

The Green Economy Concept: A Guide for Future Economic Policy, Research, and Activity

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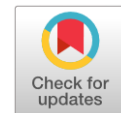
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Abstract

Short-term economic interest mostly neglects environmental concerns, resulting in continuous harmful impacts, including climate change. In response, the concept of green economy, which balances these conflicting interests, has attracted increasingly significant research attention. However, the green economy concept remains biased and vague. This study offers a novel contribution by systematically mapping the post-2016 evolution of the green economy concept, utilizing descriptive network analysis on a dataset of 11,301 Scopus-indexed articles to resolve prevailing definitional fragmentation. The study finds three main elements in the definitions offered: economic, environmental, and social, and highlights the multifaceted nature of trade-offs or synergies among these clusters. Consequently, the study defines the green economy concept as an economic philosophy, idea, and activity based on the principles of preserving the environment, enhancing public welfare, and maintaining social equity within and among generations. Theoretically, this consolidates the fragmented literature; practically, it provides a standardized framework for policymakers to design consistent green economy indicators and tracking mechanisms for future economic activity.

Keywords: Green Economy, Economic, Environmental, Social, and Systematic Literature Review

JEL Classification: A12, A13, and B22

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Introduction

There was a surge in support for the idea of a green economy after the 2007–2008 worldwide financial and economic crisis. Academics have argued about the green economy and its features for over fifty years (Pearce et al., 1989; Jacobs, 1991),

therefore the idea is not new. Nevertheless, lawmakers seemed unconcerned with this preliminary study. How does the idea, position, and link of the green economy relate to social and environmental justice? This is the most important issue at the heart of the ever-changing categorization of the green economy's relationship with sustainable development. When discussing models of transitional development, equity must always take precedence (Reiff, 2013). Efforts to create a more environmentally friendly economy should be considered throughout this change, as should the potential effects on and opportunities for general fairness.

The green economy policy transition needs measurement and an indicator-based framework that clarifies green economy implementation. The Green Growth Knowledge Platform (GGKP) (2013) emphasizes the important role of monitoring economic possibilities and transitions related to the green economy, as well as evaluating the instruments and policy restrictions associated with the green economy agenda. Furthermore, the United Nations (2014) emphasizes the significance of agreed-upon norms and boundaries for the green economy. Therefore, the scope aspect must be evaluated in light of the concept of the green economy.

Research by Basthiani and Pangestuti (2024) and Hariyono, Hidayati & Suharto (2025) establishes green economy restrictions via analysis and definition of green economy principles. Future research on the effects of a green economy is discussed in the article (Basthiani & Pangestuti, 2024). An attempt to shed fresh light on the "green economy" is the stated goal of this research, which makes use of a systematic literature review (SLR) approach (Lestari, 2025). In order to do this, this study aims to discover worldwide implementation strategies for a green economy (Akbar, 2024).

The use of an SLR for this study aims to look at empirical evidence related to several aspects contained in the green economy concept (Lestari, 2025). This makes it possible to compare the results of the findings of other researchers to identify similarities, connections, differences, and gaps that allow for further research. A thorough examination of the green economy and its evolution process is important and required (Basthiani & Pangestuti, 2024). This study examines many modalities and evolutionary trajectories of the green economy. Thus, it provides a solid theoretical foundation for a more relevant and comprehensive conceptual framework of green economy that is required in implementing green economy policy, research, and activity to build a new ecological civilization (Sumra, Iftikhar, Omerkhel, & Siddique, 2025).

The parts that follow are the meat and potatoes of this essay. Section 2 lays the theoretical groundwork for green economic concepts. Section three details the methodology (literature-based analysis) used to probe the issue. The findings and analysis are presented in the fourth part. Suggestions for future agendas are provided in the concluding portion of the article.

Literature Review

In the late 1980s, Pearce et al., (1989) released their seminal work "Blueprint for a Green Economy," which introduced the idea of a green economy. The report urged the British government to incorporate the term "sustainable development" and study its effects on economic performance evaluations and program assessments. There is a lack of clarity in the "Blueprint for a Green Economy" on the meaning of a green economy."

Jacobs (1991) made the first attempt to describe a green economy in his book *The Green Economy*, where he established the identification of the term through a

rigorous theoretical explanation of the ideology and academic discipline of the green economy. Pearce published *Blueprint 2: Greening the World Economy* (1991) and *Blueprint 3: Measuring Sustainable Development* (1994), respectively. In these two publications, Pearce developed the first blueprint for a green economy, focusing on climate change, ozone depletion, tropical deforestation, and the degradation of natural resources to support environmental laws.

However, the concept of a green economy practically disappeared during the 1990s and early 2000s, and it was barely addressed in scientific literature. In 2008, more than two decades after the blueprint was published, the principles of a green economy include: recognizing the value of natural resources and investing in them, increasing the efficiency of resource and energy use, encouraging low-emission and sustainable lifestyles, diverting the use of fossil fuels to renewable and low-emission energy, growing faster while conserving natural resources, reducing poverty, boosting employment, and promoting social equity.

