [169]. Those elements are crucial for organizational sustainability, as the main philosophy drives the organization and is the backbone of organizational changes in processes and technology.

5. Implications and Future Research

The scientific implications of this paper are based on the theoretical and empirical summary of the integrity between management style and strategy type. Similar to previous scientific research in management styles and decision making, in this paper a GIM (Figure 7) for the development of GO is proposed. The author's contribution to the science is based also on the graphical illustrations proposed in this paper, which explain the different levels of NEPS (Figure 6) and researched the construct of the integrity between the GMS and NEPS (Figure 7). Graphical communication in management sciences is gaining in popularity, which is visible in the growing number of metaphors and organizational images [65,130]. Then, the scientific contributions to the management sciences are graphically presented as figures which summarize the theoretical parts of this study. The scientific importance of this study is based on a better understanding of the NEPS and GMS relationship. So far, this issue has not been the subject of research, which proves its originality.

The managerial implication of this study is the need to improve the understanding of the integrity between the NEPS type and GMS to create a GO (Figure 7). The recommendation from this study for managers is that they should take into consideration the internal communication and engagement of all stakeholders. Additionally, the condition for integrity is the coherence between NEPS types. As already explained with bibliometric maps, scientific studies of NEPS and the GMS have been rarely undertaken. In this article, there is a new theoretical framework proposed, where NEPS and the GMS are interrelated because of the potential benefits in terms of the easier implementation of NEPS and the greater effectiveness of these strategies [170]. This is because after single action in the organization, there are no visible changes. The common assumption is that, if there is no visible effect, or it cannot be measured, it must not be effective, so then many organizations quit the sustainability approach. The opposite occurs when organization members fundamentally believe that this is the right course of action, and the organization commits itself to an act of service. Organizations commit themselves to the regime of pro-environmental actions and introduce a sustainable approach in their management styles. If the organization sticks to consistency with a new idea and the greening of the business, despite all of the failures and mistakes, the results come. It is not about the events or one event's intensity, it is about consistency and routines in NEPS and the GMS. Contrary to the other studies which are

focused on the need for environmental strategies realization, this study contributes to the management sciences revolving around the conditions of the successful NEPS implementation. Additionally, the source of organizational changes was identified as the integrity or relationship between the GMS and NEPS.

The practical contribution of this paper is based on the influence of the GMS and NEPS relations on organizational adaptation toward the inevitable climate change. The solutions are the effects of decision making in the area of management style and NEPS. The practical aspect of organizational adaptation to climate change requires the integrity between the GMS and NEPS and engagement in SDGs realization.

The theoretical contribution of this research paper is the identification of further research gaps which can be explored in future studies. There are two research gaps identified in this paper [92,132]. The first is associated with the relationship between environmental, ecological, and green excellence strategies. The second research gap is that most of the studies are focused on the performance and effects, rather than reasons coming from management and the business strategy. These research gaps indicate promising research avenues. The deep analysis of the relations between NEPS and the GMS can also influence the other elements of the organization, such as organizational culture and internal communication, decision-making processes, and environmental and social responsibility. On the other hand, the lack of certain relations between NEPS and the GMS is also not recognized in the scientific literature, but can also be a promising new research avenue.

The promising future research directions in the pro-ecological strategy context were identified based on the figures presented in this paper. First, there is a need for a comprehensive bibliometric review of the overused definition of the (pro)ecological field in strategic management, as indicated above by the two new research gaps. Second, quantitative research on the relationships between other management styles, green organizations, and green leadership can be beneficial. It is also worth conducting the research in the opposite direction and verifying which management styles are characteristic of green organizations. Such a study could show whether green priorities are business and marketing goals, or whether they result from the specificity of the organization, its culture, or sustainable development values. Another promising direction of the research could be oriented on the cross-disciplinarity studies of cognitive linguistics related to the keywords: "consistency", "coherency", "compatibility", and "integrity". In the proposed future cross-disciplinary study, the collage as a research method in the analysis of keywords' importance could reveal new linguistic metaphors of internal elements in the business organization.

6. Conclusions

This paper's goal was achieved by the exploration of the GMS and NEPS relationships in the contexts of the indicated research gaps. The aim of this study was complemented by the proposition of the theoretical Green Integrity Model (Figure 7). The two research questions were answered in this study. The first RQ is responded to with the Green Integrity Model and explained with the CLR method. The second RQ is addressed in this section, where the theoretical and practical consequences of the relationships between NEPS and the GMS are presented.

Despite having different reasons and the levels of the decision-making process, all organizations aim to prevent pollution (EP) and preserve natural resources (RM) [78]. There are different NEPS effect implementations, [170] and associated with them are multilevel strategy processes [78,171]. On a macroeconomic level, governments and international organizations implement strategy tools and methods of management to achieve long-term goals focused on reducing anthropopressure [132]. In most of the EU's countries, the government controls natural resource usage and environmental management with an environmental strategy. The administration also supervises organizations that are burdensome to the natural environment. However, these organizations reply to the legislative pressure of implementing their environmental management approaches and creating pro-ecological strategies. Then, some organizations go beyond legislative compliance and sectoral reg-

ulations and establish a proactive strategy to become sustainable, zero-emission, climate neutral, or green organizations with the green excellence strategy. In the science of management and economics, there are many names of strategies devoted to the environment, and these names are either competing or interrelated [172]. This three-stage hierarchy of NEPS provides internal coherence among different regulations dedicated to the NEP, and this is a condition for integrity between NEPS and the GMS.

The green integrity between the researched elements (the GMS and NEPS) can influence organizations' decision-making processes related to development path directions, social and environmental responsibility, workers' engagement, strategy communication, and organizational performance. Green integrity is shaped by various internal and external factors that are specific to a particular organization and the environment in which it operates. This integrity influences the organization's functioning in the changing business environment because is related to its foundations in terms of decision making.

