


Mapping Eco-Labeling Research Trends with a Bibliometric Perspective

Loso Judijanto
IPOSS Jakarta

Article Info	ABSTRACT
<p>Article history:</p> <p>Received June, 2025 Revised June, 2025 Accepted June, 2025</p> <hr/> <p>Keywords:</p> <p>Eco-labelling; Bibliometric analysis; Sustainable development; Consumer behavior</p>	<p>Eco-labelling has emerged as a vital tool in promoting sustainable consumption and production by informing consumers about the environmental impacts of products and services. Over the past two decades, the body of research on eco-labelling has expanded significantly across multiple disciplines, yet remains fragmented in terms of thematic focus and geographic collaboration. This study aims to systematically map the development of eco-labelling research using bibliometric analysis, with data sourced from the Scopus database covering the period 2000–2024. Using VOSviewer software, co-citation, co-authorship, keyword co-occurrence, overlay, and density visualizations were employed to analyze the intellectual structure, collaboration patterns, and evolving research themes. The findings reveal three major thematic clusters: consumer behavior and willingness to pay, sustainability and environmental performance, and institutional certification systems. Key contributors such as Teisl, Thøgersen, and Cashore were identified, along with leading countries including the United States, Italy, and France. The temporal analysis shows a thematic shift toward sustainable development, innovation, and climate change in recent years. This study offers a comprehensive overview of eco-labelling literature, highlights gaps in producer-side research and technological integration, and provides guidance for future scholarship and policy innovation in sustainable labeling practices.</p> <p><i>This is an open access article under the CC BY-SA license.</i></p> <div></div>

<p>Corresponding Author:</p> <p>Name: Loso Judijanto Institution: IPOSS Jakarta e-mail: losojudijantobumn@gmail.com</p>	
--	--

<h2>1. INTRODUCTION</h2> <p>In the past few decades, environmental degradation and climate change have triggered global concern across various sectors, compelling policymakers, businesses, and consumers to reconsider the ecological impacts of production and consumption. A key strategy in this transformation has been the promotion of sustainable consumption through</p>	<p>mechanisms that inform and influence consumer behavior. One of the most widely adopted tools in this regard is eco-labelling, which provides consumers with information about the environmental performance of products and services [1]. Eco-labels act as market-based instruments to bridge the information gap between producers and consumers, enhancing transparency and encouraging more sustainable choices [2], [3].</p>
--	--

Eco-labelling has evolved significantly since its inception in the 1970s. Initially focused on specific product categories such as organic food or energy-efficient appliances, it has now expanded into a broad spectrum of industries including textiles, construction, tourism, and fisheries [4], [5]. The rise in environmental awareness among consumers has further fueled the proliferation of eco-labels, resulting in a growing number of schemes both voluntary and mandatory designed to differentiate environmentally preferable products in competitive markets. These developments have encouraged both academic inquiry and policy innovation, leading to an expanding body of research examining the effectiveness, adoption, and implications of eco-labelling across sectors and regions [6].

Despite its potential, the eco-labelling landscape is marked by complexity and fragmentation. Multiple types of labels (e.g., Type I, II, III as defined by ISO), a lack of harmonized standards, varying levels of consumer understanding, and differing regulatory frameworks across countries contribute to mixed outcomes in terms of impact and credibility [7]. Furthermore, challenges related to greenwashing, label overload, and trust in certification authorities have raised critical questions regarding the effectiveness of eco-labelling in achieving real environmental benefits [8], [9]. As the field continues to mature, understanding the trajectory of scholarly work on eco-labelling becomes increasingly important to identify dominant themes, conceptual gaps, and potential areas for future research.

With the growing emphasis on sustainability in global agendas such as the United Nations Sustainable Development Goals (SDGs), eco-labelling has gained renewed attention as a policy tool for supporting responsible production and consumption (SDG 12). This relevance is reflected in a sharp increase in academic publications over the past two decades, covering diverse themes such as consumer behavior, life cycle assessment, supply chain management, certification systems, and

international trade [10], [11]. However, while individual studies have addressed specific topics, a comprehensive understanding of how research on eco-labelling has evolved over time remains limited. In particular, there is a need to map the intellectual structure, influential authors, and emerging trends that define this interdisciplinary field.

