



## A Multivocal Literature Review of Green Election Political Education Based on Pancasila Values to Achieve Sustainability

Pratama Yoga Wica<sup>(1)</sup>, Farid Fadillah<sup>(2)</sup>, Novi Eka Saputri<sup>(3)</sup>, Arif Subowo<sup>(4)</sup>, Nurul Fajariah<sup>(5)</sup>, Ahmad Ridhani Noorfauzi<sup>(6)</sup>

<sup>1,5,6</sup>Politeknik Negeri Tanah Laut, Indonesia

<sup>2</sup>Universitas 17 Agustus 1945 Samarinda, Indonesia

<sup>3</sup>Universitas Terbuka, Banten, Indonesia

<sup>4</sup>Universitas Negeri Manado, Indonesia

<sup>1</sup>pratamayoga@politla.ac.id, <sup>2</sup>faridfadillah36@gmail.com, <sup>3</sup>novi.eka.saputri@ecampus.ut.ac.id,

<sup>4</sup>arifsubowo@unima.ac.id, <sup>5</sup>nurul@politla.ac.id, <sup>6</sup>ahmadridhani@politla.ac.id

### Abstract

Pancasila-based green election reform is positioned as a strategy to strengthen democracy with integrity while simultaneously orienting toward sustainability and environmental awareness. Using the Multivocal Literature Review method, this study examined 69 secondary documents from regulations, journals, proceedings, reports, and books. This international and national literature review utilized large databases such as Scopus and Web of Science. Government documents, such as laws, regulations, and other supporting documents, were retrieved from Indonesian legal web sources. Two concepts were used: environmental and political education. These two concepts were used solely for conceptual understanding. The analysis was then conducted based on existing regulations in Indonesia, then integrated with the values of Pancasila. The results show that although regulations on environmental political education exist, their implementation remains weak, and the values of divinity, humanity, unity, deliberation, and justice have not been reflected in environmental election performance indicators. Key recommendations include green compliance indicators in the evaluation and ethics of organizers, low emission campaigns that are inclusive of all groups including people with disabilities, the establishment of a green election task force, the development of a green election deliberation module, and the management of campaign material waste to promote a just and sovereign green democracy in line with Pancasila.

**Keywords:** environmental, green elections, political education, sustainability, values

### Abstrak

Reformasi pemilu berbasis pemilu hijau Pancasila diposisikan sebagai strategi untuk memperkuat demokrasi yang berintegritas sekaligus berorientasi pada keberlanjutan dan kesadaran lingkungan. Dengan metode Multivocal Literature Review, studi ini menelaah 69 dokumen sekunder dari regulasi, jurnal, prosiding, laporan, dan buku. Tinjauan pustaka internasional dan nasional ini memanfaatkan basis data besar seperti Scopus dan Web of Science. Dokumen pemerintah, seperti undang-undang, peraturan, dan dokumen pendukung lainnya, diambil dari sumber web hukum Indonesia. Menggunakan dua konsep yaitu pemahaman lingkungan dan pendidikan politik. Kedua konsep ini digunakan semata-mata untuk pemahaman konseptual. Analisis kemudian dilakukan berdasarkan peraturan yang sudah dilaksanakan di Indonesia, kemudian diintegrasikan dengan nilai-nilai Pancasila. Hasilnya menunjukkan bahwa meski sudah ada aturan tentang pendidikan politik lingkungan, penerapannya masih lemah dan nilai ketuhanan, kemanusiaan, persatuan, musyawarah, serta keadilan belum terwujud dalam indikator kinerja lingkungan pemilu. Rekomendasi utama meliputi indikator kepatuhan hijau dalam evaluasi dan etika penyelenggara, kampanye rendah emisi yang inklusif bagi semua kelompok termasuk penyandang disabilitas, pembentukan satuan tugas pemilu hijau, pengembangan modul musyawarah pemilu hijau, dan pengelolaan



## Introduction

Elections play a crucial role in maintaining the sustainability of political parties and ensuring democratic, transparent, and open leadership changes through participation and political communication in the public sphere (Sloman, 2020). Elections are not only a means of elite rotation, but also a tool for assessing political structures and the quality of prospective leaders to ensure legitimacy of power based on competence and integrity (Maninggasa, 2022; Triana et al., 2023). Citizen participation is a key indicator of democratic health (Al Izzati et al., 2024; Rahman & Suharno, 2020). Political and democratic education fosters critical, just, and participatory citizens, especially the younger generation (Polandos et al., 2023; Polat, 2020).

