



A Bibliometrics Analysis of Green Politics: Insights and Implications

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ABSTRACT

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This study aims to analyze the development of literature related to green politics using a bibliometric approach, with data sources obtained from the Scopus database. Green politics has become an important topic amid the increasing urgency of the global climate crisis, with a focus on sustainability, environmental protection, and ecological justice. The world is concerned with green politics as it relates to the lives of the next generation. The research method involved using VOSviewer software to visualize research trends and key themes in the literature of green politics. Data was collected from articles published between 2020 and 2024 using the keyword "green politics", which included 674 articles. The results show that there are six main clusters in green politics studies, namely: climate change, party politics, sustainability, urban planning, environmental movement, and environmental politics. The analysis reveals that climate change is the most dominant theme, followed by party politics sustainability, and sustainability. This research provides important insights into the dynamics and direction of green politics research, and offers a thematic map that can assist researchers in finding future research gaps. The findings can also serve as a reference for policymakers in formulating more effective and equitable sustainability strategies and environmental policies.

1. INTRODUCTION

Climate change and increasing environmental degradation have become urgent global issues of common international concern [1, 2]. This environmental crisis has led to widespread debate on how environmental politics and policies should be developed to address this challenge. Issues such as increasing greenhouse gas emissions, declining biodiversity, and increasingly frequent natural disasters demand more holistic and comprehensive solutions. Many countries and international organizations are now placing climate change as a top priority in policy formulation, with the aim of reducing negative impacts on the planet and the future of future generations.

It is in this context that green politics emerged as a branch of political science that emphasizes the importance of environmental protection, sustainability, and ecological justice. Green politics has attracted not only the attention of academics researching environmental issues, but also practitioners, policymakers and activists who seek to integrate development goals with environmental preservation. These actors work together to create policies that support sustainable development, while ensuring that ecological well-being remains a top priority. This movement is increasingly relevant as global awareness of the importance of maintaining a balance between economic growth and environmental sustainability increases.

Green politics has grown rapidly in the last two decades, with an increasingly wide and varied literature. These studies

cover various aspects, ranging from green policies [3-16], the role of green political parties [17-22], to community engagement in the environmental movement [23-29].

However, as the volume of publications in this field increases, there is a need to evaluate and map the development of the existing literature. The bibliometric approach combines quantitative techniques and data visualization [30-36]. In addition, the researcher can identify research trends and key themes to focus on in the study of green politics.

In addition, the importance of green politics studies is also driven by global urgency in responding to the climate crisis and other environmental impacts [37, 38]. Moreover, climate change concerns have broad social and practical significance, making green politics an increasingly relevant issue. Public policies oriented towards environmental sustainability are one of the main challenges for countries around the world, especially in the context of achieving sustainable development goals (SDGs). Therefore, an in-depth understanding of how green politics has evolved and how it has been applied in various contexts is crucial for crafting more effective and equitable policies.

A bibliometric approach not only helps in understanding the evolution of green politics research, but also provides insight into the theoretical and practical implications of previous findings. This analysis can reveal research gaps, identify influential authors and institutions, and determine future research directions. In addition, bibliometric studies can also provide guidance for policymakers in formulating more effective and sustainable strategies in the environmental field.

While there have been several previous studies examining the green politics literature, most of them have been limited to specific regions or themes [6, 19-22, 39-43]. This study aims to offer a more comprehensive and global analysis, utilizing the Scopus database as the primary source to ensure broad and representative coverage. As such, this study is expected to make a significant contribution to the existing literature and support the development of more sustainable policies and practices in the future.

The bibliometric approach in this study is intended to complement the need for a more comprehensive data collection on green politics, given the increasing volume of publications over the past 5 years. This study not only aims to understand the trends and evolution of research but also to identify key themes, research gaps, influential authors, and institutions. This analysis is crucial because, as one of the most influential branches of political science in recent years, green politics emphasizes issues of sustainability and ecological justice that are so important when the world is faced with the problems of climate change and environmental degradation. By using the Scopus database as one of the world's most influential sources of scholarly journals covering global literature and data visualization techniques, this research offers a broader contribution when compared to previous studies that are often limited to a particular region or theme. Through this bibliometric approach, this research not only broadens theoretical insights but can also provide praxis guidance for policy makers in formulating effective and sustainable strategies in maintaining the sustainability of the earth.

2. METHOD

This study adopts a bibliometric analysis technique to examine green politics literature in the Scopus database and utilizes VOSviewer to visualize the findings. Scopus was selected because it is one of the international publishers that has a high reputation and has a great influence on various research topics, including green politics studies. VOSviewer is particularly essential in bibliometrics since it can produce network visualizations using citation records, co-authorship, co-word, and other bibliometric relations.

The research information was searched from the Scopus database through the keyword green politics. Firstly, 3327 documents were collected. To narrow down the scope, several criteria were applied: Publication date range between 2020 and September 2024, name restricted to social sciences, publication type restricted to journals and language limited to English only. This screening seeks to help cover new trends in current research and check on the quality and consistency of the data. The period 2020-2024 was chosen because it shows the latest publications on green politics research, especially related to the topic of the impact of the Covid-19 pandemic, which has a major influence on environmental policy at the global level. Finally, from the selected 674 articles. The data collected were bibliographic data such as the title, author and their affiliated institution, abstract, keywords, number of citations, and the journal in which the publication appeared. All data was then extracted in RIS format for further use.