Bibliometric analysis has emerged as a robust methodological approach to systematically evaluate the development of scientific knowledge across disciplines. By applying quantitative techniques to large datasets of academic publications, bibliometric methods allow researchers to uncover patterns, networks, and trends in research output, collaboration, and citation behavior [12]. This approach is particularly valuable in fields like eco-labelling, where literature spans multiple disciplines such as environmental science, economics, marketing, and public policy. Mapping eco-labelling research from a bibliometric perspective thus offers a strategic lens to assess how the field has developed, where it is heading, and what gaps need to be addressed.

Although eco-labelling has been widely studied across various sectors and disciplines, the literature remains dispersed and lacks a consolidated overview of its evolution, key contributors, and thematic focus areas. Without a systematic mapping of the research landscape, stakeholders ranging from scholars and practitioners to policymakers, face difficulty in identifying core knowledge clusters, methodological trends, and influential works. Moreover, as sustainability becomes an increasingly urgent global concern, there is a pressing need to evaluate whether existing eco-labelling research aligns with emerging policy challenges and consumer expectations. The absence of a comprehensive bibliometric analysis hampers the ability to strategically navigate the academic discourse and contribute meaningfully to the advancement of eco-labelling as a sustainable development tool. This study aims to fill the identified gap by conducting a comprehensive bibliometric analysis of eco-labelling research.

2. METHODS

This study employed a bibliometric analysis approach to systematically map and evaluate the structure, dynamics, and trends in eco-labelling research. Bibliometric methods are widely used to assess the development of a scientific field by quantitatively analyzing publications, citation patterns, and author networks [12]. The approach integrates performance analysis (e.g., publication and citation counts) and science mapping techniques (e.g., co-citation, co-authorship, and keyword co-occurrence analysis) to uncover intellectual structures and thematic evolution. By leveraging these techniques, the study aims to provide a comprehensive overview of the key contributors, collaborative patterns, and research hotspots within the eco-labelling domain.

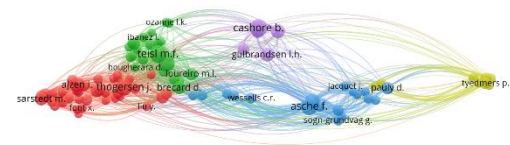
The data for this analysis were retrieved from the Scopus database, selected for its wide coverage of peer-reviewed academic journals across disciplines and its robust bibliographic metadata. A comprehensive search strategy was designed using the keywords: "eco-label" OR "eco-labelling" OR "ecolabel", targeting titles, abstracts, and keywords of documents published between 2000 and 2024. Only articles, conference papers, and reviews written in English were included to maintain consistency and academic quality. The final dataset was downloaded in BibTeX and CSV formats, and metadata such as authorship, institutions, countries, source titles, citations, and keywords were extracted for analysis.

The analytical and visualization process was carried out using VOSviewer, a software tool specifically developed for constructing and visualizing bibliometric networks [13]. Three types of analyses were conducted: (1) co-authorship analysis to identify collaborative patterns among authors, institutions, and countries; (2) citation analysis to uncover the intellectual structure of the field based on frequently cited works; and (3) keyword co-occurrence analysis to map the conceptual and thematic

evolution of eco-labelling research. Network maps were generated with thresholds set to ensure meaningful visualization (e.g., a minimum number of documents per author or keyword). Clustering techniques within VOSviewer enabled the identification of thematic groups, providing insight into the dominant and emerging research areas within the field.

3. RESULTS AND DISCUSSION

Co-Authorship Analysis



VOSviewer

Figure 1. Author Visualization

Source: Data Analysis

The visualization shown in Figure 1 is a co-citation network map of authors generated using VOSviewer, representing the intellectual structure of eco-labelling research. Each node represents an author, and the size of the node indicates the frequency with which that author has been co-cited in the dataset. The lines connecting the nodes represent co-citation relationships, while the color-coded clusters indicate thematic groupings or research communities. Notably, Teisl M.F., Thøgersen J., Cashore B., and Tyedmers P. appear as central figures within their respective clusters, suggesting their foundational influence in different thematic domains. For example, the red cluster centered on Thøgersen J. and Ajzen I. likely focuses on consumer behavior and psychology in relation to eco-labelling, while the green cluster involving Teisl M.F. and Loureiro M.L. may be linked to environmental economics and market-based instruments. The purple and yellow clusters, centered on Cashore B. and Tyedmers P. respectively, seem to represent governance

and sustainability assessments in seafood and fisheries.

