



Evolution and Trends in Indonesian Green Marketing Research: A Systematic Review (2018-2023)



Adimas Rois Adnan^{*}, Retno Widowati¹, Nuryakin¹

Master Management Program, Universitas Muhammadiyah Yogyakarta, 55185 Yogyakarta, Indonesia

^{*} Correspondence: Adimas Rois Adnan (adimas.rois.psc20@mail.umy.ac.id)

Received: 08-11-2023

Revised: 09-15-2023

Accepted: 09-25-2023

Citation: A. R. Adnan, R. Widowati, and Nuryakin, "Evolution and trends in Indonesian green marketing research: A systematic review (2018-2023)," *J. Green Econ. Low-Carbon Dev.*, vol. 2, no. 3, pp. 162–174, 2023. <https://doi.org/10.56578/jgelcd020305>.



© 2023 by the author(s). Published by Acadlore Publishing Services Limited, Hong Kong. This article is available for free download and can be reused and cited, provided that the original published version is credited, under the CC BY 4.0 license.

Abstract: In the context of escalating green consumerism in Indonesia, there has been a notable shift in corporate strategies towards green marketing, stimulating an increase in scholarly investigations in this domain. This study conducts a systematic literature analysis to delineate the evolution and emerging trends in green marketing research within Indonesia over the past five years (2018-2023). A methodical examination of 38 pertinent documents, analyzed using Wordstat, forms the basis of this inquiry. Analysis is carried out based on productive countries, authors, institutions, journals, and distribution phrases. The findings reveal that Indonesia emerges as a leading nation in publishing research on this subject. Recurrent thematic phrases, each surpassing a frequency of 100 mentions, include 'Green Marketing', 'Green Products', 'Green Advertising', and 'Willingness to Pay'. Furthermore, Structural Equation Modelling (SEM) emerges as a predominant methodological approach. Green purchase intention and performance are the most widely used variables. This review not only describes the current situation of green marketing research in Indonesia, but also identifies mainstream methods and thematic priorities, providing valuable insights for future academic efforts in this increasingly relevant field.

Keywords: Systematic review; Green marketing; Green products; Sustainability; Structural Equation Modelling (SEM)

1 Introduction

In contemporary discourse, green marketing is a hot topic for consumers, companies, society, and the government in creating sustainable consumption [1]. Green marketing is process that involves environmental issues in every process from the idea of making product until product distribution [2]. From consumer perspective, green marketing is useful for increasing awareness of sustainable consumption and balancing unlimited consumer needs with limited resources [3].

From a corporate standpoint, green marketing is instrumental in fostering environmentally conscious organizational behaviors, advancing technological innovation, and fulfilling corporate social responsibilities towards the environment. This shift not only augments company performance but also enhances consumer satisfaction, as evidenced by studies highlighting the significant impact of green marketing on consumer satisfaction and loyalty [4]. In the specific context of Indonesian green hotels, research indicates a consumer willingness to pay premium prices for sustainable services [5], underscoring the efficacy of green marketing strategies in attracting a market segment oriented towards environmental consciousness.

In terms of societal and governmental perspectives, green marketing is recognized as a crucial tool in mitigating environmental issues. It integrates environmental, ecological, and social practices [1]. The Indonesian government has shown a commitment to supporting the business sector in producing high-quality, eco-friendly products [6], a commitment that aligns with the increasing trend of waste production in Indonesia over the past five years.

A study by Kantar, titled "Who Cares, Who Does," highlights the growing interest of consumers in the Asia Pacific region, including Indonesia, towards eco-friendly products [7]. Green consumption behaviors, defined as consumer actions predicated on the perceived environmental friendliness of products (e.g., recyclable, sustainable, renewable, low energy consumption, low pollution, non-disturbing to the environment) [8], have spurred businesses to compete in developing eco-friendly products as an embodiment of green marketing [9].

Given the expanding scope of green marketing over the past two decades, and the proportional growth in knowledge on this subject across various continents and topics [2], the increasing trend of green consumption in Indonesia, coupled with government support for eco-friendly products, necessitates comprehensive research in this area. Therefore, this study, through systematic literature analysis, aims to delineate the development and trends in green marketing research within Indonesia from 2018-2023. Employing a systematic review approach, this research seeks to amalgamate a multitude of relevant studies into a cohesive document, offering an unbiased synthesis [10]. The research will examine trends based on publication frequency, authorship, journals of publication, productive countries, affiliations, and subject areas, utilizing data sourced from the Scopus database. Additionally, this study will delve into the following specific queries:

1. What are the prevailing trends in Indonesian green marketing research from 2018-2023?
2. Which phrases frequently appear in Indonesian green marketing research during this period?
3. What methodologies and variables are commonly employed in this field of study in Indonesia?
4. What are the objectives and findings of green marketing research articles in Indonesia from 2018-2023?

2 Methodology

This study meticulously examines the progression and trends in green marketing research specifically within the Indonesian context. The investigation is based on internationally accredited articles published in the Scopus database, a comprehensive repository established by Elsevier in 2004, encompassing scientific journals, books, and conference proceedings [11]. The articles selected span the period from 2018 to 2023, identified through a systematic approach focusing on keywords present in their titles or abstracts. The gathered data undergoes processing via the Wordstat application to facilitate detailed analysis. The methodology adopted in this research, including the data search strategy, is expounded upon in the subsequent subsection.

2.1 Search Strategy

The methodology for data acquisition and analysis in this study involves a multi-step approach, as delineated below:

-Initial Filtering: The initial phase involves employing a Boolean search to filter results based on their relevance to the study's objectives.

-Refinement and Storage: The second step following the Boolean search proceeds to eliminate duplicates and store literature as per their respective keywords in titles and abstracts, further introducing restrictions that would limit the search to only the relevant fields based on years, language, etc. (Figure 1).

-Literature Collection: The third step is to collect literature articles that have been limited in search.

-Comprehensive Analysis: In this phase, the collected articles undergo a thorough examination, and the findings are succinctly summarized.

-Parsing and Elaboration: The final step involves a detailed parsing of the data, followed by an elaboration of the findings within the context of the subsequent sections of the study.