The next step after the data is collected is to visualize it using the VOSviewer program. The bibliographic data acquires information like title, author, writer and journal from keyword co-occurrence and VOSviewer helps in visualizing

such data. Co-word analysis is a technique where the occurrences of keywords reflected in publications are compared with a view of establishing themes and relation to green politics research. Using such a co-word map provides an explicit way of visualizing the most addressed topics and the interconnection between them.

Finally, VOSviewer creates a network map that displays connections between the analysed components, e.g., keywords or authors. They are further used to extract major research themes on a map generated from the documents. The discussed visualization offers a detailed understanding of the development processes in the sphere of green politics to determine what issues can be important for future investigations.

3. RESULTS AND DISCUSSION

3.1 Publication and countries of green politics studies

Figure 1 shows that the University of Manchester (UK) and Københavns Universitet (Denmark) are the two universities with the highest number of authors contributing to the green politics theme, each producing 14 articles. These universities are at the top of the research rankings for environmental politics. In the next position, the University of Melbourne (Australia) ranked third with 11 articles, while Universitetet i Oslo (Norway) and Universität Zürich (Switzerland) both produced 10 articles, placing them fourth and fifth.

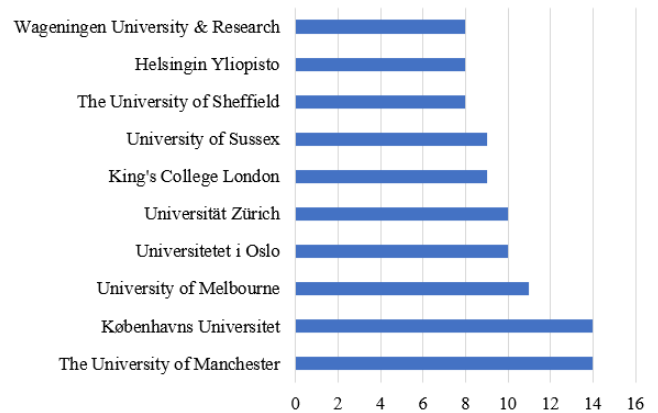


Figure 1. Number of affiliations authors of green politics studies 2020-2024

In sixth and seventh place, King's College London (UK) and University of Sussex (UK) each produced 9 articles. Meanwhile, the eighth to tenth ranked universities, namely the University of Sheffield (UK), Helsingin Yliopisto (Finland), and Wageningen University & Research (Netherlands), have the same number of articles, namely 8. This data illustrates that institutions from different countries in Europe and Australia play an important role in advancing academic discussions on green politics, demonstrating the diversity and global interest in this topic.

There are ten authors with the highest number of publications related to green politics in the 2019-2025 time span. As seen in Figure 2, Blok, A ranked first with a total of 5 articles. In second place, Pearson, M followed with 4 articles. Meanwhile, the third to fifth rank is occupied by three authors who have the same number of publications, namely Anguelovski, Lewis, and Sweeney, each with 3 articles.

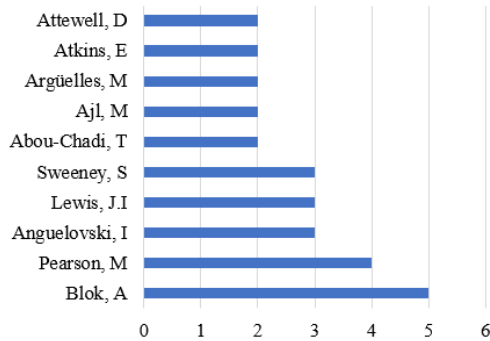


Figure 2. The highest number of authors related to green politics studies 2020-2024

Furthermore, there are five other authors who have contributed 2 articles, namely Abou-Chadi, Ajl, Argüelles, Atkins, and Attewell. Although their contribution in terms of the number of articles is smaller, these authors still make a significant contribution to the development of research in the field of green politics. This data shows that there is a diverse range of researchers involved in the academic discussion of green politics, with varied but important contributions to driving research in this area.

Although the United Kingdom has the highest number of authors in terms of universities, the United States takes the top spot as the country with the most authors contributing to green politics, with a total of 137 articles (as shown in Figure 3). The United Kingdom came in second place with 128 articles, followed by Germany with 76 articles, Australia with 44 articles, and the Netherlands with 37 articles. Norway had 29 articles, while Denmark and Switzerland both contributed 28 articles. Canada is in ninth place with 27 articles, and Sweden rounds out the top ten list with 26 articles.

The United States' dominance in the number of articles can be attributed to its large research budget, which makes research one of the pillars of the country's progress. With the support of substantial funding, the United States strengthens its position as a country with excellent publications in the field of green politics research. This also confirms that significant investment in research plays an important role in propelling the country as one of the major players in global scientific development.

Figure 4 shows that over the past five years, the number of studies related to green politics has fluctuated. In 2020, there

were 122 articles published on this topic. This number increased in 2021 with 130 articles. This upward trend continued in 2022, where the number of articles reached 145, indicating a growing interest in research in green politics.