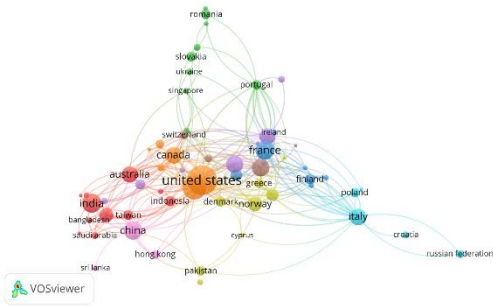


Figure 2. Country Visualization
Source: Data Analysis

The visualization in figure 2 presents a co-authorship network by country in the field of eco-labelling research, generated using VOSviewer. Each node represents a country, with the size of the node indicating the number of publications affiliated with that

country, and the links reflecting the intensity of international collaboration. The United States emerges as the most central and influential node, suggesting its dominant role in global eco-labelling research and extensive collaboration with other countries such as Canada, China, France, Italy, and Australia. The network is divided into several clusters, each indicating a regional or thematic collaboration pattern. For instance, India, China, and Taiwan form a cluster that reflects strong regional cooperation within Asia, while Italy, Poland, and Finland are grouped within a European-centric cluster. The United Kingdom is notably absent from the central positions, possibly due to lower relative publication volume or weaker co-authorship links in the dataset.

Citation Analysis

Table 1. Top Cited Literature

Citations	Authors	Title
608	[14]	The influence factors on choice behavior regarding green products based on the theory of consumption values
319	[15]	Determinants of demand for green products: An application to eco-label demand for fish in Europe
305	[6]	The influence of eco-labelling on consumer behaviour - Results of a discrete choice analysis for washing machines
300	[16]	Limits to labels: The role of eco-labels in the assessment of product sustainability and routes to sustainable consumption
271	[17]	Empirical influence of environmental management on innovation: Evidence from Europe
245	[18]	Not all salmon are created equal: Life cycle assessment (LCA) of global salmon farming systems
237	[19]	Food packaging and sustainability – Consumer perception vs. correlated scientific facts: A review
223	[20]	The Politics of Multi-Stakeholder Initiatives: The Crisis of the Forest Stewardship Council
207	[21]	Consumers’ purchase behaviour and green marketing: A synthesis, review and agenda
193	[22]	Eco-Labeling Strategies and Price-Premium: The Wine Industry Puzzle

Source: Scopus, 2025

Keyword Co-Occurrence Analysis

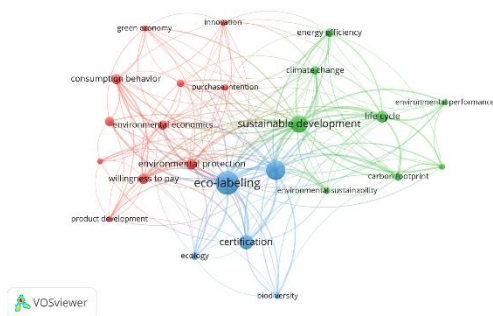


Figure 3. Network Visualization

Source: Data Analysis

The visualization in Figure 3 illustrates a keyword co-occurrence network in eco-labelling research. Each node represents a keyword extracted from the dataset, with the size indicating its frequency of appearance, and the connections reflecting co-occurrence relationships across publications. The keywords are grouped into distinct color-coded clusters, which represent major thematic domains in the literature. The central position of the keyword “eco-labeling” signifies its foundational role, closely linked with other core concepts such as “sustainable development,” “certification,” and “environmental protection.” These connections confirm that eco-labelling is consistently framed within broader discussions of environmental governance and sustainability.