The results of this research show that management style elements visible to employees and their understanding of the context in which an organization operates influence their expectations, actions, and commitment to work. These aspects cause the choice of strategy type. That is why it is so important to know the goals of the organization and its strategy, as well as individual and collective actions to implement the NEPS. An important condition for the integrity between the management style and the strategy is to provide employees with the necessary knowledge about the basic assumptions of the strategy, so that they are known and understood. Based on the research results, it can be assumed that the people involved in the strategy influence the vertical strategic coherence and choice of the NEPS type. The number of people involved, their diversity concerning the positions held, and the knowledge of the organization and its strategy have an impact on such NEPS coherence.

The limitation of this study is the usage of the Scopus database only. This scientific database requires a standard academic subscription, which can be a source of limitations for those who would like to replicate this study. Next to accessibility is the structure of the data available to be exported from databases. In Scopus, cited reference items are not standardized, so therefore they need to be matched. The queries were formulated in English which also restricts the research publication to this language, which is dominant in modern science. There is a limitation of the used methods of SLR-related directly to the formulation queries. In the queries, the limitations were primarily caused by the indexed keywords used. Regarding the queries, a large number of synonyms and a variety of spellings were the limitations in the queries' syntax and the results presented by the VOSviewer software.

The integrity between the management style and the effect of sector-characteristic management is the main subject of the general discussion [132] adopted in this paper's perspective of green organization, implying that there has to be at least integrity between the GMS and one of the NEPS types to achieve goals related to sustainable development. Business organizations' opportunities to achieve environmental sustainability lie in the integrity between the GMS and NEPS-selected levels discussed in this paper. In this effect, sustainable or green organizations are created. The volatility of the business environment and the uncertainty as to the future in the long term increase the importance of the organization's commitment to ecology and the need to implement NEPS. Companies that offer their clients solutions to more effectively protect the environment can gain a double advantage: competitive advantage and the involvement of employees in the implementation of the organization's goals and strategy.

Supplementary Materials: The following are available online at https://www.mdpi.com/article/10 .3390/su141710595/s1, Table S1. The 10 most-cited publications result from Scopus query 1. Author Contributions: Conceptualization, A.S. and L.S.-P.; methodology, A.S. and L.S.-P.; software, A.S. and L.S.-P.; validation, A.S. and L.S.-P.; formal analysis, A.S. and L.S.-P.; investigation, A.S. and L.S.-P.; resources, A.S. and L.S.-P.; data curation, A.S. and L.S.-P.; writing—original draft preparation, A.S. and L.S.-P.; writing—review and editing, A.S. and L.S.-P.; visualization, A.S. and L.S.-P.; supervision, A.S. and L.S.-P.; project administration, A.S. and L.S.-P.; funding acquisition, A.S. and L.S.-P. All authors have read and agreed to the published version of the manuscript.

Funding: (A.S.) The project is financed by the National Science Centre in Poland under the program "Business Ecosystem of the Environmental Goods and Services Sector in Poland", implemented in 2020–2022; project number 2019/33/N/HS4/02957; total funding amount PLN 120,900.00. (A.S. and L.S.-P.) The project is financed by the Ministry of Science and Higher Education in Poland under the program "Regional Initiative of Excellence" 2019–2022; project number 015/RID/2018/19; total funding amount PLN 10,721,040.00. (L.S.-P.) This project is financed by the Faculty of Management, Wroclaw University of Business and Economics; Internal Research Grant number WGB-2/10/Z/2020; total funding amount PLN 15,000.00.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: The authors would like to thank Kinga Zmigrodzka-Ryszczyk and Agnieszka Dramińska (Wroclaw University of Economics and Business) for the databases exploration, bibliometric workshops, and secondary data acquisition.

Conflicts of Interest: The authors declare no conflict of interest.

References

- 1. Ciot, M.-G. Implementation Perspectives for the European Green Deal in Central and Eastern Europe. *Sustainability* **2022**, *14*, 3947. [CrossRef]
- Sztorc, M. The Implementation of the European Green Deal Strategy as a Challenge for Energy Management in the Face of the COVID-19 Pandemic. *Energies* 2022, 15, 2662. [CrossRef]
- Agrawal, R.; Majumdar, A.; Majumdar, K.; Raut, R.D.; Narkhede, B.E. Attaining sustainable development goals (SDGs) through supply chain practices and business strategies: A systematic review with bibliometric and network analyses. *Bus. Strategy Environ.* 2022. [CrossRef]
- 4. Eurostat Environmental Goods and Services Sector (env_egs). Available online: https://ec.europa.eu/eurostat/cache/metadata/ en/env_egs_esms.htm (accessed on 20 September 2021).
- 5. *Environmental Protection Strategies for Sustainable Development;* Malik, A., Grohmann, E., Eds.; Springer: Dordrecht, The Netherlands, 2012; ISBN 978-94-007-1590-5.
- 6. Cudečka-Puriņa, N.; Atstāja, D.; Koval, V.; Purviņš, M.; Nesenenko, P.; Tkach, O. Achievement of Sustainable Development Goals through the Implementation of Circular Economy and Developing Regional Cooperation. *Energies* **2022**, *15*, 4072. [CrossRef]
- Wu, S.-I.; Wu, Y.-C. The influence of enterprisers' green management awareness on green management strategy and organizational performance. *Int. J. Qual. Reliab. Manag.* 2014, 31, 455–476. [CrossRef]
- Abadi, B.; Kelboro, G. Farmers' contributions to achieving water sustainability: A meta-analytic path analysis of predicting water conservation behavior. *Sustainability* 2022, 14, 279. [CrossRef]
- 9. Albino, V.; Balice, A.; Dangelico, R.M. Environmental strategies and green product development: An overview on sustainabilitydriven companies. *Bus. Strategy Environ.* 2009, *18*, 83–96. [CrossRef]
- 10. Morrison, G.; Greening, H.S.; Yates, K.K. Management Case Study. In *Treatise on Estuarine and Coastal Science*; Elsevier: Amsterdam, The Netherlands, 2011; Volume 11, pp. 31–76.
- 11. Sapta, I.K.S.; Sudja, I.N.; Landra, I.N.; Rustiarini, N.W. Sustainability Performance of Organization: Mediating Role of Knowledge Management. *Economies* 2021, *9*, 97. [CrossRef]
- 12. Phillips, R.; Schrempf-Stirling, J.; Stutz, C. The Past, History, and Corporate Social Responsibility. J. Bus. Ethics 2020, 166, 203–213. [CrossRef]
- 13. Furlong, K.; Bakker, K. Governance and sustainability at a municipal scale: The challenge of water conservation. *Can. Public Policy* **2011**, *37*, 219–237. [CrossRef]
- 14. Meadowcroft, J. Let's get this transition moving! *Can. Public Policy* **2016**, 42, S10–S17. [CrossRef]
- 15. Deuffic, P.; Sotirov, M.; Arts, B. Your policy, my rationale. How individual and structural drivers influence European forest owners' decisions. *Land Use Policy* **2018**, *79*, 1024–1038. [CrossRef]
- 16. Baran, M.; Sypniewska, B. The impact of management methods on employee engagement. Sustainability 2020, 12, 426. [CrossRef]