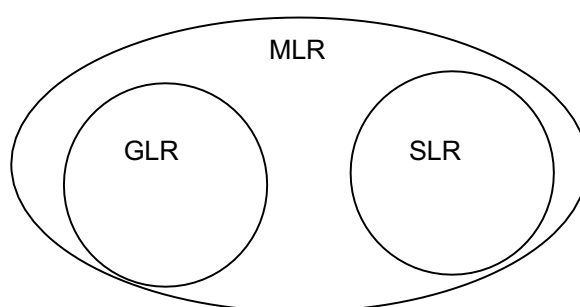
Environmental literacy is essential for understanding the impacts of human actions, promoting sustainable policies and practices across sectors (Figueiredo et al., 2023; Nuangchalerm et al., 2022; Shen et al., 2020). Examples in Europe and developed countries demonstrate strong support for pro environmental parties and opportunities for effective climate campaigns, including through short digital messages targeting young voters (Hirvonen et al., 2024; Kronborg et al., 2024; Lindgren et al., 2025; Otrachshenko & Popova, 2026; Papp, 2022). In India, election plans appear to be able to reduce energy consumption, logistics costs, and waste production, in line with the practice of "Green Elections" in Kerala and the pilot of low carbon campaigns in Puducherry (Singh & Mishra, 2025). Meanwhile in Indonesia, political education is based on Pancasila and the 1945 Constitution, including awareness of the impact of elections on the environment (Wahyuni & Adnan, 2024).

The IPCC confirms that cities are key actors in the climate crisis, contributing nearly 70% of global emissions and highly vulnerable to climate impacts (Dodman et al., 2023). Approximately 56% of the world's population now lives in urban areas, many of which are in coastal lowlands, making cities a priority for mitigation and adaptation (MacManus et al., 2021). In the context of the 2024 Indonesian elections, environmental issues only covered approximately 20–35% of monitored campaign materials (Thalib, 2024). This is likely related to the fact that green election practices such as digitalization of materials, waste/APK restrictions, and campaign waste management education have only been

implemented in approximately 15–30% of pilot areas and have not yet become national standards (Mulyadi et al., 2024). To address this gap, a new approach is proposed, aiming to map political education with an environmental agenda and develop Pancasila based green election guidelines, focusing on pre and post election follow up measures.

## Method

The Multivocal Literature Review (MLR) method was used in this study. MLR is a combination of Grey Literature (GLR) and Systematic Literature Review (SLR), for example blog posts, videos, official government reports (Garousi et al., 2019), and government regulations, proceedings, and books (Ruijter et al., 2023). The following explanation can be seen in Figure 1.



**Figure 1. Multivocal Literature Review**

**Source:** Adapted from (Garousi et al., 2019)

A Systematic Literature Review is a research review structured with sequential and planned steps (Carrera-Rivera et al., 2022). SLR can be qualitative, quantitative, or mixed, and this study chose a qualitative approach because it aims to explain mechanisms, experiences, and contexts, not just the magnitude of impact (Flemming & Noyes, 2021; Lim, 2025). The search process followed a three step guideline from The Joanna Briggs Institute (JBI): initial exploration, development of keywords and indexed terms, and then expansion to bibliographies and related sources to minimize bias (Cooper-Stanton et al., 2022). This was followed by the development of a research guideline. The following are the data compilation guidelines for this study, which can be seen in Table 1 below.