The red cluster represents research focused on consumer behavior and economic perspectives. Keywords such as “consumption behavior,” “willingness to pay,” “purchase intention,” and “environmental economics” dominate this cluster, indicating that a significant body of literature investigates how consumers perceive, value, and respond to eco-labels in market contexts. This thematic group is often concerned with behavioral economics and marketing, analyzing factors that influence eco-conscious purchasing and the effectiveness of labeling schemes in shaping demand for green products. The green cluster centers around environmental performance and sustainability metrics. Terms like “sustainable development,” “life cycle,” “carbon footprint,” “energy efficiency,” and “climate change” suggest a strong connection

between eco-labelling and environmental impact assessment. Research in this cluster tends to evaluate the measurable outcomes of eco-label adoption in terms of emissions reduction, resource efficiency, and climate mitigation. This reflects a growing emphasis on integrating eco-labelling with life cycle assessment (LCA) methodologies and aligning product standards with global sustainability goals such as the Paris Agreement and SDGs.

The blue cluster is predominantly concerned with institutional and ecological frameworks, featuring keywords like “certification,” “biodiversity,” “ecology,” and “environmental sustainability.” Studies in this domain explore the role of certification systems in enforcing environmental standards, ensuring ecological integrity, and promoting biodiversity conservation. This cluster often includes interdisciplinary research spanning environmental science, governance, and policy studies. It highlights the role of third-party verification and institutional trust in legitimizing eco-labels as credible signals of environmental responsibility.

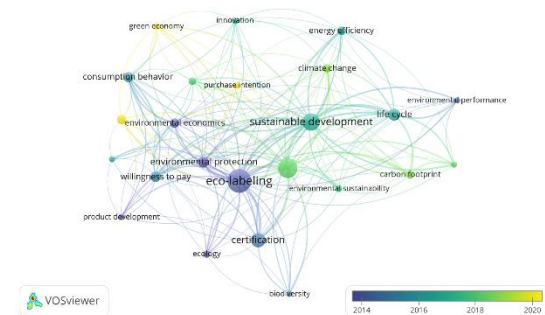


Figure 4. Overlay Visualization

Source: Data Analysis

The figure 4 above presents an overlay visualization of keyword co-occurrence in eco-labelling research using VOSviewer, with color gradients indicating the average publication year of each keyword. Nodes closer to blue and purple hues represent earlier topics (circa 2014–2016), while green to yellow hues highlight more recent and emerging keywords (2018–2020). The central keyword “eco-labeling” remains dominant across the timeline, serving as a foundational term that bridges older and

newer thematic developments. Its close association with “certification,” “environmental protection,” and “willingness to pay” reflects earlier scholarly efforts focused on regulatory mechanisms and consumer response.

The emergence of “sustainable development” as a bright green node signifies its growing relevance in recent years, likely due to alignment with the United Nations Sustainable Development Goals (SDGs), particularly SDG 12 on responsible consumption and production. Similarly, newer keywords like “green economy,” “innovation,” and “purchase intention”, shown in yellow, indicate a research shift toward market dynamics, behavioral insights, and policy innovation. These topics reflect the evolving understanding of eco-labelling not just as a regulatory tool but also as a strategic instrument for promoting green consumerism and sustainability-driven innovation. In contrast, keywords such as “ecology,” “biodiversity,” and “certification” remain in darker hues, suggesting that these themes were central in earlier stages of eco-labelling research. Their relatively limited appearance in recent studies may indicate either a saturation of research in those areas or a shift in scholarly interest toward socio-economic and policy-oriented themes.

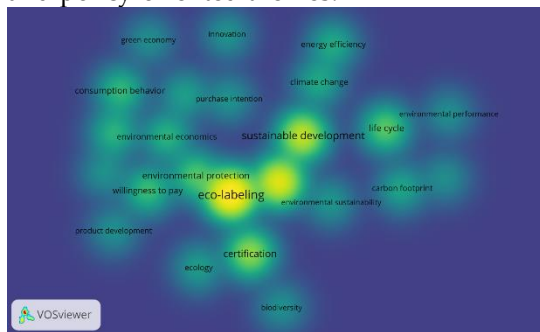


Figure 5. Density Visualization
Source: Data Analysis

The Figure 5 displays a density visualization of keyword co-occurrence in eco-labelling research, generated using VOSviewer. In this map, colors range from blue (low density) to yellow (high density), indicating the frequency and intensity with which keywords appear and co-occur across the dataset. The keyword “eco-labeling”

stands out at the center with the highest density, highlighted in bright yellow, confirming its pivotal role as the central research theme. Closely clustered around it are frequently co-occurring terms such as “environmental protection,” “sustainable development,” “certification,” and “willingness to pay,” suggesting that these topics consistently appear together in eco-labelling literature. Surrounding areas with moderate to low density shown in green and blue include emerging or specialized topics such as “green economy,” “purchase intention,” “climate change,” and “biodiversity.” While these terms are relevant, their lighter intensity indicates that they are either less frequently explored or appear more peripherally within the literature.