Several authors have proposed a model for the economy of the future called the "green economy" (Georgeson et al., 2017; Barbier, 2012; Bowen et al., 2009). At a time when the world economy was in shambles due to the financial crisis and recession worries, UNEP spearheaded green stimulus packages and identified sectors where massive public investments might embrace green economy practices (AtKisson, 2012). This has led to many governments' efforts at economic recovery including massive "green stimulus" projects.

In the years following the 2008 financial crisis, The green economy idea became quite popular. The notion of the green economy was once again the topic of major debate when the World Bank and the OECD energetically pushed it worldwide. The OECD's dedication to creating and executing the green economy idea is seen in its 2009 Green Growth Declaration and 2011 Green Growth Strategy Package. These two documents became widely regarded reports that served as the foundation for the development of the green economy idea in numerous nations.

Continuous development has an impact on human life and natural resources. This has failed in social and environmental areas, despite evidence that it stimulates the economy. An example is the annual growth in greenhouse gas emissions and the decrease in forest acreage. In addition to physical and social progress, economic development also takes into account the environmental element's sustainability. Many people believe that a green economy may help us solve our present challenges. In its 2008 report, UNEP argues that a green economy may help reduce environmental dangers and ecological shortages while simultaneously improving human well-being and social justice.

The definition of a green economy is typically defined as having a broad reach (Bigg, 2011; Loiseau et al., 2016), being ambiguous (Jänicke, 2012), and sparking disputes (PEP, 2012; Jakob & Edenhofer, 2014; Faccar et al., 2014; Buset, 2017; Speck & Zoboli, 2017). Economists disagree on what exactly constitutes a "green economy," and some point to the idea's conceptual flaws as the reason why (Georgeson et al., 2017; Merino-Saum et al., 2020). Still other people think that the green transition's current political issues are to blame for the conceptual ambiguity, and they point out that there are disparities in global governance of the green economy as an example (Brown et al., 2014).

A paradigm for lowering poverty, increasing economic development, and lessening the effects of climate change, the green economy has been touted since 2012.

According to UNEP (2011a), there is a strong correlation between the green economy and sustainable development. But other researchers whose work overlapped with this one were quite critical of this approach. The first issue is that some scholars think sustainable development is too broad and hard to implement, which would make it hard to implement a green economy (Borel-Saladin & Turok, 2013). One tool for attaining sustainable development is the green economy. Rather than being seen as a substitute for sustainable development, the green economy should be seen as a supplement (OECD, 2011). Thirdly, there is no difference between sustainable development and the green economy. You may use either phrase interchangeably, say these people. Halle (2011) argues that sustainable development has been renamed to the green economy. Also, as Abaza et al. (2011) show, there is nothing new about sustainable development that a green economy brings to the table.

An obvious connection to sustainable development and the idea of a green economy as a growth tool that combines economic advantages with environmental and social outcomes are two points on which international organizations have reached an agreement regarding the concept of a green economy (Speck & Zoboli, 2017). According to Facer et al. (2014), there are three distinct viewpoints on the green economy. One is the incrementalist viewpoint, which is pro-growth, prioritizes technology, uses market-based tools heavily, and ignores environmental boundaries. The second is the reformist viewpoint, which also considers technology central, sees economic growth as non-negotiable, but sees conflicts between growth and protecting the environment. Lastly, there is the transformative viewpoint, which stresses a paradigm change from growth to protecting the environment.

Method

In this study, we conduct an SLR to assess the impact of the green economy concept. An SLR can be described as the location, synthesis, assessment, and combination of results of existing studies on a particular topic (Fink, 2019). The process involves identifying, evaluating, and interpreting all available articles to provide answers to specific research questions (Kitchenham, 2007; Staples & Niazi, 2007).