**Table 1. JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses**

Number	Question	Answer	Description
1	Is the review question clearly and explicitly stated?	Yes	Can be seen in the explanation section
2	Were the inclusion criteria appropriate for the review question?	Yes	Can be seen in the explanation section
3	Was the search strategy appropriate?	Yes	Yes, because it uses MLR method

4	Were the sources and resources used to search for studies adequate?	Yes	Data sourced from Scopus and Web of Science, regulations, books, and documents
5	Were the criteria for appraising studies appropriate?	Yes	Preparation of guidelines based on JBI
6	Was critical appraisal conducted by two or more reviewers independently?	Yes	Written by more than one author
7	Were there methods to minimize errors in data extraction?	Yes	Using the Turnitin application
8	Were the methods used to combine studies appropriate?	Yes	Multivocal Literature Review (MLR)
9	Was the likelihood of publication bias assessed?	Yes	Using the Turnitin application
10	Were recommendations for policy and/or practice supported by the reported data?	Yes	Has been included in the recommendations for better research
11	Were the specific directives for new research appropriate?	Yes	Has been included in the recommendations for better research

**Source:** Adapted from the Joanna Briggs Institute (JBI) guidelines (Martin, 2017)

Table 1 confirms that this study complies with JBI guidelines. The data used are secondary data, summarized using the MLR method by extracting outcomes, themes, or impacts into a single synthesis. The selection of secondary data was based on efficiency, affordability, and ease of access to answer new research questions (Kelly et al., 2024). A data search was conducted to find articles on environmental and political studies, with data sources including laws and regulations (Zieger & Scudder, 2025), government reports and policy documents (Zuiderwijk et al., 2021), and international and national literature reviews (Libório et al., 2023). This international and national literature review utilized large databases such as Scopus and Web of Science (Gusenbauer & Gauster, 2025). Government documents such as laws, regulations, and other supporting documents were retrieved from Indonesian legal web sources. Then the data is classified, and can be seen in Table 2 below.

**Table 2. Research Secondary Data Classification**

Contents Regulation	Number of Documents
Laws and regulations	5
International journals	47
National journals	9
Other journals	8
<b>Total Document</b>	<b>69 Documents</b>

**Source:** From Author's Data

## Result and Discussion

After collecting 69 documents, a research framework was developed using two theories as a conceptual foundation: environmental and political education. These two concepts were used solely for conceptual understanding. An analysis was then conducted

based on Pancasila values. This analysis examined the duties, authorities, and environmental regulatory activities carried out by election organizers before and after the election through various applicable laws and regulations. The results of this study provide updates to address existing research gaps and offer practical recommendations for the development of future guidelines for green election research and policies, including the need for clear operational regulations and cross stakeholder collaboration.

### Understanding Environmental

The threat of environmental damage needs to be addressed by increasing public understanding (Yang et al., 2021). Environmental understanding encompasses the integration of knowledge, skills, competencies, and behavioral responses to environmental issues, including regulations and the socio economic impacts of environmental degradation (Huang & Hsin, 2023; Liang et al., 2018). It also encompasses knowledge of natural ecosystem mechanisms and human efforts to maintain sustainability (Kharchenko et al., 2020; Koçak et al., 2023). Environmental understanding is an essential foundation for equipping individuals to support sustainable development (Wardani et al., 2018). This capability means being able to interpret ecosystem balance and act to maintain it (Aikowe & Mazancova, 2023), developing knowledge, values, ethics, and skills to prevent and repair environmental damage (Putra et al., 2021). Environmental understanding encompasses four components: knowledge, competence, disposition, and environmentally conscious behavior (Ariyatun et al., 2024; Sasa et al., 2022; Szczytko et al., 2019). Its implementation can be realized through political education..

### Political Education

Political education is essential for instilling core values, fostering civic awareness, and fostering social responsibility (Svensson, 2023). Understanding the political system encourages individuals to actively participate (Willeck & Mendelberg, 2022) and develop political efficacy, the belief in their ability to understand and engage in political issues (Lam, 2019). Political education helps individuals assess social issues rationally (Ouyang et al., 2024). In the context of sustainability, political education plays a role in fostering environmental awareness and promoting sustainable development (Liu & Luo, 2023), as political orientation influences environmental policy (Hwang et al., 2024) and public understanding of environmental issues (Luo et al., 2022). In various countries, party policies are formulated through a combination of scientific considerations and political interests