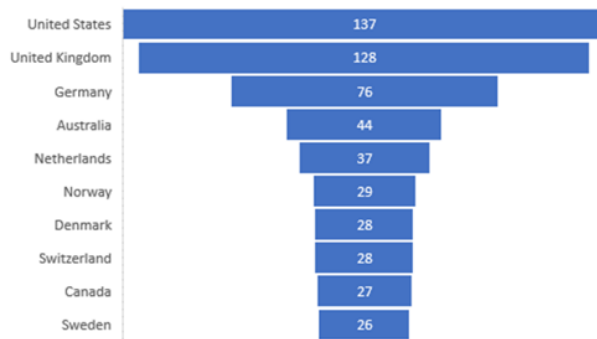


Figure 3. Country of origin of authors related to green politics studies 2020-2024

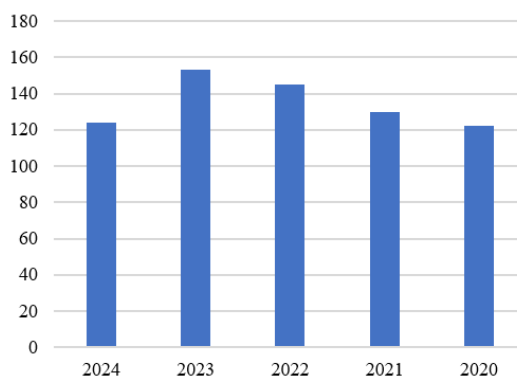


Figure 4. Publication per year about green politics studies 2020-2024

In 2023, the number of published articles continued to increase, reaching 153, which was the highest number during the five-year period. However, in 2024 there was a significant drop, with only 124 articles published. This fluctuation may indicate a change in research priorities or may also be related to policy and funding dynamics in green politics research in different countries.

3.2 Main research cluster analysis

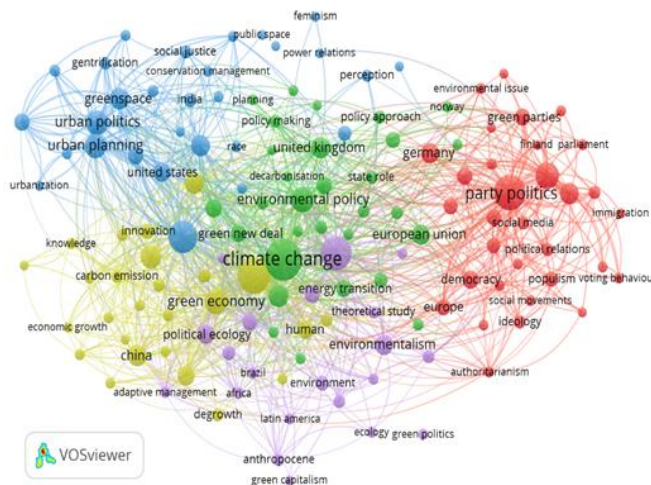


Figure 5. Co-occurrence network of green politics

Table 1. Cluster and items of concept in green politics studies

Name of Cluster	Concept Items	Number of Items (Color)
Cluster 1	Alternative energy, capitalism, climate change, climate policy, COVID-19, decarbonization, energy policy, energy transition, environmental policy, European Green Deal, green revolution, green transition, greenhouse gas, just transition, local government, national politics, neoliberalism, planning, policy approach, policy implementation, policy making, political economy, political power, renewable energy, social movement, solar power, South Korea, state role, strategic approach	30 items (Red)
Cluster 2	Activism, authoritarianism, citizenship, democracy, election, electoral geography, electoral system, environmental issues, green parties, green party, ideology, immigration, parliament, party politics, political geography, political ideology, political participation, political parties, political relations, political system, populism, public opinion, representation, social media, social movements, voting behavior, voting behaviour	27 items (Green)
Cluster 3	Adaptation, belt and road initiative, carbon emission, climate justice, climate politics, degrowth, economic growth, environmental economy, environmental governance, governance, governance approach, government, green economy, green growth, infrastructural development, infrastructure, innovation, knowledge, leadership, politics, sustainability, sustainable development, technological development	23 items (Gray)
Cluster 4	Decision making, environmental justice, gentrification, green infrastructure, green space, local participation, power relations, social justice, urban area, urban development, urban greening, urban planning, urban policy, urban political ecology, urban politics, urbanization	16 items (Yellow)
Cluster 5	Adaptive management, anthropocene, climate, ecology, environment, environmental protection, environmentalism, future prospect, green capitalism, green politics, human, humans, nationalism	13 items (Sky green)
Cluster 6	Conceptual framework, conservation management, environmental 13 management, environmental politics, feminism, forest management, gender, nature conservation, perception, political ecology, public space, research work, violence	13 items (Sea green)

In the period from 2020 to 2024, there are several main and important concepts that are often used in green politics. From the total of 674 documents obtained and analyzed and visualized using Vosviewer, it will show the dominant concept, which means that it is often discussed. The size of the circle indicates the number of publications that have a relationship with the keyword, both in the journal title and in the journal abstract. The larger the size of the circle, the greater the number of articles that have relevance to the keyword. Figure 5 shows that the 4 most dominant or prominent words are climate change, party politics, Sustainability, and urban planning.

The Vosviewer analysis identified 6 cluster items with different color codes (Table 1). This clustering is useful for research purposes. First, it allows us to see the trend of research that has been done before. Thus, researchers can understand the dominant themes and approaches that are often used in related studies. Second, it helps researchers to find future research topics (novelty). By looking at the items in each cluster, researchers can find under-explored themes or new perspectives that can be integrated into their studies. Table 1 shows each cluster and the concept items within it. This is very helpful for researchers if they take a particular cluster because it can determine new concepts to be researched.