Figure 1 is the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) in this study to conduct systematic literature review. This study utilized the keywords "Green marketing", "Sustainable Marketing", "Eco Marketing", and "In Indonesia" in the title, abstract, and keywords of the author to acquire relevant data from Scopus database. The search query option used in data mining was as follows (TITLE-ABS-KEY ("Green" AND "Marketing" AND "In" AND "Indonesia") OR TITLE-ABS-KEY ("Sustainable" AND "Marketing" AND "In" AND "Indonesia") OR TITLE-ABS-KEY ("Eco" AND "Marketing" AND "In" AND "Indonesia")) AND (LIMIT-TO (Year, "2018-2023")) AND (LIMIT-TO (Document Type, "Article")) AND (LIMIT-TO (Source Type, "Journal")) AND LIMIT-TO (Language, "English"). We discovered 38 articles in this stage.

2.2 Study Selection

Table 1 outlines the criteria for inclusion and exclusion applied in the selection of articles from the Scopus database.

3 Results

3.1 Publications per Year

Figure 2 illustrates the trajectory of publications related to green marketing in Indonesia, as documented in the Scopus database, spanning the years 2018 to 2023.

Based on Figure 2, the year 2020 marked the peak in the number of publications on green marketing in Indonesia, with a total of nine publications recorded in the Scopus database. Following 2020, there was a noticeable decline in publications on this topic. This trend is hypothesized to be a consequence of the Covid-19 pandemic, which has significantly impacted research productivity across various fields of knowledge [12]. With the transition to an endemic phase announced by the government, it is anticipated that research and publications on green marketing in Indonesia will experience a resurgence in the near future.

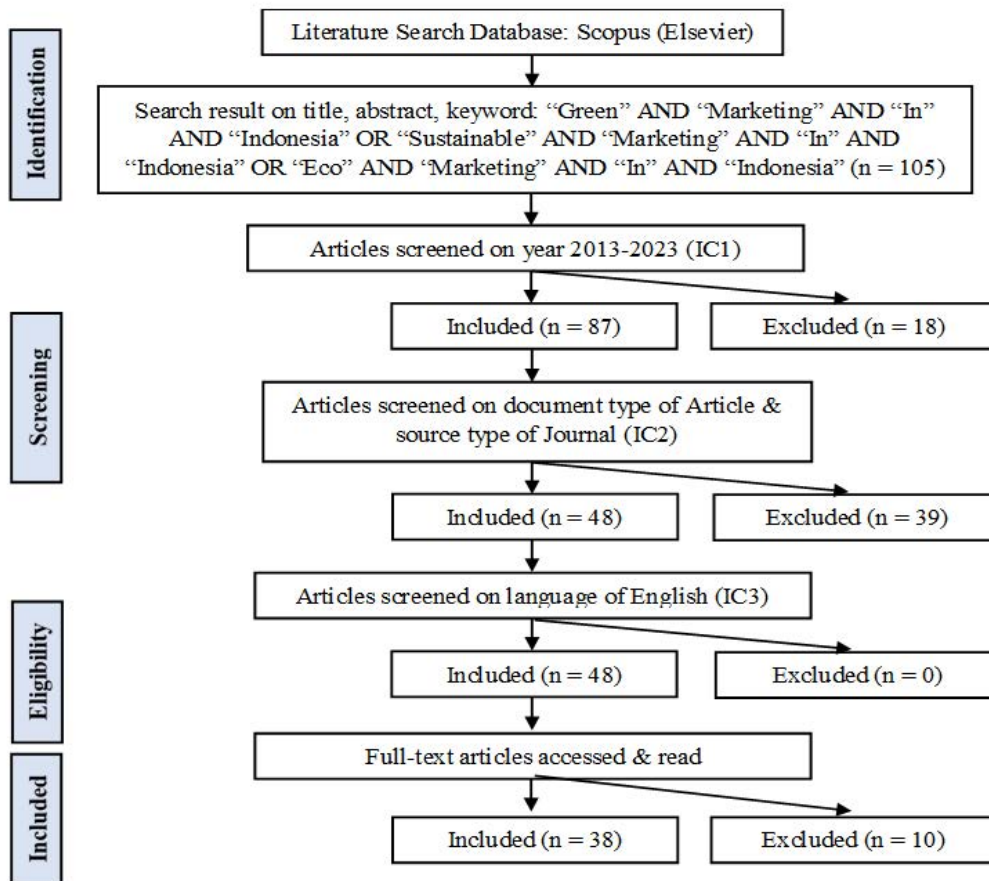


Figure 1. Prisma

Source: Authors.

Table 1. Inclusion criteria and exclusion criteria

Inclusion Criteria
- Research work is related to environmentally friendly or sustainable marketing.
- Discussion of research on marketing located in Indonesia.
- Research papers are published between 2018 and 2023.
- The research papers are written in English.
- The research follows the appropriate structure of research according to the research method.
Exclusion Criteria
- Research work is not related to environmentally friendly or sustainable marketing.
- Discussion of research not on marketing located in Indonesia.
- The research papers are not written in English.
- The research does not follow the appropriate structure of research according to the research method.

Source: Authors.

3.2 Publications by Journal

Table 2 provides an overview of the various journal sources from which the publications on green marketing in Indonesia, spanning the years 2018 to 2023, have been sourced.

Table 2 indicates that several journals have contributed to the body of literature on green marketing in Indonesia from 2018-2023. Notably, ‘Cogent Business and Management’, ‘International Journal of Supply Chain Management’, ‘International Journal of Sustainable Development and Planning’, ‘Journal of Islamic Marketing’, ‘Management of Environmental Quality: An International Journal’, ‘Management Science Letters’, and ‘Quality - Access to Success’ each published two articles on the subject. Additionally, the ‘Asian Journal of Business and Accounting’ and other journals each contributed one publication. This data serves as a valuable reference for researchers seeking suitable journals for publishing their work on green marketing or sustainability marketing.