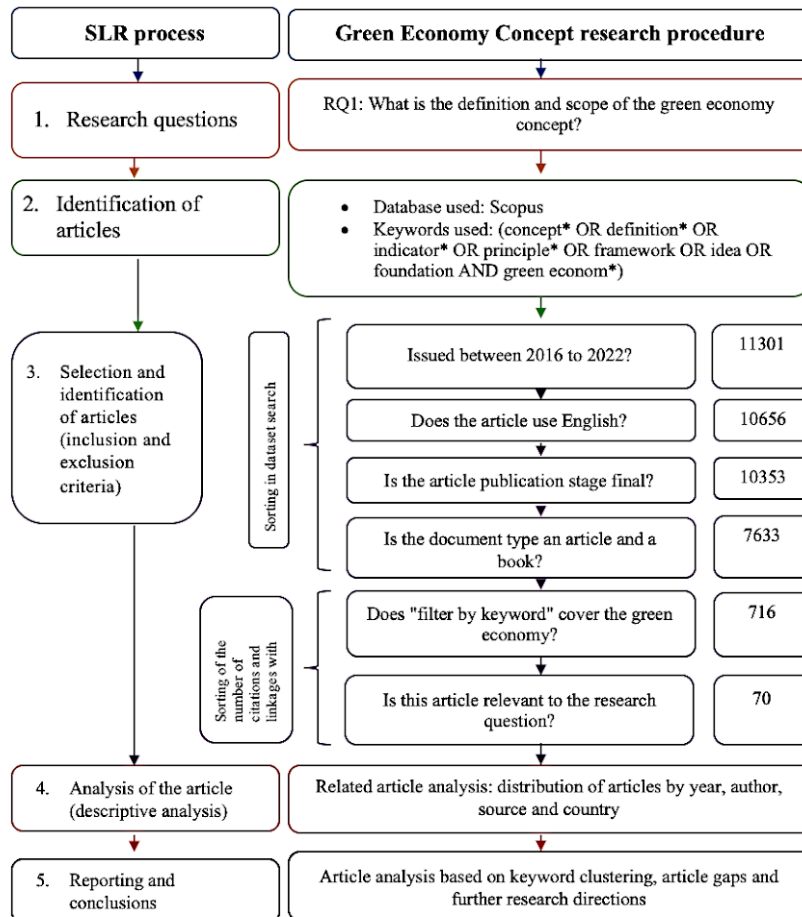
The study's sample dataset was obtained through SLR because it is the method uniquely capable of identifying the data required to determine how the concept of the green economy is evolving in different nations. The procedure is depicted in Figure 1. There are substantial data and capacity constraints that must be surmounted to measure all aspects of the green economy. However, there are reasons to be concerned about the availability of official data assessing the green economy. A lack of data can affect the measurement of progress toward diverse green economy objectives and might lead to reliance on less robust models of such an economy. In this study, we carry out a thorough literature review to identify datasets concerning the green economy.

The accurate sampling and identification of the data from the literature review was ensured by adopting an appropriate methodology (Webster & Watson, 2018). Scopus is one of the world's major databases, indexing scientific journals, books, and conference papers, containing data used by academics, governments, and corporations for their analysis. This study uses a mix of Boolean search and Bibliometric network analysis utilizing various combinations of search phrases related to the notion of the green economy to boost the effectiveness of the sample search. As described by Eck

& Waltman (2014), a bibliometric network consists of the vertices and edges that demonstrate the correlation and strength of the relationships between words. The database uses keywords for sorting sources by title, abstract, and keywords. SLR can randomly rank articles according to the research's keywords; hence, keywords must be determined beforehand to restrict the research's scope. In this study, the keywords used are (concept AND green AND economy). Existing studies use different terms to refer to the concept of the green economy, and the search terms here are broad to reflect this fact: (concept* OR definition* OR indicator* OR principle* OR framework OR idea OR foundation AND green AND econom*).

In the SLR process, articles are selected if the green economy concept is raised. In addition, additional complementary inclusion and exclusion criteria are applied to obtain the best results. Only articles published between 2016 and 2022 are included; the year 2016 is selected as the lower limit as several studies and policies concerning the green economy emerged in the wake of the 2016 Paris Agreement.

Figure 1. Research Procedure



Source: Author

The results obtained from this search yielded 11,301 articles in which the concept of the green economy is discussed. The specified eligibility criteria are employed in the sorting process to ensure the correct studies are selected. The search was limited to articles and reviews indexed in the Scopus database and published in

English. Subsequent sorting is based on the number of interconnections overall and between individual articles. The final sorting step involves reading each study identified in its entirety and sorting the sample according to the extent of their focus on green-economy concepts.

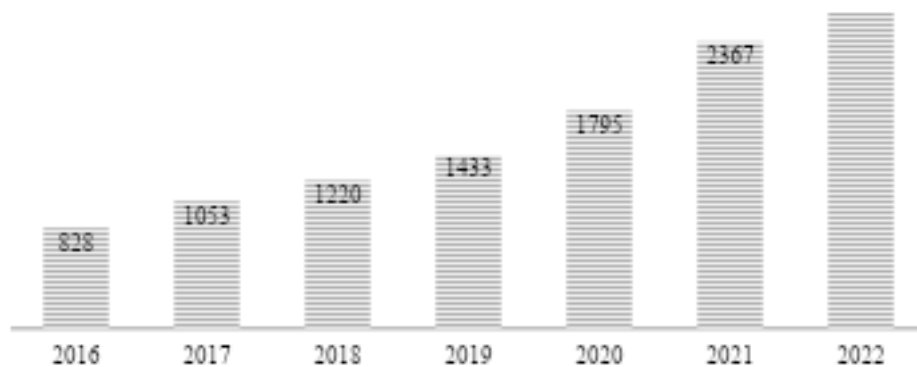
Result and Discussion

Several studies examine the concept to create a clear overview of the green economy and its implementation based on the context previously described. According to several scholars, the concept is typically defined broadly, making its implementation challenging.