3.3 Mapping study

The most frequent term in Cluster 1 is climate change. This is evident because the climate change has the highest and most frequent mention in the cluster. This is the case because almost all the concepts presented by the authors are always associated with climate change and green politics. Climate change is dominant in the analysis of green politics because it affects the mechanisms of environmental and economic systems [44, 45].

Climate change is at the top of the green political agenda because it is a global issue. Climate change is considered by most countries and intergovernmental organizations as the most significant risk to humanity, which makes the subject of this study, and therefore, other related discussions. Moreover, green politics can be defined with regard to the means by

which governments and political parties plan to approach environmental concerns such as:

The dominance of the keyword “climate change” as the most frequent and typical term in Cluster 1 also corresponds with the key topic that is the main focus of the discourse of green politics. Climate change is no longer considered an environmental concern but as a political and economic challenge. Hence, it encompasses all forms of politics from the local to the international to combat impacts on disasters, sea levels, and weather changes that affect farming and, hence, the economy. In green politics, climate change is frequently the starting point for the discourse on climate justice, which requires taking into consideration the social and economic consequences of environmental regulation for the affected population.

Climate change is one of the most significant factors that defines the current development of the policies on the international level, such as reduction of the carbon emissions and investment. This makes climate change an unavoidable topic that is associated with green politics, because many of the policy measures affect the fight against and the adaptation to climate change. Therefore, the keyword “climate change” not only reflects the frequency of the given term in the research, but also indicates a significant role of this theme in international relations and numerous initiatives related to the protection of the environment.

As for the second cluster, the most used keyword is “party politics”. This implies that the density of this keyword is highest or more frequent in this cluster than in the other categories, meaning party politics is most often used. This may be because political parties are more involved in setting the policies that govern important aspects of life such as the environment, climate change and economy. This paper also aims at helping the reader to comprehend how policies at the national and international levels are shaped especially in relation to green politics debates.

This is so since political parties are most often the main actors in the decision-making process of most democracies. This is because the political parties have an agenda and this is an indication of their political affiliation and this shapes their

stand on various issues, including climate change. Often, the arguments concerning climate change are closely connected with the partisan politics, when the left-leaning parties are This is because the most frequent keyword in Cluster 2 was ‘party politics’ suggesting that party politics plays a very important role in setting and developing policy on climate change. Of course, the opinions concerning these issues depend on the political views of the government and the approach to the global problem solving.

From the word frequency, the keyword that ranks highest in Cluster 2 is “party politics” which indicates that political parties are the main actors in decision-making regarding policies on environmental issues, climate change and green economy. Ideologies and interests of various groups are best articulated through party politics before being translated into green policies. It is a fact that progressive political parties tend to promote more aggressive agendas concerning environmental protection and climate change as well as energy transformation. Conversely, other more conventional and conservative parties will be likely to be rather cautious and concentrate on the short-term results of conventional industries. This means that political identity is a major predictor of policy action on environmentalism.

Moreover, political parties have a role in participating in the process of creating public opinion about climate change and how they should address the issue [46, 47]. More often than not, political party discourse on climate change is an extension of larger disputes about resource governance, the state’s role in environmental protection, and economic and social agendas. The emphasis on ‘party politics’ shows that issues to do with the environment cannot be This is evidence that green politics is closely related to the differences in the ideologies of different parties that can potentially shape the future of environmental politics.

The keyword that is most frequent in Cluster 3 is “sustainability”. This is evident by the fact that sustainability is the most or one of the most mentioned keywords in the cluster. Sustainability is one of the most important themes in multi-faceted studies, including green politics, climate change and green economy. This is in agreement with the sustainability concept, which is the capacity to meet the economic, social and ecological requirements in the future [48-50].

Sustainability has become the most crucial CSR dimension because of many problems that affect the world today in areas like climate change, environmental degradation, and depletion of natural resources. Sustainability is the attempt to continue developing the economy without harming future generations. In green politics, sustainability means a green economy, renewable energy and a low low-carbon economy.

Sustainability is also connected with the discussion of global and local duties in preserving the equilibrium between the growth and conservation of the natural environment. Many papers are devoted to the analysis of how the UN’s Sustainable Development Goals (SDGs) can be met, since these goals include such significant topics as climate The number of occurrence of the keyword “sustainability” in Cluster 3 points to the fact that sustainability is an important topic in green politics, climate change and environmental policy. Sustainability is not only a capability to maintain the environment, but also to attain economical and social growth and development without depleting the natural resources.

In Cluster 4, the keyword that is most frequent is “urban planning”. This is because this keyword has the highest

density or the frequency of usage within the cluster relative to the topic of urban planning. This is why the topic of urban planning is so important to Green politics; because proper urban planning can have a significant impact on the standard of living, use of resources and environmental effects in cities.

This has been so because many cities of the world especially the developing ones are grappling with numerous challenges such as population pressure, air pollution, energy consumption and climate change. This paper recognizes that urban planning has a key role to play in the generation of sustainable, green and energy efficient cities. In the green politics, the successful implementation of the urban planning entails policies on sustainable transport, green areas, water management and energy conservation in structures. The best examples are the green infrastructure development policies successfully implemented in Singapore, Copenhagen and Curitiba, Brazil [51, 52].