DISCUSSION

This study aimed to systematically map the intellectual and thematic landscape of eco-labelling research using bibliometric analysis and visualization techniques via VOSviewer. The results provide valuable insights into the structure, development, and evolution of the field over the last two decades. Several key patterns emerged from the analysis, highlighting dominant research streams, influential contributors, collaborative geographies, and shifting topical interests. These findings not only reflect the current state of eco-labelling scholarship but also identify critical gaps and future opportunities.

The author co-citation network revealed five major clusters representing the diverse intellectual traditions contributing to eco-labelling research. Notably, scholars such as Teisl M.F., Thøgersen J., and Cashore B. emerged as central figures in their respective thematic domains. Teisl’s work primarily connects to environmental economics and policy evaluation of eco-labelling schemes, while Thøgersen is widely cited for his contributions to consumer psychology and pro-environmental behavior. Cashore, on the other hand, is closely associated with governance, institutional analysis, and certification systems. These influential

authors represent different epistemological anchors (economic, behavioral, and political) that together form the interdisciplinary nature of the field. The network's dense interconnections also reflect strong cross-citation, suggesting that eco-labelling research is intellectually cohesive despite its thematic diversity.

The country co-authorship network further underscores the global distribution and collaboration patterns in eco-labelling studies. The United States leads in both publication volume and connectivity, acting as a hub of international scholarly exchange. Countries like France, Italy, China, India, and Canada also exhibit significant contributions and cross-border collaborations. Interestingly, the data reveal a noticeable presence of European countries, especially within the green and blue clusters, reflecting the continent's policy leadership in environmental certification and sustainable product standards. Meanwhile, emerging economies such as India, Indonesia, and Bangladesh are increasingly participating in the eco-labelling discourse, often in collaboration with established institutions from the Global North. This pattern highlights both a diversification of research geographies and the growing importance of South–North knowledge partnerships in sustainability-related studies.

The keyword co-occurrence analysis offered critical insight into the thematic structure of the literature. Three dominant clusters were identified. The first cluster, largely colored red in the visualizations, revolves around consumer behavior, willingness to pay, purchase intention, and environmental economics. This line of inquiry focuses on how eco-labels influence individual decision-making and market behavior. Numerous studies in this area apply behavioral theories (e.g., the Theory of Planned Behavior) to understand determinants of green purchasing and the psychological mechanisms underlying trust in eco-labels [23], [24]. The consistency and density of this cluster reflect its foundational role in validating the function and

effectiveness of eco-labels in influencing consumer demand.

The second cluster, marked in green, is conceptually centered around sustainable development, life cycle assessment, climate change, energy efficiency, and carbon footprint. This reflects the growing integration of eco-labelling within broader sustainability assessment frameworks. Recent studies have explored how eco-labels relate to environmental performance metrics, including carbon labeling and life cycle sustainability assessments (LCAs). These themes signal a methodological advancement in the field, moving beyond perception-based assessments to performance-based evaluations. The appearance of keywords such as “climate change” and “environmental performance” also reflects the alignment of eco-labelling with global climate goals and reporting standards.

The third cluster, colored in blue, is associated with certification systems, environmental protection, biodiversity, and ecology. This thematic group reflects the institutional and ecological dimensions of eco-labelling. Topics such as third-party certification, governance mechanisms, standard-setting bodies (e.g., ISO, FSC, MSC), and the ecological effectiveness of labeling schemes are central to this stream. Studies within this cluster often address the legitimacy and credibility of eco-labels, focusing on how governance structures influence stakeholder trust and compliance. The presence of terms like “biodiversity” and “ecology” also indicates ongoing debates on how eco-labels can support broader conservation goals, particularly in sectors such as fisheries, forestry, and agriculture.