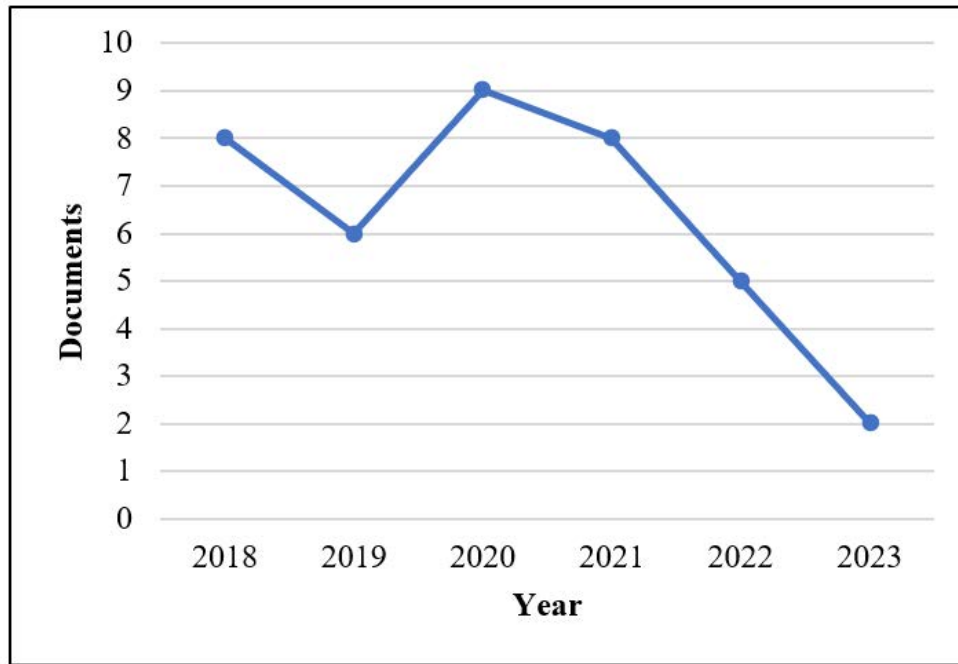


Figure 2. Annual publications

Source: Scopus database.

Table 2. Documents by journal

Journal (Publisher), Country of Publisher	TP
Cogent Business and Management (Cogent OA), United Kingdom	2
International Journal of Supply Chain Management (ExcelingTech Publishers), United Kingdom	2
International Journal of Sustainable Development and Planning (International Information and Engineering Technology Association), United Kingdom	2
Journal of Islamic Marketing (Emerald Group Publishing Ltd), United Kingdom	2
Management of Environmental Quality: An International Journal (Emerald Group Publishing Ltd.), United Kingdom	2
Management Science Letters (Growing Science), Canada	2
Quality - Access to Success (SRAC - Societatea Romana Pentru Asigurarea Calitatii), Romania	2
Asian Journal of Business and Accounting (Faculty of Business and Economics, University of Malaya), Malaysia	1

TP: Total Publications. Source: Scopus database.

3.3 Publications by Author and Country/Territory

Table 3 presents a list of the top seven authors who have published the most articles on the topic of green marketing in Indonesia from 2018 to 2023, as recorded in the Scopus database.

Table 3. Documents by author

Author - Affiliation, Country	TP
Doni Purnama Alamsyah - Universitas Bina Nusantara, Indonesia	4
Norfaridatul Akmaliah Othman - Universiti Teknikal Malaysia Melaka, Malaysia	4
Mukhamad Najib - Institut Pertanian Bogor, Indonesia	2
Mulyani - Universitas Bina Nusantara, Indonesia	2
Kardison Lumban Batu - Politeknik Negeri Pontianak, Indonesia	2
Amie Kusumawardhani - Universitas Diponegoro, Indonesia	2
Andriyansah - Universitas Terbuka, Indonesia	2

TP: Total Publications. Source: Scopus database.

Table 3 highlights that the majority of the top seven authors contributing to the field of green marketing in Indonesia, as per the Scopus database records from 2018-2023, are Indonesian researchers. Doni Purnama Alamsyah,

an Indonesian researcher, leads with four publications and has a total of 82 documents across various fields, which have been cited 373 times in the Scopus database. Following closely is Norfaridatul Akmaliah Othman, also with four publications. Norfaditatul Akmaliah Othman, a Malaysian researcher, has contributed 31 documents across different fields, accumulating 184 citations in the Scopus database.

Table 4, meanwhile, categorizes publications related to green marketing in Indonesia based on the countries or territories that have made significant contributions to this research area.

Table 4. Documents by country/territory

Country	TP
Indonesia	34
Malaysia	6
Taiwan	2
Poland	2
Thailand, Australia, Sudan, Japan, New Zealand, Pakistan, UK, Germany	1

TP: Total Publications. Source: Scopus database.

Table 4 ranks Indonesia at the forefront in terms of contributions to the field of green marketing, with a notable count of 34 publications. Within the ASEAN region, Malaysia follows as the second-highest contributor with six publications, and Thailand is represented with one publication. Remarkably, Poland stands out as the only European nation among the top four contributors to this area of research, with two publications. Additionally, Germany also makes a notable European contribution with one publication. Despite the research theme being centered on green marketing in Indonesia, the diversity of contributing countries extends beyond Indonesia and Asia. This suggests that future research exploring green marketing in other Asian countries, particularly in developing nations akin to Indonesia, could yield intriguing insights [13–26].

3.4 Publications by Subject Areas

Figure 3 displays a set of pie charts that visually represent the distribution of research publications by subject areas.

The pie chart depicted in Figure 3 demonstrates that the largest proportion of studies on green marketing, amounting to 30%, falls within the domain of Business, Management, and Accounting. This is followed by Social Science, which accounts for 14% of the publications. Other significant contributions include Economics, Econometrics, and Finance (10%), Decision Sciences (9%), and Environmental Science (9%). Additionally, Computer Science represents 7% of the publications, while Energy, Engineering, and Medicine each contribute 4%. The fields of Agricultural and Biological Sciences account for 3% of the studies. The remaining 6% of publications are categorized under ‘Others’. These statistics indicate that green marketing is an interdisciplinary field, intersecting with various academic domains.