Sustainable urban planning is important to allow cities to deal with problems that affect them, such as traffic jams, overpopulation and the distribution of resources like housing and services. As such, this topic is well linked to green politics and sustainability since well-developed cities can also be associated with the reduction of carbon emissions as well as the enhancement of quality of life.

In the fifth cluster, the most frequent term is “environmentalism”. Due to the high score of this keyword, the most used term or the most frequent word in the cluster is environmental movement (environmentalism). Environmentalism is one of the most significant topics because it is a sphere that encompasses all the actions directed towards the preservation and enhancement of the state of the environment and the struggle for environmental considerations in politics. Environmental conservation and climate change management are two of the areas of green politics that are used in the formulation of government policies and political party manifestos as well as community programs. Environmentalism is the major driving force in the Cluster 4 because environmentalism has developed into international social process that involves states, international and non-governmental organizations and civil society in a wide range of activities aimed at minimizing anthropogenic pressure on the environment. Environmentalism is not only the protection of natural objects and the reform of the economic, political, and social systems that would permit environmentalism [53, 54].

Environmentalism plays a big role in the formulation of policies in the areas of climate change, wildlife and transition to green economy. Increased awareness of the climate change and environmental problems has also sustained the movement. At the present time, numerous countries are focusing on the policy of environmentalism which consists of the regulation of greenhouse gases emissions, the usage of fossil fuels, the promotion of renewable energy, and preservation of ecosystems.

The most frequent term “environmentalism” in the fifth cluster indicates that the environmental activism is crucial for green politics analysis. It is a driving force for policy change in the area of nature conservation, emissions and sustainability. Environmentalism is no more only the study of the environment; it is the study of society, politics and the economy in an attempt to change them for the better. It has led to emergence of many more measures undertaken by governments, NGOs and other stakeholders in their efforts to fight the climate change and environmental pollution. This

paper will also examine how the policy of environmentalism has evolved to be a cornerstone of most policies globally, including the transition to clean energy and the conservation of ecosystems owing to climate change. This bears witness to the fact that the movement has many effects that transcend the environment and influence the future of world economy and politics.

In Cluster 6, the biggest keyword is environmentalism politics. The most significant or the most recurrent keyword from this cluster is environmentalism politics. Environmental politics is defined as the relationship between the environmental movement and the politics of environmentalism [55, 56]. This topic is relevant to many policy issues at local, national and international levels since the issues of climate change, natural resource conservation and energy control are vital.

It has become the dominant area because environmental policy is one of the biggest problems of the present-day societies and states. Consequences of climate change, pollution and destruction of ecosystems made policymakers think about more drastic actions to save the environment. There has been a rather heated discussion within the political sphere

In the environmental politics, the political parties, government agencies and other organizations are involved in the formulation of policies. Therefore, the discussion of climate change, renewable energy, and natural resource conservation is an important and topical issue in many countries. Political parties also hold various perceptions of environmental policies and laws and it is a fact that green or progressive parties have a positive perception towards environmental laws while more conventional or business-oriented parties have a negative perception towards them.

3.4 Discussions

From the findings of this research, several important analyses can be generated. First, the climate change as the most significant topic of Cluster 1 proves that climate change is not only an ecological concern, but also a major political and economic concern of the world. This means that environmental policies are now much more directly related to the political process in which countries and international organizations are required to consider climate risk in their decision-making. Second, the results in Cluster 2 on political parties reveal that the political system is a key determinant of environmental policy. The green policies are more likely to be supported by the progressive parties while the conservatives are likely to take time in embracing such policies like in the case of a given country.

Third, the analysis of Cluster 3, which is based on sustainability, reveals that the notion of sustainability has become not only an international issue but also a local one, concerning resource and economic development. In addition, Cluster 4 on urban planning indicates that sustainable urban planning is one of the most effective strategies to dealing with climate change since most of the world's cities face challenges such as pollution, energy consumption and uncontrolled urbanization. Lastly, the findings in Clusters 5 and 6 on environmentalism and environmentalism politics reveal that the environmentalists remain highly active in the political process and there is more and more pressure from the public and NGOs on the governments to go for green policies. This analysis further supports the assertion that green politics is a

social space where several actors – the state, political parties and civil society – are involved in the management of global environmental concerns.

The value of this study is in the forthcoming general map of the field, which not only shows the directions for the future research, but also indicates possible further developments. The use of VOSviewer gives a picture of collaboration networks, relations between themes and the relationship between political affiliation and environmental policies. Thus, finding the key trends and patterns, this research helps uncover how green politics can aid in solving such issues as climate change, economic efficiency and sustainable development of cities. It also assists scholars and policy makers to identify the parts played by political parties, civil societies and other stakeholders in the successful and fair implementation of green policies.

This research provides several important implications for future government policies and future research. First, there is a need for stronger integration between climate protection policies and government policies when considering that climate change has serious impacts not only on the environment but also on politics and economics. The international community must share the same vision and collaborate in maintaining the sustainability of environmental ecosystems. Governments of the various countries must realize that environmental management cannot be a differential or an independent feature of the economic and political life. This creates a research gap that can be filled by examining how countries can fashion policies that incorporate climate change considerations into the political and economic systems so that more countries can achieve sustainability.