Publications on the Topic by Year

The sample shows a fairly dramatic increase in publications on the topic of the green economy between 2016 and 2022, as seen in Figure 2. The most significant increase occurred from 2020 to 2021, with an increase of 31%. This reflects the large number of studies discussing environmental issues as part of the green economy that were conducted during the COVID-19 pandemic. In addition, the availability of data in several countries encouraged further research on this subject.

Figure 2. Publications on Topic by Year

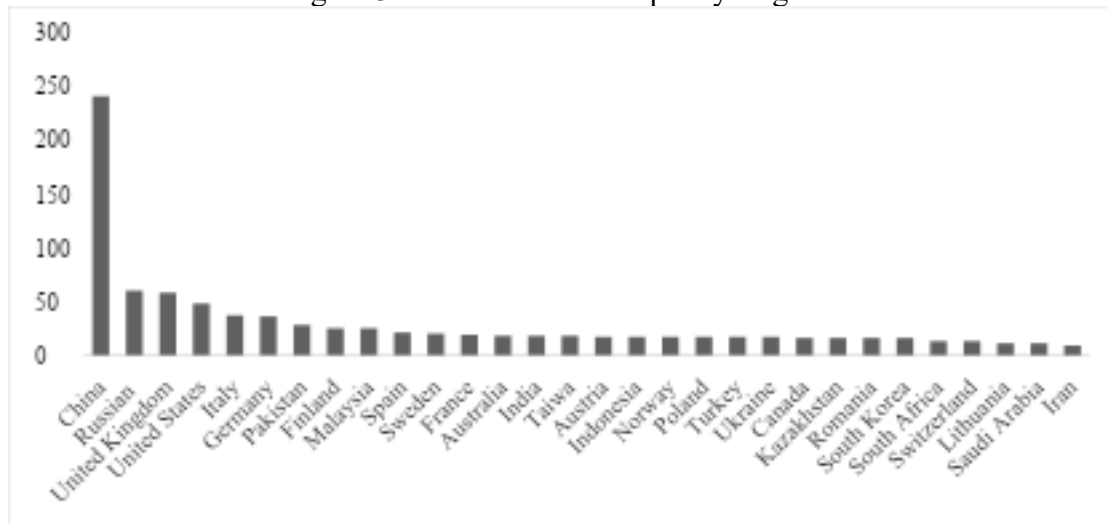


Source: Author

Sample Trends by Region

The descriptive statistics from the samples show that articles on the green economy concept were published in 87 countries. From Figure 3 it can be seen that China accounts for the most research in this field, with a total of 241 articles. There is a big difference between the articles published by China and those published by other countries.

Figure 3. Publications on Topic by Region

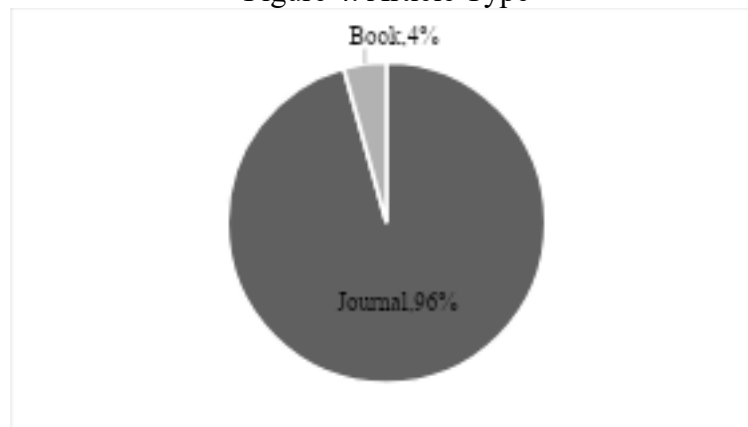


Source: Author

Article Type

From Figure 4 we know that only publications in journals or books are included in our sample. These publication types are considered to have a fairly high level of accuracy and judgment compared to other types. Journals and books are also the sources most frequently consulted by researchers and policymakers.

Figure 4. Article Type



Source: Author

Subjects Covered

According to our assessment, 21 subjects are addressed in the sample publications. Most of the publications listed in Table 1 are journals in fields other than economics. This is due to the connection between economic, environmental, and social issues.