- 17. Nasiakou, S.; Vrahnakis, M.; Chouvardas, D.; Mamanis, G.; Kleftoyanni, V. Land Use Changes for Investments in Silvoarable Agriculture Projected by the CLUE-S Spatio-Temporal Model. *Land* **2022**, *11*, 598. [CrossRef]
- Suriyankietkaew, S.; Petison, P. A retrospective and foresight: Bibliometric review of international research on strategic management for sustainability, 1991. Sustainability 2020, 12, 91. [CrossRef]
- 19. Carvajal, M.; Nadeem, M.; Zaman, R. Biodiversity disclosure, sustainable development and environmental initiatives: Does board gender diversity matter? *Bus. Strategy Environ.* 2022, *31*, 969–987. [CrossRef]
- 20. Mazur-Wierzbicka, E. Towards circular economy—A comparative analysis of the countries of the European Union. *Resources* **2021**, *10*, 49. [CrossRef]
- Rodríguez Bolívar, M.P. Characterizing the Role of Governments in Smart Cities: A Literature Review. *Public Adm. Inf. Technol.* 2016, 11, 49–71. [CrossRef]
- 22. Henriques, I.; Sadorsky, P. Environmental management practices and performance in Canada. *Can. Public Policy* 2013, 39, S157–S175. [CrossRef]
- 23. Hipsher, S.A. The Private Sector's Role in Poverty Reduction in Asia; Elsevier Ltd.: Amsterdam, The Netherlands, 2013; ISBN 9780857094483.
- 24. Molina-Azorin, J.F.; López-Gamero, M.D.; Tarí, J.J.; Pereira-Moliner, J.; Pertusa-Ortega, E.M. Environmental Management, Human Resource Management and Green Human Resource Management: A Literature Review. *Adm. Sci.* **2021**, *11*, 48. [CrossRef]
- 25. Kozar, Ł.; Oleksiak, P. Organisations Facing the Challenges of Sustainable Development–Selected Aspects Organizacje Wobec Wyzwań Zrównoważonego Rozwoju–Wybrane Aspekty; Wydawnictwo Uniwersytetu Łódzkiego: Łódź, Poland, 2022; ISBN 9788382208191.
- 26. Egels-Zandén, N.; Rosén, M. Sustainable strategy formation at a Swedish industrial company: Bridging the strategy-as-practice and sustainability gap. *J. Clean. Prod.* **2015**, *96*, 139–147. [CrossRef]
- 27. Haleem, F.; Farooq, S.; Boer, H. The impact of country of origin and operation on sustainability practices and performance. *J. Clean. Prod.* **2021**, *304*, 127097. [CrossRef]
- 28. Ling, Y.H. Examining green policy and sustainable development from the perspective of differentiation and strategic alignment. *Bus. Strategy Environ.* **2019**, *28*, 1096–1106. [CrossRef]
- Schillebeeckx, S.J.D.; Kautonen, T.; Hakala, H. To Buy Green or Not to Buy Green: Do Structural Dependencies Block Ecological Responsiveness? J. Manag. 2022, 48, 472–501. [CrossRef]
- 30. Balasubramanian, S.; Shukla, V.; Mangla, S.; Chanchaichujit, J. Do firm characteristics affect environmental sustainability? A literature review-based assessment. *Bus. Strategy Environ.* **2021**, *30*, 1389–1416. [CrossRef]
- 31. Meyer, C. Social Innovation Governance in Smart Specialisation Policies and Strategies Heading towards Sustainability: A Pathway to RIS4? *Soc. Sci.* **2022**, *11*, 150. [CrossRef]
- 32. Tudor, C.; Sova, R. EU Net-Zero Policy Achievement Assessment in Selected Members through Automated Forecasting Algorithms. ISPRS Int. J. Geo-Inform. 2022, 11, 232. [CrossRef]
- Nielsen, B.F.; Baer, D.; Lindkvist, C. Identifying and supporting exploratory and exploitative models of innovation in municipal urban planning; key challenges from seven Norwegian energy ambitious neighborhood pilots. *Technol. Forecast. Soc. Chang.* 2019, 142, 142–153. [CrossRef]
- 34. Peng, H.; Shen, N.; Ying, H.; Wang, Q. Can environmental regulation directly promote green innovation behavior?—Based on situation of industrial agglomeration. *J. Clean. Prod.* 2021, 314, 128044. [CrossRef]
- 35. Ginter, A.; Zarzecka, K.; Gugała, M. Effect of Herbicide and Biostimulants on Production and Economic Results of Edible Potato. *Agronomy* **2022**, 12, 1409. [CrossRef]
- Kozłowska-Woszczycka, A.; Pactwa, K. Social License for Closure—A Participatory Approach to the Management of the Mine Closure Process. Sustainability 2022, 14, 6610. [CrossRef]
- 37. Grzesiak, S.; Sulich, A. Car Engines Comparative Analysis: Sustainable Approach. Energies 2022, 15, 5170. [CrossRef]
- 38. Birknerová, Z.; Uher, I. Assessment of Management Competencies According to Coherence with Managers' Personalities. *Sustainability* 2022, 14, 170. [CrossRef]
- Aquino, K. Structural and individual determinants of workplace victimization: The effects of hierarchical status and conflict management style. J. Manag. 2000, 26, 171–193. [CrossRef]
- Schmolke, A.; Thorbek, P.; DeAngelis, D.L.; Grimm, V. Ecological models supporting environmental decision making: A strategy for the future. *Trends Ecol. Evol.* 2010, 25, 479–486. [CrossRef]
- Bremer, L.L.; Delevaux, J.M.S.; Leary, J.J.K.; Cox, L.J.; Oleson, K.L.L. Opportunities and Strategies to Incorporate Ecosystem Services Knowledge and Decision Support Tools into Planning and Decision Making in Hawai'i. *Environ. Manag.* 2015, 55, 884–899. [CrossRef]
- 42. Kagan, R.A.; Gunningham, N.; Thornton, D. Explaining corporate environmental performance: How does regulation matter? *Law Soc. Rev.* 2003, 37, 51–90. [CrossRef]
- 43. Csordás, A.; Lengyel, P.; Füzesi, I. Who Prefers Regional Products? A Systematic Literature Review of Consumer Characteristics and Attitudes in Short Food Supply Chains. *Sustainability* **2022**, *14*, 8990. [CrossRef]
- Vasseur, L.; You, M. Facing Climate Change Through Sustainable Agriculture: Can Results from China Be Transferred to Africa? In Agricultural Adaptation to Climate Change; Springer International Publishing: Cham, Switzerland, 2016; pp. 167–183.
- Gao, X.; Shi, C.; Zhai, K. An evaluation of environmental governance in urban China based on a hesitant fuzzy linguistic analytic network process. *Int. J. Environ. Res. Public Health* 2018, 15, 2456. [CrossRef]