Secondly, this research also has managerial implications for policymakers in terms of differences in political ideologies and how these affect green policy adoption. The fact that the progressive political parties are more likely to support green policies shows that more effort needs to be put in to ensure that the conservative political parties also support the sustainability agenda. This may lead to more studies on how to foster an agreement on environmental policies between political affiliations. Second, by identifying the role of the NGOs and the environmental movement in the formulation of environmental policies, this research also reveals the significance of civil society pressure in influencing environmental policies which can provide a basis for future research on how to enhance the civil society and government collaboration in the development of effective and equitable green policies.

4. CONCLUSION

This research successfully maps the development of green politics literature in the period 2020 to 2024, by identifying six main clusters: These are climate change, party politics, sustainability, urban planning, environmental movements, and environmental politics. This research, through the use of bibliometric analysis and data visualization through VOSviewer, has given a clear picture of trends, collaboration and focus areas of green politics in academic literature. The research contributes greatly to the overall understanding of the future research agenda and improved and more efficient policy-making for environmental protection.

The main drawback of this study is that only one database – Scopus was employed and although it is one of the biggest, it

does not encompass all the research papers available from other databases like Web of Science or Google Scholar. Also, this study relied on English language articles only, thus, it can overlook research articles written in other languages. For further studies, it is suggested that more databases should be employed, and the literature should be searched in different languages. Furthermore, a further analysis of each of the mentioned clusters, particularly in relation to the involvement of developing countries in green politics, the dynamics of environmental movements in certain regions, and the challenges of integrating renewable energy policies and economic development. could help in gaining more practical and contextual knowledge of more universal problems and their solutions.

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REFERENCES

- [1] Abdillah, A., Buchari, R.A., Widianingsih, I., Nurasa, H. (2023). Climate change governance for urban resilience for Indonesia: A systematic literature review. *Cogent Social Sciences*, 9(1): 2235170. <https://doi.org/10.1080/23311886.2023.2235170>
- [2] Antic, M. (2023). Transnational Iranian poetics of resistance: The green movement and Iranian women's agency in Sepideh Farsi's *Red Rose* (2014). *Feminist Media Studies*, 23(7): 3498-3514. <https://doi.org/10.1080/14680777.2022.2126870>
- [3] Baharuddin, T., Nurmandi, A., Qodir, Z., Jubba, H., Syamsurrijal, M. (2022). Bibliometric analysis of socio-political research on capital relocation: Examining contributions to the case of Indonesia. *Journal of Local Government Issues*, 5(1): 17-31. <https://doi.org/10.22219/logos.v5i1.19468>
- [4] Berger, H.A. (2023). The environmentalism of the far-right pagans: Blood, soil, and the spirits of the land. *Journal for the Study of Religion, Nature & Culture*, 17(4): 481-500. <https://doi.org/10.1558/jsrnc.24203>
- [5] Berglund, O., Bailey, D.J. (2023). Whose system, what change? A critical political economy approach to the UK climate movement. *Environmental Politics*, 32(6): 1012-1032. <https://doi.org/10.1080/09644016.2022.2156179>
- [6] Bleidorn, W., Schilling, T., Hopwood, C.J. (2025). High openness and low conscientiousness predict green party preferences and voting. *Social Psychological and Personality Science*, 16(1): 93-104. <https://doi.org/10.1177/19485506241245157>
- [7] Bottazzi, P., Boillat, S. (2021). Political agroecology in Senegal: Historicity and repertoires of collective actions of an emerging social movement. *Sustainability*, 13(11): 6352. <https://doi.org/10.3390/su13116352>
- [8] Caliskan, C. (2020). The influence of elite networks on green policy making. *Politics & Policy*, 48(6): 1104-1137. <https://doi.org/10.1111/polp.12382>
- [9] Carter, N., Pearson, M. (2024). From green crap to net zero: Conservative climate policy 2015–2022. *British Politics*, 19(1): 154-174. <https://doi.org/10.1057/s41293-022-00222-x>
- [10] Clegg, L. (2024). Party politics and the effectiveness of local climate change policy frameworks: Green influence from the sidelines. *Local Government Studies*, 50(3): 643-662. <https://doi.org/10.1080/03003930.2023.2292662>
- [11] Cojoianu, T.F., Clark, G.L., Hoepner, A.G., Veneri, P., Wójcik, D. (2020). Entrepreneurs for a low carbon world: How environmental knowledge and policy shape the creation and financing of green start-ups. *Research Policy*, 49(6): 103988. <https://doi.org/10.1016/j.respol.2020.103988>
- [12] Constantatos, C., Pargianas, C., Sartzetakis, E.S. (2021). Green consumers and environmental policy. *Journal of Public Economic Theory*, 23(1): 105-140. <https://doi.org/10.1111/jpet.12469>
- [13] Deslatte, A., Kim, S., Hawkins, C.V., Stokan, E. (2024). Keeping policy commitments: An organizational capability approach to local green housing equity. *Review of Policy Research*, 41(1): 135-159. <https://doi.org/10.1111/ropr.12499>
- [14] Du, G., Yu, M., Sun, C., Han, Z. (2021). Green innovation effect of emission trading policy on pilot areas and neighboring areas: An analysis based on the spatial econometric model. *Energy Policy*, 156: 112431.
- [15] Einecker, R., Kirby, A. (2020). Climate change: A bibliometric study of adaptation, mitigation and resilience. *Sustainability*, 12(17): 6935. <https://doi.org/10.3390/SU12176935>
- [16] Fu, Y., Zhang, X. (2017). Planning for sustainable cities? A comparative content analysis of the master plans of eco, low-carbon and conventional new towns in China. *Habitat International*, 63: 55-66. <https://doi.org/10.1016/j.habitatint.2017.03.008>
- [17] Gross, S.G. (2023). Energy, ecology, and the remaking of west German politics in the 1970s and 1980s. *German Politics and Society*, 41(4): 62-86. <https://doi.org/10.3167/gps.2023.410404>
- [18] Guo, Y., Yuan, Y. (2022). Assessing the energy resources policy agenda: Evidence from China's green express policy. *Resources Policy*, 79: 103037. <https://doi.org/10.1016/j.resourpol.2022.103037>
- [19] Gürçam, S. (2024). Paving the way for climate resilience through sustainable urbanization: A comparative study. *Lectio Socialis*, 8(1): 17-34. <https://doi.org/10.47478/lectio.1396483>
- [20] Hine, A., Gibson, C., Carr, C. (2024). Green hydrogen regions: Emergent spatial imaginaries and material politics of energy transition. *Regional Studies*, 8(1): 1-18. <https://doi.org/10.1080/00343404.2024.2314553>
- [21] Huntington, N., O'Brien, T. (2021). Tied to a star: The green party of Aotearoa New Zealand and the 2020 election. *Environmental Politics*, 30(4): 669-676. <https://doi.org/10.1080/09644016.2021.1877477>
- [22] Jiao, Y., Chen, Q., Wu, Y., Ji, C., Zhang, N., Luo, H., Zhang, K. (2024). Designing new environmental policy instruments to promote the sustainable development of iron and steel production in China: A comparative analysis of cleaner production assessment indicator systems and the assessment principles of the green factory. *Resources Policy*, 96: 105244. <https://doi.org/10.1016/j.resourpol.2024.105244>
- [23] Johnston, S.A., Sprong, S. (2023). Seeking an adversary: The radical right and the saliency of pro-immigration