(Wang et al., 2021), and some leaders incorporate environmental education agendas into government policies (Earle & Leyva-de La Hiz, 2021). Therefore, environmental education must be sensitive to political and cultural dynamics for environmental solutions to be effective (Long & Henderson, 2024; Prusinski, 2024). In higher education, sustainability oriented environmental education has been shown to encourage pro environmental behavior among students (Gopinath & Kumar, 2025; Negm, 2024; Sepúlveda Hernández, 2024; Shange et al., 2025). Therefore, election management bodies need to actively educate the younger generation through political education outreach.

### Integration of Pancasila Values

Policy formulation in a democratic system stems from public aspirations channeled through elections and direct democracy mechanisms (Charles, 2024). Elections are not merely a technical procedure but also a manifestation of the values of freedom, equality, and respect for human rights (Hasibuan, 2023). Presidential and regional head elections are a crucial part of the electoral system, which is organized based on the principle of equality (Heriyanto, 2022; Najmi et al., 2024). In Indonesia, the General Elections Commission (KPU) (election organizer), the Election Supervisory Agency (Bawaslu) (election supervisor), and the Election Organizers Honorary Council (DKPP) (election ethics enforcement) are responsible for disseminating political education to raise public awareness of responsible political behavior and the importance of environmental conservation in the democratic process. Table 3 shows regulations governing environmental aspects before and after elections in the Republic of Indonesia.

**Table 3. Regulations That Regulate Environmental Aspects Before and After The General Election In The Republic Of Indonesia**

Number	Contents Regulation	Source
1	Articles 275 and 280 prohibit the installation of campaign materials in public and strategic locations (government offices, public facilities, places of worship, schools, campuses, and trees) for the sake of order and aesthetics, while Article 298 requires the KPU to install campaign materials with attention to ethics, cleanliness, and the beauty of the city as an environmental responsibility.	(Law The Republic Indonesia Number 7 of 2017)
2	Article 66 Paragraph (5) requires election organizers to display campaign materials while maintaining environmental cleanliness and beauty, while Article 85 Paragraph (2) allows the use of e-voting to reduce paper, thus saving resources and supporting environmentally friendly and sustainable elections.	(Law Number 1 of 2015)
3	This regulation limits the installation of APK/BK in public spaces such as trees, places of worship, and highways for the sake of order and environmental aesthetics, while also encouraging ethical political practices and environmental preservation in accordance with the principles of sustainable development.	(General Election Commission Regulation Number 15 of 2023)

4	Article 2 Paragraph (3) emphasizes that election supervision must pay attention to environmental management, so that elections are not only about politics but also require protecting the ecosystem by preventing negative impacts, for example by efficiently using resources and managing campaign waste.	(General Election Supervisory Agency Regulation Number 5 of 2022)
5	This regulation encourages environmentally friendly campaigns and health protocols during the pandemic as part of the state's responsibility towards sustainability, balancing political participation and ecosystem protection through restrictions on single-use plastic materials and promoting more resource-efficient digital campaigns.	(General Election Commission Number 5 of 2020)

**Source:** From Author's Data

A detailed analysis of the weaknesses of environmental regulations can be seen in Table 4.

**Table 4. Analysis of Weaknesses of Environmental Socialization Regulations**

Contain	Weaknesses of Regulation	Source
1	The main weakness of this regulation is that the concept of green elections is only stated normatively without technical guidelines, evaluation indicators, and strong institutional commitment, so that its implementation is not systematic and is not yet truly oriented towards sustainability.	(Law The Republic Indonesia Number 7 of 2017)
2	This regulation has not adequately accommodated the urgency of environmental sustainability in regional head elections because resource efficiency, campaign waste management, and environmentally friendly principles have not been prioritized, while the absence of a firm monitoring and sanctioning mechanism makes it difficult to optimally realize the commitment to sustainable regional head elections.	(Law Number 1 of 2015)
3	The main weakness of this regulation is the absence of a clear sanctioning mechanism for violations that impact the environment, so that enforcement of environmental protection principles is weak and the potential for pollution or damage from campaign activities is difficult to suppress effectively.	(General Election Commission Regulation Number 15 of 2023)
4	This regulation has not been effective in encouraging environmentally friendly campaigns because it places more emphasis on election procedures, without technical guidance or incentives to switch to sustainable media, so the use of non-biodegradable campaign materials such as plastic banners and synthetic billboards remains high and has the potential to increase post-election environmental pollution.	(General Election Supervisory Agency Regulation Number 5 of 2022)
5	This regulation has not integrated sustainability into campaign financing because it does not provide budget guidelines for environmentally friendly activities (green materials or waste management), so that funding practices remain oriented towards electoral efficiency without encouraging environmental responsibility as part of sustainable democratic ethics.	(General Election Commission Number 5 of 2020)