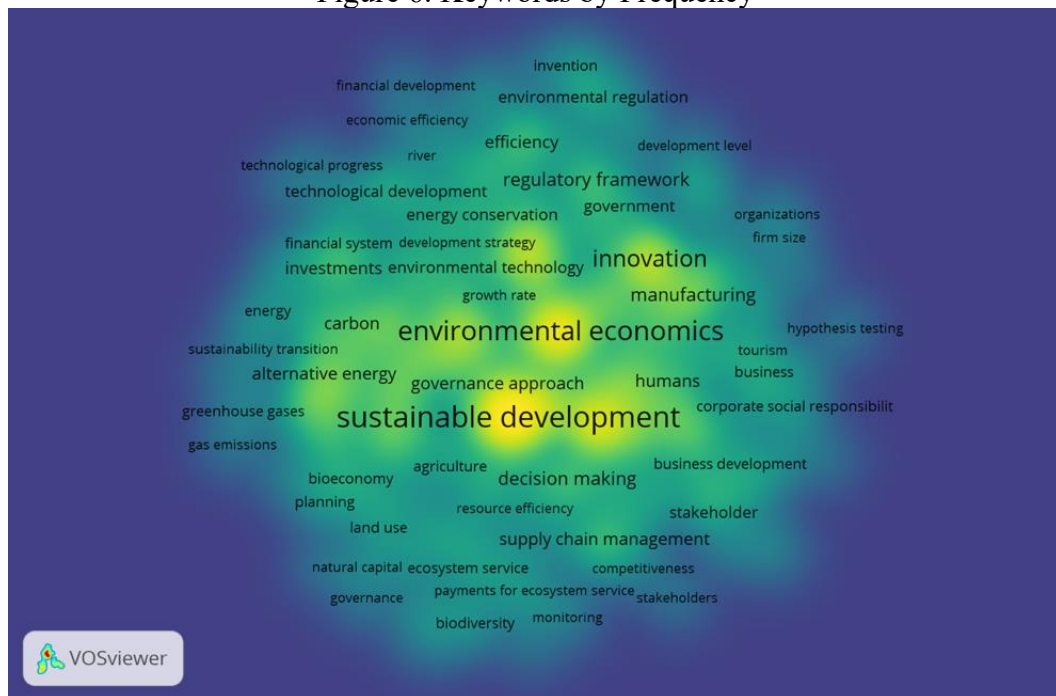
The Green Economy Concept is Too Broad

Guided by the abovementioned understandings and theories, the concept of the green economy continues to evolve, improve, and innovate, deepening the possibilities of its

As a natural consequence, the lines separating the idea of a green economy from other related concepts are blurry and controversial, leading to various interpretations and limiting the concept's applicability and implementation. Many have questioned the distinction between sustainable development and a green economy, even though the OECD and UNEP have made it clear that the two are not interchangeable (OECD, 2011; UNEP, 2011a).

From several references it shows several terms such as "the intellectual cousin of" (Fiorino, 2014), "a key vehicle for," and "the child of" (Jacobs, 2013), "a method to operationalize" (GGKP, 2016), and "a pathway to" (ten Brink, 2012). Depending on the source, sustainable development may be described as either "a support of" (UNDESA, 2012) or "an enabler of" (Georgeson et al., 2017; UNCTAD, 2011). According to these instances, teleological reasoning is often used to describe sustainable development and the green economy, with the former serving as a vehicle to attain the latter. In comparison to sustainable development, the green economy is sometimes portrayed as being "narrower in scope" (OECD, 2011), "more focused" (Brown et al., 2014; Ferguson, 2015), "practical" (Choi, 2015), or "operational" (GGKP, 2016).

Figure 6. Keywords by Frequency



Source: Author

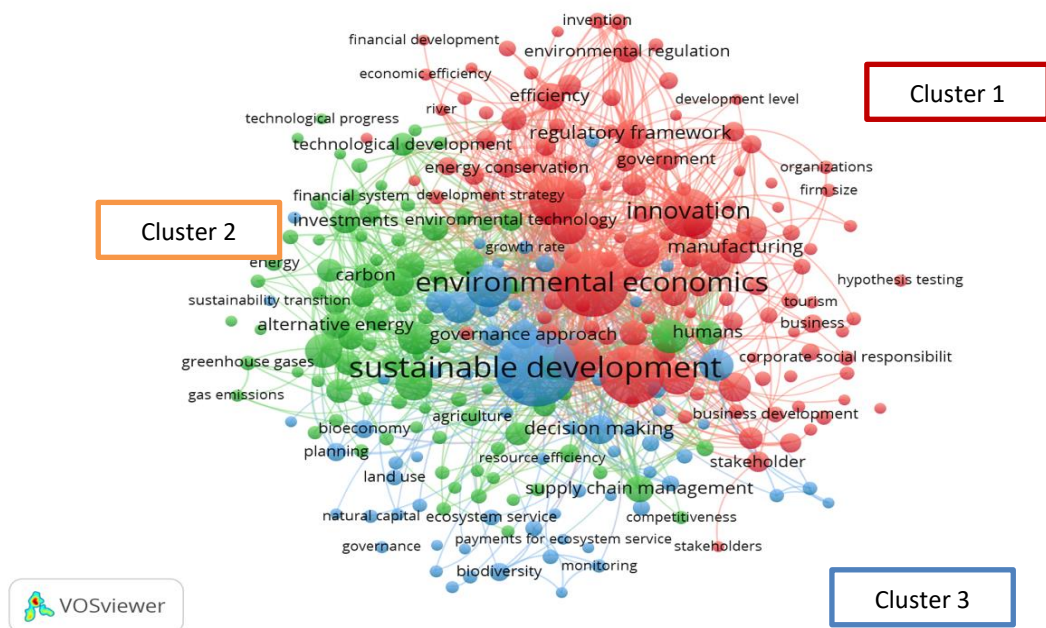
The Green Economy Considers Environmental, Economic, and Social Factors