The temporal overlay visualization revealed a clear evolution of research themes over time. Earlier studies (2014–2016), represented in darker hues, focused heavily on foundational topics such as certification, ecology, and willingness to pay. These themes laid the groundwork by establishing the credibility and market relevance of eco-labels. In contrast, more recent studies (2018–2020), shown in green and yellow, demonstrate a

shift toward emerging areas such as sustainable development, innovation, green economy, and climate-related performance metrics. This transition suggests a growing maturity of the field and its adaptation to broader sustainability and digital transformation agendas. It also reflects the increasing incorporation of eco-labelling within global frameworks such as the SDGs, carbon pricing, and ESG (Environmental, Social, Governance) reporting.

Complementing this, the density visualization confirms that eco-labelling research remains highly concentrated around core themes such as “eco-labeling,” “sustainable development,” “certification,” and “willingness to pay.” The intense yellow areas represent the most frequently co-occurring concepts, indicating a sustained academic interest in the interplay between eco-labelling and consumer response, as well as its linkage with institutional and policy mechanisms. However, the relatively lower density of terms such as “innovation,” “product development,” and “green economy” suggests that these potentially rich areas are still underexplored, presenting opportunities for future inquiry.

These findings have several important implications. First, the field is clearly interdisciplinary, drawing from economics, behavioral science, political science, and environmental studies. This convergence has enriched the literature but also demands greater integration of theoretical frameworks and empirical approaches to avoid fragmentation. Second, the dominance of consumer-focused research signals the need to expand analytical attention toward producers, regulators, and supply chain actors. Understanding how businesses adopt and respond to eco-labelling, especially in developing economies, is critical for creating more inclusive and effective labeling systems. Third, the expansion of themes toward sustainability metrics and performance evaluation indicates a methodological shift that could benefit from the adoption of big data, AI, and digital

traceability tools to improve label accuracy and transparency.

Additionally, the geographic distribution of research points to opportunities for strengthening South–South collaborations and amplifying perspectives from the Global South, where eco-labelling is increasingly deployed in export industries such as fisheries, textiles, and agriculture. These regions often face unique challenges in certification access, institutional capacity, and consumer literacy. Addressing these issues through context-specific studies can enrich global understanding and inform more equitable eco-labelling frameworks. There is also a clear need to examine policy harmonization and the future of eco-labelling in the digital age. With the proliferation of labels and overlapping schemes, issues of label fatigue and consumer confusion are on the rise (Delmas & Grant, 2014). Future research should explore how digital platforms, QR codes, and blockchain can support next-generation eco-labelling systems that are more interactive, verifiable, and integrated into broader sustainability governance infrastructures.

4. CONCLUSION

This study has mapped the landscape of eco-labelling research through a comprehensive bibliometric analysis using VOSviewer, uncovering the field’s intellectual structure, thematic evolution, and collaborative networks. The findings reveal that eco-labelling is a multidisciplinary domain anchored in environmental economics, consumer behavior, sustainability science, and institutional governance. Central themes such as “eco-labeling,” “sustainable development,” and “certification” continue to dominate the discourse, while emerging topics like innovation, green economy, and climate change indicate a shift toward broader sustainability agendas. The co-authorship and co-citation analyses highlight the pivotal role of scholars and countries like the United States, Italy, and France in shaping the field. While significant progress has been made in

understanding consumer responses and policy frameworks, there remains a need to expand research into underexplored areas such as producer behavior, technological innovation, and the integration of eco-labelling into digital platforms and global

value chains. Ultimately, this bibliometric study provides a strategic overview that not only synthesizes past developments but also guides future research directions to enhance the credibility, impact, and inclusivity of eco-labelling as a sustainability tool.