- 46. Polyvyanyy, A.; Ouyang, C.; Barros, A.; van der Aalst, W.M.P. Process querying: Enabling business intelligence through query-based process analytics. *Decis. Support Syst.* 2017, 100, 41–56. [CrossRef]
- 47. Prokop, V.; Gerstlberger, W.; Zapletal, D.; Striteska, M.K. The double-edged role of firm environmental behaviour in the creation of product innovation in Central and Eastern European countries. *J. Clean. Prod.* **2022**, 331, 129989. [CrossRef]
- Floress, K.; de Jalón, S.; Church, S.P.; Babin, N.; Ulrich-Schad, J.D.; Prokopy, L.S. Toward a theory of farmer conservation attitudes: Dual interests and willingness to take action to protect water quality. J. Environ. Psychol. 2017, 53, 73–80. [CrossRef]
- 49. Zema, T.; Sulich, A. Models of Electricity Price Forecasting: Bibliometric Research. Energies 2022, 15, 5642. [CrossRef]
- 50. Zimm, C.; Sperling, F.; Busch, S. Identifying Sustainability and Knowledge Gaps in Socio-Economic Pathways Vis-à-Vis the Sustainable Development Goals. *Economies* **2018**, *6*, 20. [CrossRef]
- 51. Malabagi, S.; Kulkarni, V.N.; Gaitonde, V.N.; Satish, G.J.; Kotturshettar, B.B. Product Lifecycle Management (PLM): A decision-making tool for project management. *AIP Conf. Proc.* **2021**, 2358, 100013.
- 52. Manning, R.E.; Anderson, L.E. *Managing Outdoor Recreation: Case Studies in the National Parks*; CABI Publishing: Wallingford, UK, 2012; ISBN 9781845939311.
- García-Morales, V.J.; Ruiz-Moreno, A.; Llorens-Montes, F.J. Effects of technology absorptive capacity and technology proactivity on organizational learning, innovation and performance: An empirical examination. *Technol. Anal. Strategy Manag.* 2007, 19, 527–558. [CrossRef]
- Denyer, D.; Tranfield, D. Producing a systematic review. In *The Sage Handbook of Organizational Research Methods*; Sage Publications Ltd.: Thousand Oaks, CA, USA, 2009; pp. 671–689, ISBN 978-1-4129-3118-2.
- 55. Dwyer, R.; Lamond, D.; Pane Haden, S.S.; Oyler, J.D.; Humphreys, J.H. Historical, practical, and theoretical perspectives on green management: An exploratory analysis. *Manag. Decis.* **2009**, *47*, 1041–1055. [CrossRef]
- Bascur, J.P.; Verberne, S.; van Eck, N.J.; Waltman, L. Browsing citation clusters for academic literature search: A simulation study with systematic reviews. In Proceedings of the CEUR Workshop Proceedings, Lisbon, Portugal, 14 April 2020; Volume 2591, pp. 53–65.
- 57. Denyer, D.; Tranfield, D. Using qualitative research synthesis to build an actionable knowledge base. *Manag. Decis.* **2006**, 44, 213–227. [CrossRef]
- 58. Adams, R.; Jeanrenaud, S.; Bessant, J.; Denyer, D.; Overy, P. Sustainability-oriented Innovation: A Systematic Review. *Int. J. Manag. Rev.* 2016, *18*, 180–205. [CrossRef]
- 59. Molina-Azorín, J.F.; Claver-Cortés, E.; López-Gamero, M.D.; Tarí, J.J. Green management and financial performance: A literature review. *Manag. Decis.* 2009, 47, 1080–1100. [CrossRef]
- 60. Facchinetti, T.; Benetti, G.; Giuffrida, D.; Nocera, A. SLR-kit: A semi-supervised machine learning framework for systematic literature reviews. *Knowl. Based Syst.* 2022, 251, 109266. [CrossRef]
- 61. Boar, A.; Bastida, R.; Marimon, F. A Systematic Literature Review. Relationships between the Sharing Economy, Sustainability and Sustainable Development Goals. *Sustainability* **2020**, *12*, 6744. [CrossRef]
- Visser, M.; van Eck, N.; Waltman, L. Large-scale comparison of bibliographic data sources: Web of Science, Scopus, Dimensions, and CrossRef. In Proceedings of the 17th International Conference on Scientometrics and Informetrics, ISSI 2019–Proceedings, Rome, Italy, 2–5 September 2019; Volume 2, pp. 2358–2369.
- 63. Bascur, J.P.; van Eck, N.J.; Waltman, L. An interactive visual tool for scientific literature search: Proposal and algorithmic specification. In Proceedings of the CEUR Workshop Proceedings, Cologne, Germany, 14 April 2019; Volume 2345, pp. 76–87.
- 64. Dey, M.; Bhattacharjee, S.; Mahmood, M.; Uddin, M.A.; Biswas, S.R. Ethical leadership for better sustainable performance: Role of employee values, behavior and ethical climate. *J. Clean. Prod.* **2022**, *337*, 130527. [CrossRef]
- 65. van Eck, N.J.; Waltman, L. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics* **2010**, *84*, 523–538. [CrossRef] [PubMed]
- Waltman, L.; van Eck, N.J.; Wouters, P. Counting publications and citations: Is more always better? J. Informetr. 2013, 7, 635–641. [CrossRef]
- 67. van Eck, N.J.; Waltman, L.; Dekker, R.; van den Berg, J. A comparison of two techniques for bibliometric mapping: Multidimensional scaling and VOS. J. Am. Soc. Inf. Sci. Technol. 2010, 61, 2405–2416. [CrossRef]
- 68. Colavizza, G.; Boyack, K.W.; van Eck, N.J.; Waltman, L. The Closer the Better: Similarity of Publication Pairs at Different Cocitation Levels. *J. Assoc. Inf. Sci. Technol.* **2018**, *69*, 600–609. [CrossRef]
- 69. van Eck, N.J.; Waltman, L. How to normalize cooccurrence data? An analysis of some well-known similarity measures. J. Am. Soc. Inf. Sci. Technol. 2009, 60, 1635–1651. [CrossRef]
- 70. Waltman, L.; van Eck, N.J. Field-normalized citation impact indicators and the choice of an appropriate counting method. *J. Informetr.* **2015**, *9*, 872–894. [CrossRef]
- Szaruga, E.; Załoga, E. Qualitative–Quantitative Warning Modeling of Energy Consumption Processes in Inland Waterway Freight Transport on River Sections for Environmental Management. *Energies* 2022, 15, 4660. [CrossRef]
- Fu, H.-Z.; Waltman, L. A large-scale bibliometric analysis of global climate change research between 2001 and 2018. *Clim. Chang.* 2022, 170, 1–21. [CrossRef]
- 73. Kundurpi, A.; Westman, L.; Luederitz, C.; Burch, S.; Mercado, A. Navigating between adaptation and transformation: How intermediaries support businesses in sustainability transitions. *J. Clean. Prod.* **2021**, *283*, 125366. [CrossRef]