The factors that play a major role in the concept of the green economy can be captured using the umbrella concepts put forward by Hirsch & Levin (1999) that cluster terms with something in common. The use of scientometrics, which may provide fresh and in-depth data on the subjects at hand, is the foundation of umbrella ideas. According to Hanafizadeh and Kim (2020), scientometrics is useful for tracing the development of the literature and pinpointing promising research directions.

In terms of scientometrics, the two most fundamental methods are co-word and co-citation analysis (Chen et al., 2002). An objective and quantitative method for determining relatedness in the literature is co-citation based on scientometrics (Liu et al., 2018). The link between two or more keywords on the same issue is considered significant when their values are equal; the closer the co-occurrence of the keywords, the closer they are to each other. (Chen et al., 2016). Articles are sorted based on the nature of the group, as seen from the linkage of references, type of journal, author, and country. This study uses Publish or Perish, RStudio, and VOS Viewer software to perform co-word analysis and co-citation network visualization.

The literature in which connections related to the concept of the green economy appear are identified by making connections between various elements, as depicted in Figure 6. The relative node size in each layout indicates the frequency of citations in the literature on the green economy. The larger the node, the higher the citation count and reference relevance. The different colors signify different groups.

Figure 7. Co-Occurrence Network: Green Economy



Source: Author

Three large clusters were identified from the results of the SLR data mapping. These indicate the three major variables most often discussed in the Scopus database in relation to the concept of the green economy as seen in Figure 7. In the first cluster, some studies link the green economy with the environment and natural resources, including fuel (Winter, 2009), energy (van der Zwaan et al., 2002; Lin & Jiang, 2011; Warr & Ayres, 2006; Fuss et al., 2012), and water (Qi & Chang, 2011). In the second cluster, the green economy is also closely related to traditional economic factors (Dafermos et al., 2018; Batten et al., 2020), such as credit policy (Nanayakkara & Colombage, 2019), bond policy (Nanayakkara & Colombage, 2019), and investment policy (Li et al., 2021).

In the third cluster, some studies employ social variables, including population (Nordhaus, 2001), productivity (Burke et al., 2015; Panagos et al., 2018), Income distribution and poverty have been studied by Ibarrarán et al. (2009) and Panagos et al. (2018), respectively. Investment in lowering carbon emissions, raising energy efficiency, and decreasing environmental degradation drives economic development and the expansion of the labor force in a green economy. Research like this suggests that if people pitch in to help one another, the green economy's social component may materialize. In this case, every individual in society plays a role as a sustainable policymaker who can act as an agent of change in promoting a green economy.

A green economy would provide jobs and income while decreasing pollution and carbon emissions, improving the efficiency of energy, water, and minerals, and protecting ecosystem services and biodiversity (Ocampo, 2011). Several prior sustainable development projects (Ashley et al., 2006; Russell et al., 2006; Fisher et al., 2008) were more sector-or site-focused, in contrast to its integrated, economy-wide design.

Existing economic models severely misallocate resources because they fail to take social and environmental costs and benefits into account, according to proponents of "green" economics (Pearce and Barbier, 2000). To rephrase, society does not benefit from resource allocation when markets and prices do not fairly represent the whole social and environmental costs of economic activity (Frank and Bernanke, 2004). The goal of a green economy is to counteract these issues by shifting the system's incentives in such a way that both public and private investments are held fully accountable for the costs and benefits they generate. According to TEEB (2009), UNDP (2016), and ten Brink et al. (2012), this method is thought to facilitate the reallocation of human and financial resources in a way that boosts human happiness, social justice, and environmental preservation.

The literature mostly proposes three approaches: Increasing public spending to support environmentally friendly economic growth, innovation, and access to information; 3) international collaboration to establish global agreements and regulations in support of these efforts; and 4) addressing market failures through price adjustments and regulatory enforcement to better allocate resources in accordance with societal values (Moyo, 2012; TEEB, 2009; Stiglitz, 2012; UNEP, 2011). By bringing together the goals of many different groups and individuals and striking a balance between economic development and preservation, these interventions should win over the business sector and gain political support for a green economy (Jacobs, 2012; Morrow, 2012).