3.5 Publication by Affiliations

Table 5 presents a summary of the affiliations that have published the most articles on the topic of green marketing, highlighting the leading contributors in this research area.

Table 5. Documents by affiliations

Affiliation	TP
Universitas Bina Nusantara, Indonesia	8
Universitas Brawijaya, Indonesia	5
Universiti Teknikal Malaysia Melaka, Malaysia	5
Universitas Diponegoro, Indonesia	3
Universitas Terbuka, Indonesia	3
Politeknik Negeri Pontianak, Indonesia	3
Universitas Pembangunan Nasional Yogyakarta, Indonesia	2
Sekolah Tinggi Ilmu Ekonomi Surakarta, Indonesia	2
Institut Pertanian Bogor, Indonesia	2
Universitas Negeri Jakarta, Indonesia	2

TP: Total Publications. Source: Scopus database.

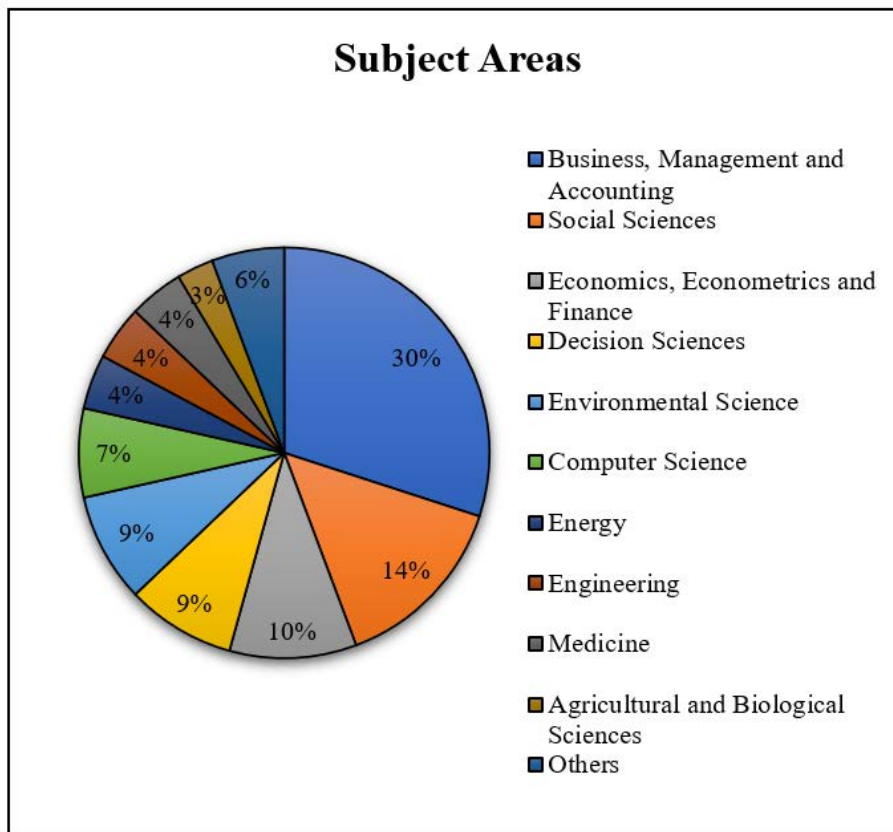


Figure 3. Publications by subject areas

Source: Scopus database.

Table 5 reveals that Universitas Bina Nusantara in Indonesia holds the distinction of having the highest number of published articles on green marketing in Indonesia, contributing a total of 8 publications. According to the Scopus database, Universitas Bina Nusantara boasts a substantial portfolio with 9,279 documents across various fields, authored by 7,672 contributors. Following closely in second place is Universitas Brawijaya, also in Indonesia, with 5 publications. Ranking third is Universiti Teknikal Malaysia Melaka (Malaysia), which has also produced 5 publications on the subject. Notably, Universiti Teknikal Malaysia Melaka is the only non-Indonesian institution among the top affiliations contributing significantly to this area of research.

3.6 Highly Cited Articles on Green Marketing in Indonesia

Table 6 provides a compilation of the five most cited articles on related topics, as indexed in the Scopus database.

Table 6 showcases the five most cited articles in the field of green marketing, based on data from the Scopus database. The article with the highest citation count is “Exploring Consumers’ Purchase Intention toward Green Products in an Emerging Market: The Role of Consumers’ Perceived Readiness,” published in the *International Journal of Customer Studies*. Authored by Denni Arli, Lay Peng Tan, Fandy Tjiptono, and Lin Yang, this article has garnered 104 citations. The study’s primary objective is to examine the factors influencing consumers’ purchase intentions towards environmentally friendly products in a developing country, specifically Indonesia. The research sample was bifurcated into students, sourced from three universities, and non-students, drawn from two shopping malls and various residential areas in Yogyakarta, Indonesia. The study investigated six independent variables: Attitude, Subjective Norm, Perceived Behavioral Control, Pro-Environmental Self-Identity, Ethical Obligation, and Perceived Sense of Responsibility. Additionally, it explored the role of Perceived Readiness to Be Green as a mediating variable. The findings indicated that all the independent variables, along with Perceived Readiness to Be Green, significantly impacted the intention to purchase green products. Furthermore, the study demonstrated that Perceived Readiness to Be Green mediates the relationship between Attitude, Perceived Behavioral Control, Pro-Environmental Self-Identity, and Perceived Sense of Responsibility towards purchase intention [14].

The table also includes articles by Alamsyah et al. [22] with 45 citations, Raharjo et al. [25] with 41 citations, Sugandini et al. [19] with 33 citations, and Hari et al. [26] with 32 citations, each contributing significantly to the scholarly discourse on green marketing.