- positions in green party speeches. *Party Politics*, 29(2): 347-358. <https://doi.org/10.1177/13540688211067932>
- [24] Konisky, D.M., Carley, S. (2021). What we can learn from the Green New Deal about the importance of equity in national climate policy. *Journal of Policy Analysis and Management*, 40(3): 996-1002. <https://doi.org/10.1002/pam.22314>
- [25] Koseoglu, M.A., Rahimi, R., Okumus, F., Liu, J. (2016). Bibliometric studies in tourism. *Annals of Tourism Research*, 61: 180-198. <https://doi.org/10.1016/j.annals.2016.10.006>
- [26] Lee, C.C., Nie, C. (2023). Place-based policy and green innovation: Evidence from the national pilot zone for ecological conservation in China. *Sustainable Cities and Society*, 97: 104730. <https://doi.org/10.1016/j.scs.2023.104730>
- [27] Luhtakallio, E., Ylä-Anttila, T., Lounela, A. (2022). How do civil society organizations influence climate change politics? Evidence from India, Indonesia, and Finland. *Journal of Civil Society*, 18(4): 410-432. <https://doi.org/10.1080/17448689.2022.2164026>
- [28] Merigó, J.M., Blanco-Mesa, F., Gil-Lafuente, A.M., Yager, R.R. (2016). A bibliometric analysis of the first thirty years of the *International Journal of Intelligent Systems*. In 2016 IEEE Symposium Series on Computational Intelligence (SSCI), Athens, Greece, pp. 1-6. <https://doi.org/10.1109/SSCI.2016.7850009>
- [29] Mora, L., Bolic, R., Deakin, M. (2017). The first two decades of smart-city research: A bibliometric analysis. *Journal of Urban Technology*, 24(1): 3-27. <https://doi.org/10.1080/10630732.2017.1285123>
- [30] Mulet-Forteza, C., Martorell-Cunill, O., Merigó, J.M., Genovart-Balaguer, J., Mauleon-Mendez, E. (2018). Twenty five years of the *Journal of Travel & Tourism Marketing*: A bibliometric ranking. *Journal of Travel & Tourism Marketing*, 35(9): 1201-1221. <https://doi.org/10.1080/10548408.2018.1487368>
- [31] Namin, S., Xu, W., Zhou, Y., Beyer, K. (2020). The legacy of the Home Owners' Loan Corporation and the political ecology of urban trees and air pollution in the United States. *Social Science & Medicine*, 246: 112758. <https://doi.org/10.1016/j.socscimed.2019.112758>
- [32] Naruetharadhol, P., Gebsubut, N. (2020). A bibliometric analysis of food tourism studies in Southeast Asia. *Cogent Business & Management*, 7(1): 1733829. <https://doi.org/10.1080/23311975.2020.1733829>
- [33] Nordbrandt, M. (2021). Do cross-cutting discussions enhance pro-environmental attitudes? Testing green deliberative theory in practice. *Environmental Politics*, 30(3): 326-356. <https://doi.org/10.1080/09644016.2020.1787063>
- [34] Rüdiger, W., Sajuria, J. (2020). Green party members and grass-roots democracy: A comparative analysis. *Party Politics*, 26(1): 21-31. <https://doi.org/10.1177/1354068818754600>
- [35] Sabato, S., Mandelli, M. (2024). Towards an EU framework for a just transition: Welfare policies and politics for the socio-ecological transition. *European Political Science*, 23(1): 14-26. <https://doi.org/10.1057/s41304-023-00458-1>
- [36] Schwörer, J. (2024). Mainstream parties and global warming: What determines parties' engagement in climate protection? *European Journal of Political Research*, 63(1): 303-325. <https://doi.org/10.1111/1475-6765.12602>
- [37] Svensson, A., Wahlström, M. (2023). Climate change or what? Prognostic framing by Fridays for Future protesters. *Social Movement Studies*, 22(1): 1-22. <https://doi.org/10.1080/14742837.2021.1988913>
- [38] Terzi, Ö. (2024). Emotional politics of norm hierarchy in EU's external relations: The case of climate crisis and the EU's arctic policy. *Journal of European Integration*, 46(5): 729-749. <https://doi.org/10.1080/07036337.2024.2359590>
- [39] Thompson, L., Pearson, M. (2021). Exploring party change: The professionalisation of the UK's three green parties crossing the representation threshold. *Environmental Politics*, 30(6): 938-957. <https://doi.org/10.1080/09644016.2020.1817650>
- [40] Udeagha, M.C., Muchapondwa, E. (2023). Achieving green environment in Brazil, Russia, India, China, and South Africa economies: Do composite risk index, green innovation, and environmental policy stringency matter? *Sustainable Development*, 31(5): 3468-3489. <https://doi.org/10.1002/sd.2597>
- [41] Ullah, S., Luo, R., Nadeem, M., Cifuentes-Faura, J. (2023). Advancing sustainable growth and energy transition in the United States through the lens of green energy innovations, natural resources and environmental policy. *Resources Policy*, 85: 103848. <https://doi.org/10.1016/j.resourpol.2023.103848>
- [42] von Malmborg, F. (2024). At the controls: Politics and policy entrepreneurs in EU policy to decarbonize maritime transport. *Review of Policy Research*. <https://doi.org/10.1111/ropr.12609>
- [43] Wang, M., Li, X., Wang, S. (2021). Discovering research trends and opportunities of green finance and energy policy: A data-driven scientometric analysis. *Energy Policy*, 154: 112295. <https://doi.org/10.1016/j.enpol.2021.112295>
- [44] Baute, S. (2024). The distributive politics of the green transition: A conjoint experiment on EU climate change mitigation policy. *Journal of European Public Policy*. <https://doi.org/10.1080/13501763.2024.2304609>
- [45] Fisher, S.D., Kenny, J., Poortinga, W., Böhm, G., Steg, L. (2022). The politicisation of climate change attitudes in Europe. *Electoral Studies*, 79, 102499. <https://doi.org/10.1016/j.electstud.2022.102499>
- [46] Gourley, P., Khamis, M. (2023). It is not easy being a green party: Green politics as a normal good. *European Journal of Political Economy*, 76: 102266. <https://doi.org/10.1016/j.ejpoleco.2022.102266>
- [47] Tranter, B., Skrbiš, Z., Smith, J.F. (2020). Poles apart: Political divisions over climate change among younger Australians. *Journal of Applied Youth Studies*, 3(3): 255-273. <https://doi.org/10.1007/s43151-020-00013-5>
- [48] Sheng, C., Liu, Y., Liu, J. (2023). Multi-level governance and competing sustainability aims: Politics of renewable energy development and nature conservation in Changdao, China. *Energy Research & Social Science*, 97: 103001. <https://doi.org/10.1016/j.erss.2023.103001>
- [49] Brunn, S.D. (2022). Geographers and sustainability: Five research challenges. *Geography and Sustainability*, 3(1): 68-73. <https://doi.org/10.1016/j.geosus.2022.03.003>
- [50] Pan, M., Ng, M. K., Xu, Y. (2023). Just sustainability, actor-networks and environmental politics in China: Local controversies over shared environmental infrastructure in industrial districts. *Local Environment*,