- 74. Pecl, G.T.; Araújo, M.B.; Bell, J.D.; Blanchard, J.; Bonebrake, T.C.; Chen, I.C.; Clark, T.D.; Colwell, R.K.; Danielsen, F.; Evengård, B.; et al. Biodiversity redistribution under climate change: Impacts on ecosystems and human well-being. *Science* 2017, 355, eaai9214. [CrossRef] [PubMed]
- Buysse, K.; Verbeke, A. Proactive environmental strategies: A stakeholder management perspective. *Strategy Manag. J.* 2003, 24, 453–470. [CrossRef]
- Lahtinen, S.; Yrjölä, M. Managing sustainability transformations: A managerial framing approach. J. Clean. Prod. 2019, 223, 815–825. [CrossRef]
- 77. Bainbridge, J.M.; Potts, T.; O'Higgins, T.G. Rapid policy network mapping: A new method for understanding governance structures for implementation of marine environmental policy. *PLoS ONE* **2011**, *6*, e26149. [CrossRef]
- 78. Worthington, I. Greening Business; Oxford University Press: Oxford, UK, 2013.
- 79. Stål, H.I.; Bengtsson, M.; Manzhynski, S. Cross-sectoral collaboration in business model innovation for sustainable development: Tensions and compromises. *Bus. Strategy Environ.* **2022**, *31*, 445–463. [CrossRef]
- Pei, Z.; Yu, T.; Yi, W.; Li, Y. Twenty-year retrospection on green manufacturing: A bibliometric perspective. *IET Collab. Intell. Manuf.* 2021, *3*, 303–323. [CrossRef]
- Méndez-León, E.; Reyes-Carrillo, T.; Díaz-Pichardo, R. Towards a holistic framework for sustainable value analysis in business models: A tool for sustainable development. *Bus. Strategy Environ.* 2022, *31*, 15–31. [CrossRef]
- 82. Song, L.; Zhan, X.; Zhang, H.; Xu, M.; Liu, J.; Zheng, C. How much is global business sectors contributing to sustainable development goals? *Sustain. Horiz.* 2022, *1*, 100012. [CrossRef]
- Piwowar-Sulej, K. Pro-environmental organizational culture: Its essence and a concept for its operationalization. *Sustainability* 2020, 12, 4197. [CrossRef]
- 84. Rode, J.; Heinz, N.; Cornelissen, G.; Le Menestrel, M. How to encourage business professionals to adopt sustainable practices? Experimental evidence that the 'business case' discourse can backfire. *J. Clean. Prod.* **2021**, *283*, 124618. [CrossRef]
- Fidlerová, H.; Stareček, A.; Vraňaková, N.; Bulut, C.; Keaney, M. Sustainable Entrepreneurship for Business Opportunity Recognition: Analysis of an Awareness Questionnaire among Organisations. *Energies* 2022, 15, 849. [CrossRef]
- Bäckstrand, K. Towards a Climate-Neutral Union by 2050? The European Green Deal, Climate Law, and Green Recovery. In Routes to a Resilient European Union; Springer International Publishing: Cham, Switzerland, 2022; pp. 39–61.
- 87. Belas, J.; Gavurova, B.; Machova, V.; Mikolas, Z. Selected factors of corporate management in SMEs sector [Wybrane czynniki zarządzania korporacyjnego w sektorze MSP]. *Polish J. Manag. Stud.* **2020**, *21*, 119–134. [CrossRef]
- 88. Giuliani, G. Monsters, Catastrophes and the Anthropocene: A Postcolonial Critique; Taylor and Francis: Abingdon, UK, 2020; ISBN 9781351064866.
- Male, S.; Kelly, J.; Gronqvist, M.; Graham, D. Managing value as a management style for projects. *Int. J. Proj. Manag.* 2007, 25, 107–114. [CrossRef]
- Kong, D.; Yang, X.; Liu, C.; Yang, W. Business strategy and firm efforts on environmental protection: Evidence from China. Bus. Strategy Environ. 2020, 29, 445–464. [CrossRef]
- 91. Morris, C.; Kirwan, J. Exploring the Ecological Dimensions of Producer Strategies in Alternative Food Networks in the UK. *Sociol. Ruralis* **2011**, *51*, 349–369. [CrossRef]
- Hutzschenreuter, T.; Kleindienst, I. Strategy-process research: What have we learned and what is still to be explored. *J. Manag.* 2006, 32, 673–720. [CrossRef]
- Oliver, S.K.; Fergus, C.E.; Skaff, N.K.; Wagner, T.; Tan, P.-N.; Cheruvelil, K.S.; Soranno, P.A. Strategies for effective collaborative manuscript development in interdisciplinary science teams. *Ecosphere* 2018, 9, e02206. [CrossRef]
- 94. Cornelissen, J.P.; Kafouros, M.; Lock, A.R. Metaphorical images of organization: How organizational researchers develop and select organizational metaphors. *Hum. Relat.* 2005, *58*, 1545–1578. [CrossRef]
- Sulich, A.; Sołoducho-Pelc, L. Renewable Energy Producers' Strategies in the Visegrád Group Countries. *Energies* 2021, 14, 3048. [CrossRef]
- Amjed, A.; Khan, R.A.A.; Khan, M.M. Morgan metaphors of organization: A promising approach to organizational analysis over the years. J. Manag. Res. 2001, 1, 111–120.
- Morgan, G. Reflections on images of organization and its implications for organization and environment. *Organ. Environ.* 2011, 24, 459–478. [CrossRef]
- 98. Örtenblad, A.; Putnam, L.L.; Trehan, K. Beyond Morgan's eight metaphors: Adding to and developing organization theory. *Hum. Relat.* **2016**, *69*, 875–889. [CrossRef]
- 99. Oswick, C.; Grant, D. Re-Imagining Images of Organization: A Conversation With Gareth Morgan. *J. Manag. Inq.* **2016**, 25, 338–343. [CrossRef]
- 100. Morgan, G. Commentary: Beyond Morgan's eight metaphors. Hum. Relat. 2016, 69, 1029–1042. [CrossRef]
- Kozar, Ł. Shaping the Green Competence of Employees in an Economy Aimed at Sustainable Development. *Green Hum. Resour.* Manag. (Zielone Zarządzanie Zasobami Ludzkimi) 2017, 6, 55–67.
- 102. Laloux, F. Reinventing Organisations: A Guide to Creating Organisations Inspired by the Next Stage of Human Consciousness; Nelson Parker: Brussels, Belgium, 2014.
- Córdova-Aguirre, L.J.; Ramón-Jerónimo, J.M. Exploring the inclusion of sustainability into strategy and management control systems in peruvian manufacturing enterprises. *Sustainability* 2021, 13, 5127. [CrossRef]