Table 6. Top five most cited articles on green marketing in Indonesia

Title	Authors	Year	Journal	TC
Exploring Consumers' Purchase Intention toward Green Products in an Emerging Market: The Role of Consumers' Perceived Readiness.	Arli et al. [14]	2018	International Journal of Consumer Studies	104
The Awareness of Environmentally Friendly Products: The Impact of Green Advertising and Green Brand Image.	Alamsyah et al. [22]	2020	Management Science Letters	45
The Role of Green Management in Creating Sustainability Performance on The Small and Medium Enterprises.	Raharjo [25]	2019	Management of Environmental Quality: An International Journal	41
Green Supply Chain Management and Green Marketing Strategy on Green Purchase Intention: SMEs Cases.	Sugandini et al. [19]	2020	Journal of Industrial Engineering and Management	33
The Impact of Religiosity, Environmental Marketing Orientation and Practices on Performance: A Case of Muslim Entrepreneurs in Indonesia.	Hari et al. [26]	2018	Journal of Islamic Marketing	32

Source: Scopus database. TC = Total Citations.

3.7 Distribution Phrases

The keyword analysis in this study is conducted by examining the distribution of phrases, as illustrated in Figure 4 and detailed in Table 7.



Figure 4. Distribution phrases

Source: Authors.

The distribution of phrases depicted in Figure 4 and outlined in Table 7 highlights the terms and phrases frequently employed by authors in their articles on environmentally friendly topics.

The analysis of phrases from the 38 documents examined in this study reveals a recurrent use of specific terms, limited to a frequency threshold of 100. The top ten phrases that frequently appear across these documents include Green Marketing, Green Products, Purchase Intention, Environmentally Friendly, Green Advertising, Green Product, Willingness to Pay, Competitive Advantage, Eco Friendly, and Green Perceived.

Table 7. Details of distribution phrases

	Freq.	No. Cases	% Cases
Green Marketing	806	31	81.58%
Green Products	493	30	78.95%
Purchase Intention	425	21	55.26%
Environmentally Friendly	401	33	86.84%
Green Advertising	359	9	23.68%
Green Product	318	27	71.05%
Willingness to Pay	251	15	39.47%
Competitive Advantage	148	19	50.00%
Eco Friendly	137	25	65.79%
Green Perceived	136	11	28.95%
Green Awareness	135	5	13.16%
Green Hotels	128	5	13.16%
Green Innovation	126	9	23.68%
Green Management	124	5	13.16%
Green Brand	120	15	39.47%
Organic Vegetables	115	7	18.42%
Green Marketing Strategy	110	18	47.37%
Consumer Behavior	104	21	55.26%
Eco Innovation	103	6	15.79%
Plastic Bags	103	4	10.53%
Long Term	102	15	39.47%
Green Trust	101	12	31.58%

Source: Authors.

Green hotels are one of the interesting phrases to discuss. Indonesia as one of the countries with the best natural tourist destinations, the existence of hotels is inseparable. The tourism industry, especially hotel industry, plays an important role in suppressing the rate of global warming which is resulted from the increasing of carbon emissions generated by the use of land, Policies related to hotels with environmental concept energy, water, and air [15]. Indonesia, through the government supports the development of green hotels through the Green Hotel Award held by the Ministry of Tourism and Creative Economy. The findings in the study suggest that tourists are willing to pay for sustainable hotel services, and indicate environmental knowledge and preferences play a role [5]. This highlights the growing importance and potential impact of green practices in the hospitality industry, particularly in regions rich in natural attractions like Indonesia.

3.8 Documents by Methods and Variables

Table 8 presents a detailed overview of the methods and variables employed in the 38 documents that form the basis of this study.

Table 8. Methods and variables from 38 articles

Author	Method	Variables
Jamal et al.	SEM	Customer Engagement, Ecolabeling, Information Credibility, Communication Tools, Green Purchase Intention, Brand Trust.
Agusdin et al.	SEM	Green Knowledge Creation, Green Entrepreneurship Orientation, Green Innovation Capability, Green Product Development, Marketing Performance.
Wiasuti et al.	SEM	Green Hotel Attributes, Trust Green Hotels, Behavioral Intention Green Hotels, Willingness to Pay
Wibowo et al.	SEM	Attitude Toward Behaviour, Perceived Behavioral Control, Egocentric Values, Altruistic Values, Biospheric Values
Junarsin et al.	Survey online (Secondary data)	Green Awareness, Green Trust, Green Brand Performance, Green Purchase Intention
Nutwakin and Maryati	SEM	Green Marketing Orientation, Green Product Innovation, Green Product Competitiveness, Education, Experience, Green Marketing Performance

Author	Method	Variables
Sujjante et al.	Descriptive test and <i>t</i> test	awareness, And Constraints
Ariadi et al.	SEM	Product, Psychography, Demography, Purchase, Willingness to Pay
Tseng et al.	Delphi method	Product Packaging, Consumer Perception, Corporate Communication, Consumer Behavior
Nelson et al.	The dichotomous choice contingent valuation method	Willingness to Pay
Nio et al.	SEM	Green Attributes, Indoor Air Quality, Environmental Awareness, Land Attributes, Accessibility, Risk Aversion, Willingness to Pay for A Green Apartment
Syarief	SEM	Innovation, Green Supply Chain Management, Market Uncertainty, Performance
Ghazali et al.	SEM	Collectivism, Masculinity, Uncertainty Avoidance, Power Distance, Long-Term Orientation, Customer Preferences on Green Product
Alamsyah et al.	Confirmatory Factor Analysis (CFA)	Green Impact, Green Message, Green Theme, Green Emotion, Green Experience, Green Interaction, Green Claim.
Suhartante, et al.	SEM	Green Perceived Risk, Green Perceived Quality, Green Perceived Value, Green Satisfaction, Green Trust, Green Repurchase Intention
Hairudinor and Barkatullah	CFA & SEM	Entrepreneurial Orientation, Green Marketing Mix Strategy, Ecolabeling Strategy, Green Washing Strategy, Sustainable Performance
Sukaatmadia	Census research	Environmental Orientation, Green Marketing Mix Strategy, Competitive Advantage
Alamsyah et al.	CFA & SEM	Green Impact, Green Message, Green Theme, Green Advertising, Green Awareness
Dewi et al.	Explanatory	Green Product, Purchase Intention
Alamsyah et al.	SEM	Perceived Innovation, Green Perceived Value, Green Purchase Intention
Chairy & Svahrivar, J	SEM	Karma, Long-Term Orientation, Spirituality, Green Purchase Intention
Bloenhad et al.	SEM	Green Supply Chain Management, Green Marketing, Green Corporate Image, Green Satisfaction
Sugandini et al.	SEM	Green Supply Chain Management Green Marketing Strategy, Green Purchase Intention
Alamsyah et al.	SEM	Green Advertising, Green Brand Image, Green Awareness, Green Purchase Intention
Lumbanraja et al.	SEM	Green Tourism Marketing, Creative Industries, Tourism Experience, Tourism Satisfaction
Achmad et al.	SEM	Availability of The Value Chain, Practice of The Value Chain, Competence of Value Chain, Increased Activity of The Value Chain, Performance of Agribusiness
Zulganef et al.	SEM	Perceived on Government Regulation, Eco-Friendly Awareness, Intention to Use Plastic Bag, Intention to Purchase Green Product
Dwikuncoro and Ratajczak	SEM	Green Trust, Green Product Quality, Green Satisfaction, Customer Attitude, Price, Purchase Intention
Agustini et al.	Case study (interview)	Green Marketing Mix