Natural capital is what sets the green economy apart from other economic theories; conventional wisdom places a low monetary value on ecological services. The sustainable management of natural resources is one of the main tenets of a green economy. The concept of a "green economy" places an emphasis on the valuation of natural resources and the establishment of marketplaces that address environmental issues and promote environmentally responsible growth. The concept promotes public and private investment in natural resources to reduce carbon emissions and increase natural resource efficiency. The proper valuation and pricing of natural resources are useful for ensuring sustainable value by reconciling degradation from the current production of capital. Pricing policy is also a part of the transition toward a green economy. Some pricing policies adopted by countries are taxes related to the

environment and tariffs on pollution, for example, on carbon, nitrogen, and sulfur oxide emissions or waste disposal.

Based on the results of this study, the concept of the green economy is an economic philosophy, idea, and activity based on the preservation of the environment, enhancement of public welfare, and maintenance of social equity within and across generations. This implies that the application of a green economy is the more integrated and comprehensive incorporation of environmental and social factors into the economic process in a sustainable manner.

Conceptual Closeness

Many valuable takeaways may be gleaned from this research. One thing to keep in mind is that a green economy is inherently complex. One of its distinguishing features is its emphasis on the interplay between environmental concerns and economics (i.e., how well do these two domains complement one another?). To what degree, and how much? But sustainability is the main idea, and the green economy is only one facet of it. Approximately two-thirds of the green economy definitions examined here address social issues in some way; for example, "equity" and other less commonly mentioned social concerns receive equal weight with other, more commonly cited green economy concepts, such as resource efficiency.

There is a preponderance of one combination among the green economy's guiding words since they are not conceptually equal. Whenever one idea (like economic growth) is defined, additional concepts (like technology and innovation) are nearly always implied. These semantic structures must be kept in mind because the green economy concept is surrounded by ambiguities and dissonances. In this analysis, at least three aspects of the concept were identified. These are, in order of frequency, economic, environmental, and social.

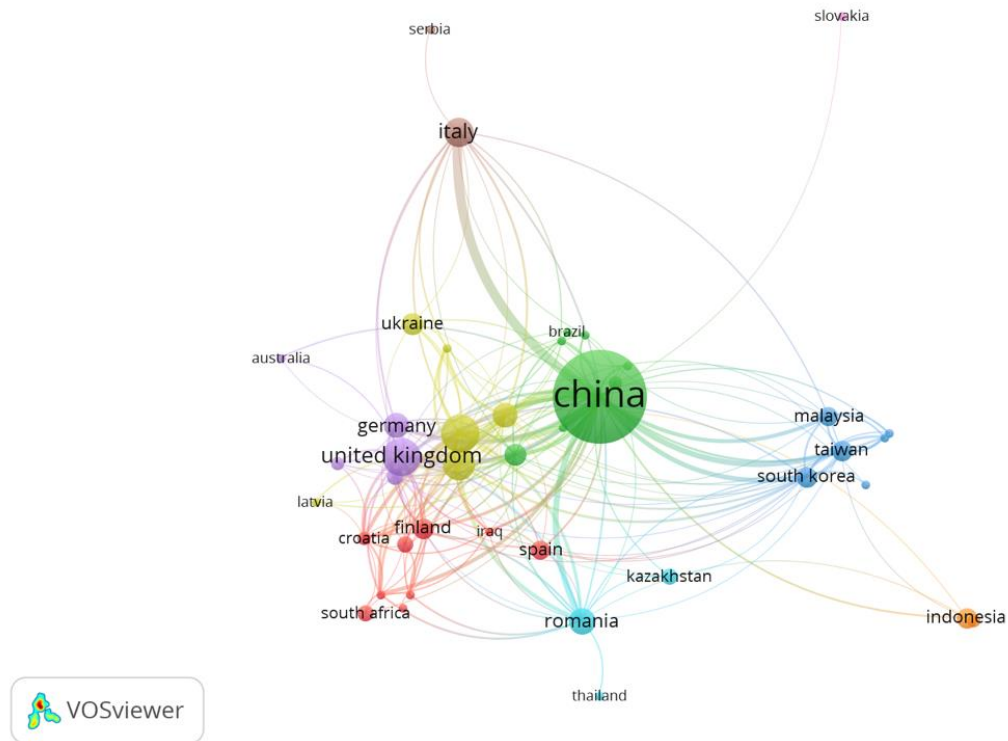
Finally, network analysis was conducted to outline the role played by certain influential definitions such as UNEP (2010) and connecting ideas (such progress in the economy, sustainability, and effectiveness). These features exhibit "conceptual enclosures" and represent opposing views on the green economy in their presentation. The definitions centered on resource efficiency rather than the four-square model of UNEP seemed to be the most disparate. The former may provide the theoretical foundations for structural and systemic transformation due to their possible compatibility with new paradigms and alternative worldviews. However, for this to be the case, there should not be a sizable disparity between the definition, its theoretical development, its technological translation, and the choices made in actual practice.