**Source:** From Author's Data

Problems with green elections and solutions for implementing the pancasila principles can be seen in Table 5.

**Table 5. Problems with Green Elections and Solutions for Implementing the Pancasila Principles**

The Principles of Pancasila	Problems	Solution
The First Principle is Belief in One Almighty God.	The value of divinity as the moral basis of public policy has not been realized in the environmental compliance indicators of elections, so that the ethics of respect for God's creation has not been made a standard for the performance of organizers.	It is recommended to include a "green compliance" indicator in the evaluation of election organizers' policies and ethics, and to link democratic participation with environmental preservation as a form of spiritual responsibility, in line with the First Principle of Pancasila which emphasizes respect for God's creation.
The Second Principle is Just and Civilized Humanity.	The just and civilized humanitarian values as stated in the Second Principle of Pancasila have not been fully implemented in election campaign standards, resulting in problems in the form of a lack of environmentally friendly campaign practices that are also inclusive of people with disabilities and vulnerable groups.	It is recommended that election organizers implement low emission election protocols that simultaneously guarantee inclusivity, including physical accessibility, noise control, and safe zones as a form of practicing the Second Principle of Pancasila, namely upholding just and civilized humanity for all citizens without discrimination.
The Third Principle is the Unity of Indonesia.	The lack of solid coordination between related institutions such as the KPU, Bawaslu, local governments, DLH, and Satpol PP in managing election waste shows that the value of Indonesian Unity (the Third Principle of Pancasila) has not been realized, resulting in uneven handling and weakening the spirit of mutual cooperation in maintaining the sustainability of public spaces.	It is recommended to establish an integrated green election task force from the central to the regional levels that unites the roles of the General Elections Commission (KPU), Elections Supervisory Agency (Bawaslu), Regional Governments, Environmental Agency (DLH), and Public Order Agency (Satpol PP) in a single command for monitoring, regulating, and publishing compliance, in order to strengthen national unity and uniformity of environmental conservation practices throughout Indonesia, in line with the spirit of the Third Principle of Pancasila.
The Fourth Principle is Democracy Led by the Wisdom of Deliberation /Representation.	Election socialization has not yet implemented a green deliberation curriculum that teaches citizens to formulate data based proposals, engage in dialogue with organizers, and monitor joint decisions, thus reflecting the less than optimal implementation of the Fourth Principle of Pancasila in ensuring wise and participatory democracy regarding environmental issues.	It is recommended to develop a national scale "green election deliberation" module integrated into the KPU public participation program and Bawaslu's monitoring network, including reporting and follow up mechanisms, to realize environmentally conscious deliberative democracy in line with the Fourth Principle of Pancasila.
The Fifth Principle is Just and Civilized Humanity	Social justice for all Indonesian people (the Fifth Principle of Pancasila) has not been fully realized in the context of elections, as can be seen from the disparity in waste management infrastructure in various regions, which causes regions with limited facilities to have to bear a greater burden of campaign waste without any standard of support across regions that is evenly distributed.	It is recommended to develop a national technical assistance protocol and a network of recycling vendors across regions to ensure fairer processing of used campaign materials (APK), supported by transparent reporting to reduce waste and distribute burdens and benefits equitably as mandated by the Fifth Principle of Pancasila.