Author	Method	Variables
Astuty, E	SEM	Green Marketing Perception, Green Purchasing Willingness, Environmental Attitude, Green Purchasing Behavior
Raharjo, K	Mathematically	Stakeholder Demand, Resources, Knowledge, Product Uniqueness, Green Management, Sustainability Performance
Adi and Adawiyah	Descriptive statistics and partial least square	Environmental Marketing, Environmental Orientation, Commercial Performance, Economic Performance, The Firm's Operational Performance
Yoestini et al.	SEM	Top Management Support Advantages, Product Development Advantages, Distribution Advantages, Pricing Advantages, Green Corporate Image Based, Marketing Communication Advantages, Green Business Performance Attitude, Subjective Norm, Perceived Behavioral Control, Pro-Environmental Self-Identity, Ethical Obligation, Perceived Sense of Responsibility, Perceived Readiness to Be Green, Purchase Intention
Arli et al.	SEM	Green Marketing Mix, Customer Satisfaction
Novela et al.	Multiple linear regression	
Aqmala et al.	SEM	Explorative Green Product Development, Entrepreneurial Orientation, Explorative Green Product Capabilities, Exploitative Market Penetration, Uniqueness Green Product, Market Performance
Auliandri et al.	SEM	Environmental Concern, Subjective Norm, Perceived Behavioral Control, Willingness to Pay, Attitude, Purchase Intention
Aryanto et al.	SEM	Market Orientation, E-Eco Innovation, Marketing Performance

Source: Authors.

In the array of methods utilized across the 38 documents in this study, SEM emerges as the predominant approach, applied in 27 instances. SEM stands out as a formidable technique, adept at integrating complex path models with latent variables, such as factors. This methodological approach empowers researchers to meticulously define and validate a range of models, including confirmatory factor analysis models, regression models, and intricate path models [16]. The growing demand among academic researchers and social science practitioners for effective tools to unravel the complexities of latent phenomena's structure and interrelationships has significantly propelled the adoption and evolution of SEM [17]. Notably, SEM's capacity to simplify the analysis and discussion of complex models has been a key factor in its widespread acceptance and development [18].

Turning to the thematic focus of the research, Table 8 reveals a pronounced emphasis on the topics of purchase intention, addressed in 9 documents, and performance, discussed in 8 documents. Studies concentrating on purchase intention consistently conclude that the earnest implementation of green marketing strategies by companies fosters a consumer inclination to purchase environmentally friendly products [19]. These strategies are pivotal in heightening consumer awareness about green products, thereby catalyzing purchase intent. In parallel, research exploring performance aspects indicates that the adoption of Green Supply Chain Management (GSCM) can significantly enhance company performance [20]. Another noteworthy finding is that the implementation of Corporate Social Responsibility (CSR) not only accrues benefits and competitive advantages for achieving green business performance but also strengthens the company's reputation and commitment to social responsibility [21]. Additionally, these strategies effectively differentiate a company's products from those of its competitors, ultimately bolstering the company's green reputation and performance [21].

3.9 Documents by Object Research

Table 9 categorizes the research objects utilized by the 38 documents included in this study. These objects are systematically grouped based on their similarities, with sectors like hotels and real estate being collectively classified under the property industry.

As indicated by Table 9, the Food and Beverages sector emerges as the most frequently researched area in the context of green marketing in Indonesia, accounting for 10 of the documents. This research encompasses various sub-topics, including green coffee, organic food, and other environmentally-focused food and beverage products. Following this, the property industry and the clothing industry are each the focus of 5 documents. Notably, within the property sector, a significant portion of the research is dedicated to green hotels, highlighting the trend towards the

development of environmentally friendly hospitality options in Indonesia. Other sectors prominently featured as research objects in the context of green marketing include the cosmetic industry and various merchandise sectors. Table 9 is designed to aid future researchers in selecting appropriate and relevant subjects for their studies in the realm of green marketing, particularly within the Indonesian context.

Table 9. Object research

Object Research	TD
Food and Beverages	10
Property Industry	5
Clothing Industry	5
Cosmetic Industry	3
Merchandise	2
Tourism Industry	1

Source: Authors.

3.10 Research Outcome

Table 10 below is designed to elucidate the objectives and key findings derived from the five most cited articles in the field of green marketing in Indonesia, as previously listed in Table 6.