- Bititci, U.S.; Mendibil, K.; Nudurupati, S.; Turner, T.; Garengo, P. The interplay between performance measurement, organizational culture and management styles. *Meas. Bus. Excell.* 2004, *8*, 28–41. [CrossRef]
- Papadas, K.K.; Avlonitis, G.J.; Carrigan, M.; Piha, L. The interplay of strategic and internal green marketing orientation on competitive advantage. J. Bus. Res. 2019, 104, 632–643. [CrossRef]
- 106. Lukin, E.; Krajnović, A.; Bosna, J. Sustainability Strategies and Achieving SDGs: A Comparative Analysis of Leading Companies in the Automotive Industry. *Sustainability* **2022**, *14*, 4000. [CrossRef]
- Montabon, F.; Sroufe, R.; Narasimhan, R. An examination of corporate reporting, environmental management practices and firm performance. J. Oper. Manag. 2007, 25, 998–1014. [CrossRef]
- 108. Burgelman, R.A. Intraorganizational Ecology of Strategy Making and Organizational Adaptation: Theory and Field Research. *Organ. Sci.* **1991**, *2*, 239–262. [CrossRef]
- 109. Fujisaki, K.; Shimpo, M.; Akamatsu, R. Factors related to food safety culture among school food handlers in Tokyo, Japan: A qualitative study. *J. Foodserv. Bus. Res.* **2019**, *22*, 66–80. [CrossRef]
- Tabassi, A.A.; Bryde, D.J.; Abdullah, A.; Argyropoulou, M. Conflict Management Style of Team Leaders in Multi-Cultural Work Environment in the Construction Industry. In Proceedings of the Procedia Computer Science, Barcelona, Spain, 8–10 November 2017; Volume 121, pp. 41–46.
- 111. Myers, Z. Wildness and Wellbeing: Nature, Neuroscience, and Urban Design; Palgrave Pivot: Devon, UK, 2019.
- 112. Suleman, Q.; Syed, M.A.; Shehzad, S.; Hussain, I.; Khattak, A.Z.; Khan, I.U.; Amjid, M.; Khan, I. Leadership empowering behaviour as a predictor of employees' psychological wellbeing: Evidence from a cross-sectional study among secondary school teachers in Kohat Division, Pakistan. *PLoS ONE* 2021, *16*, e0254576. [CrossRef]
- 113. Santoro, A.; Venturi, M.; Agnoletti, M. Landscape perception and public participation for the conservation and valorization of cultural landscapes: The case of the cinque terre and porto venere unesco site. *Land* **2021**, *10*, 93. [CrossRef]
- 114. Zahra, S.A. The Resource-Based View, Resourcefulness, and Resource Management in Startup Firms: A Proposed Research Agenda. J. Manag. 2021, 47, 1841–1860. [CrossRef]
- 115. López-Concepción, A.; Gil-Lacruz, A.I.; Saz-Gil, I. Stakeholder engagement, CSR development and SDGs compliance: A systematic review from 2015 to 2021. *Corp. Soc. Responsib. Environ. Manag.* **2022**, *29*, 19–31. [CrossRef]
- 116. Laszlo, C. The Sustaianble Company; Island Press: Washington, DC, USA, 2003.
- 117. Brodt, S.; Klonsky, K.; Tourte, L. Farmer goals and management styles: Implications for advancing biologically based agriculture. *Agric. Syst.* **2006**, *89*, 90–105. [CrossRef]
- 118. Mielcarek, P. Strategic Coherence and Process Maturity in the Context of Company Ambidextrousness; C.H. Beck: Warsaw, Poland, 2021; ISBN 978-83-8235-568-0.
- 119. Sullivan, K.; Thomas, S.; Rosano, M. Using industrial ecology and strategic management concepts to pursue the Sustainable Development Goals. *J. Clean. Prod.* **2018**, *174*, 237–246. [CrossRef]
- European Commission Sustainable Development Goals. Available online: https://international-partnerships.ec.europa.eu/ policies/sustainable-development-goals_en (accessed on 28 July 2022).
- 121. Kopnina, H. Sustainability: New strategic thinking for business. Environ. Dev. Sustain. 2017, 19, 27–43. [CrossRef]
- 122. Stawicka, E. Sustainable business strategies as an element influencing diffusion on innovative solutions in the field of renewable energy sources. *Energies* **2021**, *14*, 5453. [CrossRef]
- 123. Ayambire, R.A.; Pittman, J. Opening the black box between governance and management: A mechanism-based explanation of how governance affects the management of endangered species. *Ambio* 2022, *51*, 2091–2106. [CrossRef] [PubMed]
- 124. Carmona-Moreno, E.; Céspedes-Lorente, J.; de Burgos-Jiménez, J. Environmental strategies in Spanish hotels: Contextual factors and peformance. *Serv. Ind. J.* 2004, 24, 101–130. [CrossRef]
- 125. Cvancarova, Z.; Franek, J. Corporate governance development in Central and Eastern Europe. *Actual Probl. Econ.* 2016, 179, 122–133.
- 126. Attanasio, G.; Preghenella, N.; De Toni, A.F.; Battistella, C. Stakeholder engagement in business models for sustainability: The stakeholder value flow model for sustainable development. *Bus. Strategy Environ.* **2022**, *31*, 860–874. [CrossRef]
- 127. Camilleri, M.A. Strategic attributions of corporate social responsibility and environmental management: The business case for doing well by doing good! *Sustain. Dev.* **2022**, *30*, 409–422. [CrossRef]
- 128. Arslan, A.; Haapanen, L.; Hurmelinna-Laukkanen, P.; Tarba, S.Y.; Alon, I. Climate change, consumer lifestyles and legitimation strategies of sustainability-oriented firms. *Eur. Manag. J.* **2021**, *39*, 720–730. [CrossRef]
- Ossai, C.I.; Boswell, B.; Davies, I.J. Sustainable asset integrity management: Strategic imperatives for economic renewable energy generation. *Renew. Energy* 2014, 67, 143–152. [CrossRef]
- 130. Öztel, H.; Hinz, O. Changing organisations with metaphors. Learn. Organ. 2001, 8, 153–168. [CrossRef]
- 131. Gabriel, Y. Narrative Ecologies and the Role of Counter-Narratives: The Case of Nostalgic Stories and Conspiracy Theories; Taylor and Francis Inc.: Abingdon, UK, 2016; ISBN 9781317399490.
- 132. Aguilera, R.V.; Aragón-Correa, J.A.; Marano, V.; Tashman, P.A. The Corporate Governance of Environmental Sustainability: A Review and Proposal for More Integrated Research. *J. Manag.* **2021**, *47*, 1468–1497. [CrossRef]
- Wang, H.; Qi, S.; Zhou, C.; Zhou, J.; Huang, X. Green credit policy, government behavior and green innovation quality of enterprises. J. Clean. Prod. 2022, 331, 129834. [CrossRef]