- 28(8): 979–994.
<https://doi.org/10.1080/13549839.2023.2181778>
- [51] Zhang, A., Deng, R., Wu, Y. (2022). Does the green credit policy reduce the carbon emission intensity of heavily polluting industries? Evidence from China's industrial sectors. *Journal of Environmental Management*, 311: 114815. <https://doi.org/10.1016/j.jenvman.2022.114815>
- [52] Zhang, C., Wang, Z., Li, Y., Zhang, D., Balezentis, T. (2024). Can green credit policy with dual-carbon targets make highly polluting enterprises “green”: A micro-analysis of total factor productivity growth. *Journal of Environmental Management*, 367: 121981. <https://doi.org/10.1016/j.jenvman.2024.121981>
- [53] Panarello, D. (2021). Economic insecurity, conservatism, and the crisis of environmentalism: 30 years of evidence. *Socio-Economic Planning Sciences*, 73: 100925. <https://doi.org/10.1016/j.seps.2020.100925>
- [54] Antal, A. (2021). Authoritarian populism, environmentalism and exceptional governance in Hungary. *Politologický Časopis/Czech Journal of Political Science*, 28(3): 209-228. <https://doi.org/10.5817/PC2021-3-209>
- [55] Wolford, W.W., White, B., Scoones, I., Hall, R., Edelman, M., Borras, S.M. (2024). Global land deals: What has been done, what has changed, and what's next? *Journal of Peasant Studies*. <https://doi.org/10.1080/03066150.2024.2325685>
- [56] Allan, B., Lewis, J.I., Oatley, T. (2021). Green industrial policy and the global transformation of climate politics. *Global Environmental Politics*, 21(4): 1-19. https://doi.org/10.1162/glep_a_00640