Table 10. Purposes and findings from 5 most cited articles

Title	Purposes	Findings
Exploring Consumers' Purchase Intention toward Green Products in an Emerging Market: The Role of Consumers' Perceived Readiness	Explore the roles of consumers' perceived readiness to be green and subsequently, how readiness to be green affects consumers' purchase intention toward green products in an emerging market, Indonesia.	Consumers' attitude, subjective norm, perceived behavioral control, pro environmental self-identity, ethical obligation and consumers' readiness to be green are the determinants of intention to purchase green products.
The awareness of environmentally friendly products: The impact of green advertising and green brand image	Review the correlation among green advertising, green brand image and customer green awareness on environment friendly products and their impacts to purchase intention.	Green advertising is very important for the customers' green awareness. after that green awareness has an influence on customer purchasing intention on the environmentally friendly product.
The role of green management in creating sustainability performance on the small and medium enterprises	Analyze the effect of the relationship between stakeholder demand, resources, knowledge and product uniqueness on green marketing and its implications on sustainability performance.	Stakeholder demands, resources, knowledge and the uniqueness of the product have a significant effect on the application of green management, and the green management has a significant effect on the sustainability performance.
Green Supply Chain Management and Green Marketing Strategy on Green Purchase Intention: SMEs Cases	Analyze green supply chain management and green marketing strategies to green purchasing intentions.	There is an influence of green supply chain management on green marketing strategy, and there is an influence of green marketing strategy on green purchase intention.
The impact of religiosity, environmental marketing orientation and practices on performance: A case of Muslim entrepreneurs in Indonesia	Investigate the environmental marketing orientation of Muslim entrepreneurs and looks at its relationship with environmental marketing and organizational performance in the context of small and medium enterprises in Indonesian.	Environmental orientation has a positive relationship with environmental marketing and operational and economic performance. No significant influence of environmental marketing on commercial performance due to "greenwashing" practices. Religiosity as moderate the relationship between environmental orientation and environmental marketing practices.

Source: Authors

Among the five articles, three studies prominently address the topic of green purchase intention [14, 19, 22]. This area of research is intrinsically linked with green consumerism behavior. Green purchase intention is defined as the consumer's propensity or likelihood to select eco-friendly products [23]. A significant finding across these studies is that companies implementing green marketing strategies effectively are likely to evoke stronger purchase intentions

among consumers. Purchase intention is a critical precursor, serving as a foundational motivator for the execution of an action [24].

The remaining two articles focus on the theme of sustainability performance [25, 26]. Business performance is typically measured in terms of a company's success over a specific period, gauged by factors like sales growth and market share [25]. It is observed that only a handful of companies adopt comprehensive social and environmental strategies to enhance their performance. These studies underscore those investments in green management not only contribute to immediate sustainability but also ensure long-term responsibility and viability [25]. This highlights the growing importance of integrating environmental considerations into business strategies to achieve sustainable success.

3.11 Limitations

Green marketing and sustainable consumption are recognized as vital components in achieving the Sustainable Development Goals [2]. In line with this, the Indonesian government has shown a commitment to fostering sustainable consumption practices by actively supporting green marketing initiatives.

However, akin to other bibliometric studies, this research is not without its limitations. Firstly, the study is confined to data sourced exclusively from the Scopus database, limited to a specific year range and language, and only includes articles published in journals. It is important to acknowledge that data derived from other databases might yield varying results and conclusions. Future research could benefit from incorporating multiple databases, thereby broadening the understanding of green marketing research trends and patterns. Secondly, this study is focused solely on analyzing articles that discuss green marketing research conducted within Indonesia. It is crucial to consider that green marketing research carried out in other countries may present different trends and developments. This geographical limitation suggests an opportunity for future studies to explore green marketing research on a broader, more global scale, which could provide a more comprehensive view of the field.

4 Conclusions

The conducted investigation revealed that 2020 marked the zenith of publication activity regarding green marketing in Indonesia, with a subsequent decline observed in subsequent years. Prominent journals in this domain, including Cogent Business and Management, International Journal of Supply Chain Management, International Journal of Sustainable Development and Planning, Journal of Islamic Marketing, Management of Environmental Quality: An International Journal, Management Science Letters, Quality - Access to Success, and Asian Journal of Business and Accounting, have been identified as frequent publishers of related articles. This information is poised to serve as a valuable reference for future researchers aiming to disseminate their scholarly works on green marketing.

Key contributors to the literature on this subject are Doni Purnama Alamsyah and Norfaridatul Akmaliah Othman, with Indonesia emerging as the most prolific country in terms of article production on green marketing.

The research highlights common phrases such as Green Marketing, Green Products, Green Advertising, Willingness to Pay, and Competitive Advantage, each exceeding a frequency of 100 mentions. SEM is noted as the predominant research method employed. Variables like green purchase intention and performance are recurrently explored in these studies. Future researchers are encouraged to integrate additional variables pertinent to green marketing to uncover more nuanced trends in the literature. Among the five most cited documents, three delve into the theme of green purchase intention, while the other two focus on sustainability performance, reflecting the significant areas of interest and impact within this field.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare no conflict of interest.

References

- [1] Y. Geng and M. Maimaituerxun, "Research progress of green marketing in sustainable consumption based on citespace analysis," *SAGE Open*, vol. 12, no. 3, 2022. <https://doi.org/10.1177/21582440221119835>
- [2] S. Bhardwaj, K. Nair, M. U. Tariq, A. Ahmad, and A. Chitnis, "The state of research in green marketing: A bibliometric review from 2005 to 2022," *Sustainability*, vol. 15, no. 4, pp. 1–16, 2023. <https://doi.org/10.3390/su15042988>
- [3] C. D. Duong, "Big five personality traits and green consumption: Bridging the attitude-intention-behavior gap," *Asia Pac. J. Mark. Logist.*, vol. 34, no. 6, pp. 1123–1144, 2021. <https://doi.org/10.1108/APJML-04-2021-0276>
- [4] C. J. Gelderman, J. Schijns, W. Lambrechts, and S. Vijgen, "Green marketing as an environmental practice: The impact on green satisfaction and green loyalty in a business-to-business context," *Bus. Strateg. Environ.*, vol. 30, no. 4, pp. 2061–2076, 2021. <https://doi.org/10.1002/bse.2732>