- 134. Lee, J.; Miller, D. People matter: Commitment to employees, strategy and performance in Korean firms. *Strategy Manag. J.* **1999**, 20, 579–593. [CrossRef]
- 135. Foroozesh, N.; Karimi, B.; Mousavi, S.M. Green-resilient supply chain network design for perishable products considering route risk and horizontal collaboration under robust interval-valued type-2 fuzzy uncertainty: A case study in food industry. *J. Environ. Manag.* 2022, 307, 114470. [CrossRef]
- Sołoducho-Pelc, L.; Sulich, A. Between Sustainable and Temporary Competitive Advantages in the Unstable Business Environment. Sustainability 2020, 12, 8832. [CrossRef]
- 137. Makhloufi, L.; Laghouag, A.A.; Meirun, T.; Belaid, F. Impact of green entrepreneurship orientation on environmental performance: The natural resource-based view and environmental policy perspective. *Bus. Strategy Environ.* **2022**, *31*, 425–444. [CrossRef]
- 138. Fuerst, M.; Schotter, A. Strategic Integrity Management as a Dynamic Capability. In *Strategic Management in the 21st Century;* Wilkinson, T., Kannan, V.R., Eds.; Praeger Publishers: Westport, CT, USA, 2013; pp. 1–35.
- 139. Jamal, N.M.; Kiet, W.W.; Saat, M.M.; Othman, A. A relationship analysis between green supply chain practices, environmental management accounting and performance. *J. Sustain. Sci. Manag.* **2020**, *15*, 113–131.
- 140. Harrison, J.S.; Barney, J.B.; Freeman, R.E.; Phillips, R.A. *Stakeholder Theory*; Cambridge University Press: Cambridge, UK, 2019; ISBN 9781108123495.
- Gabriel, Y. Organizations in a State of Darkness: Towards a Theory of Organizational Miasma. Organ. Stud. 2012, 33, 1137–1152.
 [CrossRef]
- 142. Chang, C.-P.; Wen, J.; Zheng, M. Environmental governance and innovation: An overview. *Environ. Sci. Pollut. Res.* 2022, 29, 12720–12721. [CrossRef]
- 143. Kozar, Ł. Green Jobs. Determinants–Identification–Impact on the Local Labour Market Zielone Miejsca Pracy. Uwarunkowania–Identyfikacja– Oddziaływanie Na Lokalny Rynek Pracy; Uniwersytet Łódzki: Łódź, Poland, 2019.
- 144. Stanef-Puică, M.-R.; Badea, L.; Șerban-Oprescu, G.-L.; Șerban-Oprescu, A.-T.; Frâncu, L.-G.; Crețu, A. Green Jobs—A Literature Review. *Int. J. Environ. Res. Public Health* **2022**, *19*, 7998. [CrossRef]
- 145. Sulich, A.; Zema, T. Green jobs, a new measure of public management and sustainable development. *Eur. J. Environ. Sci.* **2018**, *8*, 69–75. [CrossRef]
- 146. Sulich, A.; Sołoducho-Pelc, L. The circular economy and the Green Jobs creation. *Environ. Sci. Pollut. Res.* **2022**, *29*, 14231–14247. [CrossRef] [PubMed]
- 147. Trovato, M.R.; Cappello, C. Climate Adaptation Heuristic Planning Support System (HPSS): Green-Blue Strategies to Support the Ecological Transition of Historic Centres. *Land* 2022, *11*, 773. [CrossRef]
- 148. Niemczyk, J.; Sus, A.; Bielińska-Dusza, E.; Trzaska, R.; Organa, M. Strategies of European Energy Producers: Directions of Evolution. *Energies* 2022, 15, 609. [CrossRef]
- 149. Higgins, J.M. The Eight 'S's of successful strategy execution. J. Chang. Manag. 2005, 5, 3–13. [CrossRef]
- 150. Notaro, S.; Lovera, E.; Paletto, A. Consumers' preferences for bioplastic products: A discrete choice experiment with a focus on purchase drivers. *J. Clean. Prod.* **2022**, 330, 129870. [CrossRef]
- 151. Chen, P.-K.; Lujan-Blanco, I.; Fortuny-Santos, J.; Ruiz-de-Arbulo-López, P. Lean Manufacturing and Environmental Sustainability: The Effects of Employee Involvement, Stakeholder Pressure and ISO 14001. *Sustainability* **2020**, *12*, 7258. [CrossRef]
- 152. Tegarden, L.F.; Sarason, Y.; Childers, J.S.; Hatfield, D.E. the Engagement of Employees in the Strategy Process and Firm Performance. *J. Bus. Strategy* 2005, 22, 75–99. [CrossRef]
- 153. Miller, A. Technological thinking: Its impact on environmental management. Environ. Manag. 1985, 9, 179–190. [CrossRef]
- 154. Ascher, W. Long-term strategy for sustainable development: Strategies to promote far-sighted action. *Sustain. Sci.* 2006, *1*, 15–22. [CrossRef]
- 155. Olson, E.G. Creating an enterprise-level 'green' strategy. J. Bus. Strategy 2008, 29, 22–30. [CrossRef]
- 156. Moravcikova, D.; Krizanova, A.; Kliestikova, J.; Rypakova, M. Green marketing as the source of the competitive advantage of the business. *Sustainability* **2017**, *9*, 2218. [CrossRef]
- 157. Eden, C.; Ackermann, F. Making Strategy: The Journey of Strategic Management; SAGE: Thousand Oaks, CA, USA, 2013.
- 158. Matthews, G. Employee engagement: What's your strategy? Strategy HR Rev. 2018, 17, 150–154. [CrossRef]
- 159. Martins-Loução, M.A.; Dias, T.; Cruz, C. Integrating Ecological Principles for Addressing Plant Production Security and Move beyond the Dichotomy 'Good or Bad' for Nitrogen Inputs Choice. *Agronomy* **2022**, *12*, 1632. [CrossRef]
- Moini, H.; Sorensen, O.J.; Szuchy-Kristiansen, E. Adoption of green strategy by Danish firms. *Sustain. Account. Manag. Policy J.* 2014, 5, 197–223. [CrossRef]
- Kim, A.; Kim, Y.; Han, K.; Jackson, S.E.; Ployhart, R.E. Multilevel Influences on Voluntary Workplace Green Behavior: Individual Differences, Leader Behavior, and Coworker Advocacy. J. Manag. 2017, 43, 1335–1358. [CrossRef]
- 162. Borin, N.; Lindsey-Mullikin, J.; Krishnan, R. An analysis of consumer reactions to green strategies. *J. Prod. Brand Manag.* 2013, 22, 118–128. [CrossRef]
- 163. Speculand, R. Beyond Strategy: The Leaders Role in Successful Implementation. Strateg. Dir. 2011, 27. [CrossRef]
- 164. Upadhyay, A.Y.A.; Sasmita, P. Engaging employees through balanced scorecard implementation. *Startegic HR Rev.* 2013, 12, 302–307. [CrossRef]
- 165. Clemens, B. Changing environmental strategies over time: An empirical study of the steel industry in the United States. *J. Environ. Manag.* **2001**, *62*, 221–231. [CrossRef]

