

# Green innovation and environmental reputation: a bibliometric and research future avenue

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**Abstract.** Environmental reputation received many attentions in light with worldwide efforts to preservation with a focus on enhancement of environmental strategy throughout green technology. This study mapped 69 peer-reviewed articles in the Scopus database from 2003 to 2024. The results demonstrate nine prominent clusters that are significant references for future researchers in identifying organizations' pursuits of green innovation toward environmental reputation. The nine clusters are green innovation capability, sustainability, environmental legitimacy, environmental regulation, social capital, firm reputation, environmental governance, human resources, and impression management. The implications of the study are elaborated further.

## 1 Introduction

Environmental preservation has garnered attention in the last two decades for being a critical matter in various spheres of life. For this reason, stakeholders are demanded to develop environmentally oriented strategies, behaviors, and views [1,2]. Consequently, all industries are striving to design environmentally friendly strategies and procedures that are embedded in routine activities such as green innovation [3,4] and strategic environmental to establish environmental performance and promote organizational reputation [5].

Empirical studies have highlighted efforts to preserve the environment in multiple industry sectors, such as manufacturing [6], SMEs [7,8], and hospitality [9]. Nevertheless, the literature on the hospitality industry merely centers on the consumer level [10]. Thus, relatively limited literature illuminates internal organizational perspectives on responding to environmental issues [3,11]. Meanwhile, the hospitality industry directly contributes to environmental problems regarding water, energy, and waste [12].

This study fills the subsequent gaps. First, green innovation is a fundamental pillar of building sustainable performance and competitiveness [13].

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However, the literature still overlooks the role of green innovation on environmental performance [14]. Second, green innovation has not been examined as a driver of environmental reputation [5]. Meanwhile, environmental preservation is contingent on organizational performance [15] in devising various environmentally friendly strategies and green innovation [16]. Accordingly, it is imperative to conduct literature mapping to provide direction for future study, promote organizational involvement in preserving the environment, and establish a green reputation.

## **2 Methods**

### **2.1 Protocols and analysis**

To attain the study objectives, the literature review comprised three primary steps. First, two keywords, “green innovation” and “environmental reputation,” were identified as the baseline for data collection. Second, the data was collected using the research information system “ris\*” (research information system) from Scopus to ensure the quality of the selected articles that were subsequently fed to the reference manager [17, 18]. Third, we collected a total of 69 articles, which showed that both keywords were considered relatively few, indicating the novelty of this topic. Finally, by determining the abstracts and keywords, it was analyzed to obtain the mapping of relevant research. Furthermore, to realize the data analysis according to the protocol, VOS Viewer 1.16.36 was employed for several reasons. First, we mapped abstracts, keywords, and relevant research. Second, it maps publication maps, countries, relevant journals, and field areas [19, 20].

## **3 Result and discussion**

### **3.1 Descriptive analysis**

Drawing from 69 articles from 1998-2024, the topic is relatively new in literature of sustainability. Thus, the phenomena increasing the possibilities to research in the future. Figure 1 depicts the journal venue that published the topic but the focus is remaining limited. Journal of Cleaner Production (24 articles), Energy Economics (4), Industrial Marketing Management (3), Journal of Environmental Management (3), Economic Modelling (2), Transportation Review (2), Transportation Research (2), Technological Forecasting and Social Change (2), Business Horizons (2), International Review of Economics & Finance (2), International Review of Financial Analysis (2), Heliyon (2), and followed by several journals that published only one article (Figure 2). In terms of area, the majority of contributions come from Energy (35), Environmental Science (32), Economics, Econometrics and Finance (19), Business, Management and Accounting (16), Decision Sciences (9), Social Sciences (8), Engineering (3), and 1 article from other fields.

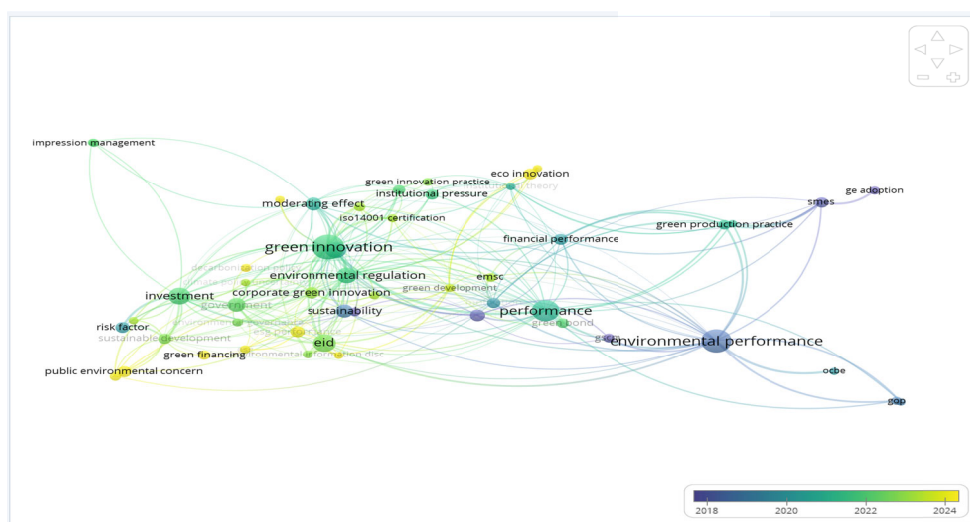




Subsequently, the results of the overlay visualization reveal that the most researched topics in 2018 are sustainability, environmental performance, and GE adoption. In 2020, research weighed more on risk factors, performance, green product practice, and financial performance.

The 2022 research highlights green innovation, environmental regulation, institutional pressure, and investment. From 2022 to 2024, many studies were conducted on EID, sustainable development, corporate green innovation, EMSC, green development, green innovation practice, climate policy uncertainty, ESG performance, green financing, public environmental concern, and ECO innovation. Meanwhile, the topic of green innovation is extensively researched in 2022.

Therefore, from the context of sophistication, green innovation is an essential topic as a foundation for establishing sustainability [3,4,39,40]. The increasing comprehension of managers concerning green innovation practices is anticipated to create transformations aligned with environmental preservation efforts [31,41]. An overview of research topics is represented in Figure 4.



**Fig. 3.** Map of overlay visualization.

The density visualization results display that green innovation is a research topic with the brightest density, implying that this topic is heavily researched, followed by EID, environmental regulation, performance, and environmental performance.

Topics that are rarely researched are indicated by the density that is not too bright, including impression management, public environmental concern, OCBE, GOP, GE adoption, green production practice, green financing, green development, financial performance, ECO innovation, sustainable development, green innovation practice, institutional pressure.



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