- [5] K. M. Nelson, S. Partelow, M. Stähler, S. Graci, and M. Fujitani, "Tourist willingness to pay for local green hotel certification," *PLoS One*, vol. 16, no. 2, pp. 1–19, February 2021. <https://doi.org/10.1371/journal.pone.0245953>
- [6] "Kemendag dukung peningkatan produk ramah lingkungan," 2019. <https://www.kemendag.go.id/berita/pojok-media/kemendag-dukung-peningkatan-produk-ramah-lingkungan>
- [7] S. L. Nariswari, "Survei: Konsumen Indonesia makin peduli produk ramah lingkungan," 2022. <https://lifestyle.kompas.com/read/2022/09/20/184205220/survei-konsumen-indonesia-makin-peduli-produk-ramah-lingkungan?page=all>
- [8] R. A. Clark, D. L. Haytko, C. M. Hermans, and C. S. Simmers, "Social influence on green consumerism: Country and gender comparisons between China and the United States," *J. Int. Consum. Mark.*, vol. 31, no. 3, pp. 177–190, 2019. <https://doi.org/10.1080/08961530.2018.1527740>
- [9] A. D. Putra and N. W. S. Suprapti, "Implementasi pemasaran hijau melalui penawaran tas belanja eco-bag untuk meningkatkan loyalitas pelanggan pasar swalayan," *Matrik J. Manaj. Strateg. Bisnis Kewirausahaan*, vol. 11, no. 1, pp. 40–51, 2017. <https://doi.org/10.24843/matrik:jmbk.2017.v11.i01.p04>
- [10] E. Aromataris and A. Pearson, "The systematic review: An overview," *Am. J. Nurs.*, vol. 114, no. 3, pp. 53–58, 2014. <https://doi.org/10.1097/01.NAJ.0000444496.24228.2c>
- [11] V. K. Singh, P. Singh, and M. Karmakar, "The journal coverage of Web of Science, Scopus and dimensions: A comparative analysis," *Scientometrics*, 2021. <https://doi.org/10.1007/s11192-021-03982-7>
- [12] J. He, X. L. Liu, X. Y. Lu *et al.*, "The impact of COVID-19 on global health journals: An analysis of impact factor and publication trends," *BMJ Glob. Heal.*, vol. 8, no. 4, 2023. <https://doi.org/10.1136/bmjgh-2022-011514>
- [13] E. Suryantoro, U. Udin, and I. N. Qamari, "Bibliometric analysis of information systems in infection prevention and control," *Multidiscip. Rev.*, vol. 6, no. 1, p. e2023006, 2023. <https://doi.org/10.31893/multirev.2023006>
- [14] D. Arli, L. P. Tan, F. Tjiptono, and L. Yang, "Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness," *Int. J. Consum. Stud.*, vol. 42, no. 4, pp. 389–401, 2018. <https://doi.org/10.1111/ijcs.12432>
- [15] Y. P. Mbulu and I. M. A. Gunadi, "Green hotel and its implementation in Indonesia (Case study: Aston Hotel & Resort Bogor, Neo Hotel, and Fave Hotel)," 2018. <https://doi.org/10.2991/ictgtd-18.2018.37>
- [16] J. Hox and T. M. Bechger, "An introduction to structural equation modeling," *Stud. Health Technol. Inform.*, vol. 213, pp. 3–6, 2015. <https://doi.org/10.3233/978-1-61499-538-8-3>
- [17] P. Tarka, "An overview of structural equation modeling: Its beginnings, historical development, usefulness and controversies in the social sciences," *Qual. Quant.*, vol. 52, no. 1, pp. 313–354, 2018. <https://doi.org/10.1007/s11135-017-0469-8>
- [18] G. Dash and J. Paul, "CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting," *Technol. Forecast. Soc. Change*, vol. 173, p. 121092, 2021. <https://doi.org/10.1016/j.techfore.2021.121092>
- [19] D. Sugandini, M. Muafi, C. Susilowati, Y. Siswanti, and W. Syafri, "Green supply chain management and green marketing strategy on green purchase intention: SMEs cases," *J. Ind. Eng. Manag.*, vol. 13, no. 1, pp. 79–92, 2020. <https://doi.org/10.3926/jiem.2795>
- [20] E. Syarief, "The role of market uncertainty in fostering innovation and green supply chain management on the performance of tourism SMEs," *Uncertain Supply Chain Manag.*, vol. 9, no. 3, pp. 617–624, 2021. <https://doi.org/10.5267/j.uscm.2021.5.009>
- [21] Yoestini, K. L. Batu, A. Kusumawardhani, and Andriyansah, "Green business performance-based CSR: Evidence from large-scale enterprises in Indonesia," *Qual. - Access Success*, vol. 19, no. 166, pp. 56–63, 2018. <https://doi.org/10.21825/jeps.81966>
- [22] D. P. Alamsyah, N. A. Othman, and H. A. A. Mohammed, "The awareness of environmentally friendly products: The impact of green advertising and green brand image," *Manag. Sci. Lett.*, vol. 10, no. 9, pp. 1961–1968, 2020. <https://doi.org/10.5267/j.msl.2020.2.017>
- [23] C. Othman and M. S. Rahman, "Investigation of the relationship of brand personality, subjective norm and perceived control on consumers' purchase intention of organic fast food," *Mod. Appl. Sci.*, vol. 8, no. 3, pp. 92–106, 2014. <https://doi.org/10.5539/mas.v8n3p92>
- [24] H. C. Wu, C. F. Wei, L. Y. Tseng, and C. C. Cheng, "What drives green brand switching behavior?" *Mark. Intell. Plan.*, vol. 36, no. 6, pp. 694–708, 2018. <https://doi.org/10.1108/MIP-10-2017-0224>
- [25] K. Raharjo, "The role of green management in creating sustainability performance on the small and medium enterprises," *Manag. Environ. Qual. An Int. J.*, vol. 30, no. 3, pp. 557–577, 2019. <https://doi.org/10.1108/MEQ-03-2018-0053>
- [26] P. H. Adi and W. R. Adawiyah, "The impact of religiosity, environmental marketing orientation and practices on performance: A case of Muslim entrepreneurs in Indonesia," *J. Islam. Mark.*, vol. 9, no. 4, pp. 841–862, 2018. <https://doi.org/10.1108/JIMA-09-2016-0067>