- 166. Rousali, C.; Besseris, G. Lean Screening for Greener Energy Consumption in Retrofitting a Residential Apartment Unit. *Appl. Sci.* 2022, 12, 6631. [CrossRef]
- van Lieshout, J.W.; Nijhof, A.H.J.; Naarding, G.J.W.; Blomme, R.J. Connecting strategic orientation, innovation strategy, and corporate sustainability: A model for sustainable development through stakeholder engagement. *Bus. Strategy Environ.* 2021, 30, 4068–4080. [CrossRef]
- 168. Park, J.; Kim, H.J. Environmental proactivity of hotel operations: Antecedents and the moderating effect of ownership type. *Int. J. Hosp. Manag.* **2014**, *37*, 1–10. [CrossRef]
- 169. Collier-Meek, M.A.; Johnson, A.H.; Sanetti, L.M.H. Evaluating the Fit of the Ecological Framework for Implementation Variables. *Assess. Eff. Interv.* **2019**, *45*, 14–26. [CrossRef]
- 170. Colby, M.E. Environmental management in development: The evolution of paradigms. Ecol. Econ. 1991, 3, 193–213. [CrossRef]
- 171. Taylor, S.R. Green management: The next competitive weapon. *Futures* **1992**, *24*, 669–680. [CrossRef]
- 172. Howard-Grenville, J.A. Inside the 'black box': How organizational culture and subcultures inform interpretations and actions on environmental issues. *Organ. Environ.* **2006**, *19*, 46–73. [CrossRef]