REFERENCES

- [1] C. C. Erskine and L. Collins, "Eco-labelling: success or failure?," *Environmentalist*, vol. 17, no. 2, pp. 125–133, 1997.
- [2] M. Wojnarowska, M. Sołtysik, and A. Prusak, "Impact of eco-labelling on the implementation of sustainable production and consumption," *Environ. Impact Assess. Rev.*, vol. 86, p. 106505, 2021.
- [3] L. H. Gulbrandsen, "Creating markets for eco-labelling: Are consumers insignificant?," *Int. J. Consum. Stud.*, vol. 30, no. 5, pp. 477–489, 2006.
- [4] C. Bratt, S. Hallstedt, K.-H. Robèrt, G. Broman, and J. Oldmark, "Assessment of eco-labelling criteria development from a strategic sustainability perspective," *J. Clean. Prod.*, vol. 19, no. 14, pp. 1631–1638, 2011.
- [5] F. Rubik and P. Frankl, *The future of eco-labelling: Making environmental product information systems effective*. Routledge, 2017.
- [6] K. Sammer and R. Wüstenhagen, "The influence of eco-labelling on consumer behaviour—Results of a discrete choice analysis for washing machines," *Bus. Strateg. Environ.*, vol. 15, no. 3, pp. 185–199, 2006.
- [7] A. Markandya, "Eco-labelling: An introduction and review," in *Eco-labelling and international trade*, Springer, 1997, pp. 1–20.
- [8] R. Gertz, "Eco-labelling—a case for deregulation?," *Law, Probab. Risk*, vol. 4, no. 3, pp. 127–141, 2005.
- [9] A. Mattoo and H. V. Singh, "Eco-labelling: Policy considerations," *Kyklos*, vol. 47, no. 1, 1994.
- [10] M. Thrane, F. Ziegler, and U. Sonesson, "Eco-labelling of wild-caught seafood products," *J. Clean. Prod.*, vol. 17, no. 3, pp. 416–423, 2009.
- [11] R. Piotrowski and S. Kratz, "Eco-labelling in the globalised economy," in *Challenges of globalization*, Routledge, 2017, pp. 217–237.
- [12] N. Donthu, S. Kumar, D. Mukherjee, N. Pandey, and W. M. Lim, "How to conduct a bibliometric analysis: An overview and guidelines," *J. Bus. Res.*, vol. 133, pp. 285–296, 2021.
- [13] N. Van Eck and L. Waltman, "Software survey: VOSviewer, a computer program for bibliometric mapping," *Scientometrics*, vol. 84, no. 2, pp. 523–538, 2010.
- [14] P.-C. Lin and Y.-H. Huang, "The influence factors on choice behavior regarding green products based on the theory of consumption values," *J. Clean. Prod.*, vol. 22, no. 1, pp. 11–18, 2012.
- [15] D. Brécard, B. Hlaimi, S. Lucas, Y. Perraudau, and F. Salladarré, "Determinants of demand for green products: An application to eco-label demand for fish in Europe," *Ecol. Econ.*, vol. 69, no. 1, pp. 115–125, 2009.
- [16] R. E. Horne, "Limits to labels: The role of eco-labels in the assessment of product sustainability and routes to sustainable consumption," *Int. J. Consum. Stud.*, vol. 33, no. 2, pp. 175–182, 2009.
- [17] M. Wagner, "Empirical influence of environmental management on innovation: Evidence from Europe," *Ecol. Econ.*, vol. 66, no. 2–3, pp. 392–402, 2008.
- [18] N. Pelletier *et al.*, "Not all salmon are created equal: life cycle assessment (LCA) of global salmon farming systems." ACS Publications, 2009.
- [19] S. Otto, M. Strenger, A. Maier-Nöth, and M. Schmid, "Food packaging and sustainability—Consumer perception vs. correlated scientific facts: A review," *J. Clean. Prod.*, vol. 298, p. 126733, 2021.
- [20] S. Moog, A. Spicer, and S. Böhm, "The politics of multi-stakeholder initiatives: The crisis of the Forest Stewardship Council," *J. Bus. Ethics*, vol. 128, pp. 469–493, 2015.
- [21] A. P. Sharma, "Consumers' purchase behaviour and green marketing: A synthesis, review and agenda," *Int. J. Consum. Stud.*, vol. 45, no. 6, pp. 1217–1238, 2021.
- [22] M. A. Delmas and L. E. Grant, "Eco-labeling strategies and price-premium: the wine industry puzzle," *Bus. Soc.*, vol. 53, no. 1, pp. 6–44, 2014.
- [23] S. Dekhili and M. Akli Achabou, "Eco-labelling brand strategy: Independent certification versus self-declaration," *Eur. Bus. Rev.*, vol. 26, no. 4, pp. 305–329, 2014.
- [24] H. W. So and R. Laforteza, "Reviewing the impacts of eco-labelling of forest products on different dimensions of sustainability in Europe," *For. policy Econ.*, vol. 145, p. 102851, 2022.