Such criteria do not necessarily include critical viewpoints on the current state of the economy and politics, even when these are compatible. For instance, the monitoring system may be framed in terms of the UNEP model's four main components to bring concepts and policies closer together. However, no international measurement endeavor has used this model for structural purposes. The operationalization of these concepts, whether there will be eventual dominance of a particular understanding and actual effects on day-to-day living will all be revealed in the upcoming years.

Countries that Frequently Perform Research on Green Economy

The concept of a green economy has been the subject of numerous discussions among academics and practitioners alike. China is the nation that has published the most research on the green economy concept, with 241 articles. In addition, as shown in Figure 8, studies undertaken in China have become a benchmark for research in other nations.

Figure 8. Frequency of Research on the Green Economy by Country



Source: Author

Previous research in China has produced an index to measure green-economy efficiency and determine whether the Chinese government's policies are consistent with the idea of a green economy (Chen et al., 2018; Wang et al., 2019; He et al., 2019; Pan et al., 2019; Shuai & Fan, 2020). This index can also be used by the Chinese government to regulate the application of the green economy concept in various Chinese regions. From 2007 to 2018, there was greater adoption of the green economy model in Beijing, Shanghai, Tianjin, and Guangdong; these regions have an index value higher than 0.9; others, including Hebei, Liaoning, Guizhou, and Gansu, have an index value below 0.5 (Shuai & Fan, 2020).

China is a developing country with a high growth rate, and its economy is thus supported by the industrial sector. Unfortunately, resource depletion and environmental deterioration have been outcomes of its huge industrial expansion. By concentrating on the development of a green economy, which includes the establishment of a green economy index, China is striving to rectify the harm done to resources and the environment.

China uses the green economy-efficiency assessment index and can examine the elements that contribute to the heterogeneous application of the green economy idea

in some of its regions. The index also allows the government to formulate and implement policies that promote a green economy across its various regions. The input and output indicators used in calculating this index include economic, social, and environmental factors. In addition, the Chinese government has introduced an index threshold that is mandatory for the region and the industrial sector, which is the largest contributor to climate damage.

The green economy index was created from a regional perspective and is intended to capture the intensity of the adoption of the green-economy model and the limitations of each region. The green economy index created by China is then used by international authorities and other countries to evaluate green economic development.

For example, UNEP has created a green economy evaluation index (UNEP, 2012), and the Global Green Growth Institute (GGGI) has created an indicator-based evaluation system (this takes account of national development, social status, resource consumption, and environmental status), and the World Commission for Environment and Development (WCED) has created an urban green development evaluation index. These evaluation methods rely primarily on the integration of the green economy development capacities of several nations; it is not possible to evaluate the economic development status of each region individually (Cassen, 1987). Researchers have assessed the progress of the green economy using these indexes and such concepts as “green GDP” and “green economy efficiency.” In certain locations, these systems have allowed a more accurate measurement of the growth of green economies.

Conclusion

This study represents a systematic and empirical indicator-based articulation of qualitative and quantitative green economy concepts extracted from 11,301 articles. The SLR provides several important lessons on the multidimensional nature of the green economy, revealing that social, economic, and environmental factors exhibit a high degree of connectivity in the post-2016 literature. The findings clarify that the green economy is a systematic effort to create awareness and incentive mechanisms for economic activity, emphasizing the importance of environmental sustainability and social inclusion alongside traditional growth.

Based on the analysis, this study defines the green economy concept as an economic philosophy, idea, and activity based on the principle that it is important to preserve the environment, enhance public welfare, and maintain social equity within and across generations. This unified definition clears up any confusion about the notion and helps us get closer to comprehending the intricacies of sustainable resource management.

From a practical policy perspective, the application of this concept requires governments to adopt regionally appropriate policies. As observed in the case of China, it is necessary to strengthen the enforcement of regulations by looking at the specific conditions of each region. There is a need to pay attention to regional differences in the impact of environmental regulations to introduce appropriate incentives while adhering to unified environmental standards.

These findings have significant implications for the future research agenda. First, having established a consolidated definition, future scholarship should shift focus from conceptual debates to the operationalization of these three clusters (economic, social, environmental) into standardized, quantifiable metrics. Researchers are encouraged to

develop a universal "Green Economy Index" that can be applied longitudinally across different political economies, not just in high-output nations like China. Future studies should specifically investigate the "social equity" cluster, which this review identified as critical yet often under-measured compared to environmental factors. Finally, comparative research is needed to test whether the "China model" of green economy efficiency holds true in other developing nations with different regulatory frameworks, thereby validating the global applicability of the definition proposed in this study.

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