**Source:** From Author's Data



The results of this study indicate that the state has attempted to integrate social and environmental dimensions into election administration through environmental outreach programs (Table 3). However, implementation, policy effectiveness, and field oversight remain weak, necessitating strengthened regulations and coordination among election organizers (Table 4). To address these limitations, it is recommended to review the concept of environmental political education based on Pancasila values, which emphasize the balance between humans, society, and nature. The integration of Pancasila values into sustainable election practices is expected to strengthen environmental awareness and moral responsibility in democratic life, in accordance with democratic principles rooted in the state's fundamental ideology (Table 5). These solutions will enhance the professionalism of election organizers and strengthen public trust in the integrity of the democratic process. Thus, elections will become not only a political mechanism but also an instrument of sustainable development aligned with social welfare and environmental justice. The transformation toward green elections requires multi-sectoral collaboration between the government, election organizers, political participants, educational institutions, and civil society. This synergy is key to fostering awareness that the success of sustainable democracy is determined not only by election results, but also by environmental sustainability, public ethical values, and inclusive participation, so that Indonesia can realize a greener, more progressive, and more sovereign electoral system.

## **Conclusion**

Election reforms based on the Green Election concept and Pancasila values aim to build a democratic system with integrity and environmental awareness. Sustainability principles need to be applied at every stage of the election, from campaigning to voting, so that elections serve not only as a mechanism for the transfer of power but also as a means of political education and environmental awareness for the public. The key to success lies in strengthening political and environmental education before and after the election, so that citizens have a clear understanding of the environmental impacts of political activities and are motivated to elect leaders and policies that support sustainable development in accordance with Pancasila values.

However, the implementation of these reforms still faces obstacles because the values of divinity, humanity, unity, deliberation, and justice embodied in Pancasila have not been operationally translated into measurable environmental performance indicators. To address this, several concrete solutions are recommended: the implementation of "green

compliance" indicators in the evaluation of election organizer policies and ethics, low emission event protocols that are inclusive of all community groups, the establishment of a green election task force that integrates the roles of the General Elections Commission (KPU), Elections Supervisory Agency (Bawaslu), local governments, and related agencies, the development of a green election deliberation module for citizen education, and the management of campaign waste recycling through a transparent and measurable regional vendor network. With inclusive participation from all government and community stakeholders, Indonesia can realize a green democracy that is just, visionary, and in line with the noble ideals of Pancasila.

## Suggestion

Further research could examine the extent to which political actors and election organizers truly incorporate environmental values into their communication and campaign strategies, as well as their impact on voter awareness, perception, and participation on environmental issues. This approach helps understand the relationship between electoral interests and environmental moral commitments, while also assessing the effectiveness of green campaigns in encouraging environmentally conscious voter behaviour. Furthermore, comparative studies across regions or between political parties are important to examine variations in the application of environmentally friendly election principles across various socio political contexts in Indonesia, including supporting and inhibiting factors, such as political culture, institutional capacity, and regulations. The research findings are expected to enrich political science and public policy, and contribute to a model for elections that is democratic, inclusive, environmentally, and aligned with the values of Pancasila as a sustainable political ethic.

## References

- Aikowe, L. D., & Mazancova, J. (2023). Pro-environmental awareness of university students – assessment through sustainability literacy test. *International Journal of Sustainability in Higher Education*, 24(3), 719–741. <https://doi.org/10.1108/IJSHE-06-2021-0219>
- Al Izzati, R., Dartanto, T., Suryadarma, D., & Suryahadi, A. (2024). Direct elections and trust in state and political institutions: Evidence from Indonesia's election reform. *European Journal of Political Economy*, 85, 102572. <https://doi.org/10.1016/j.ejpoleco.2024.102572>
- Ariyatun, A., Sudarmin, S., Wardani, S., Saptono, S., & Winarto, W. (2024). Bibliometric Analysis of Environmental Literacy in Sustainable Development: A Comprehensive Review Based on Scopus Data From 2013 to 2023. *International Journal of Educational Methodology*, volume–10–2024(volume–10–issue–1–february–2024), 179–195. <https://doi.org/10.12973/ijem.10.1.979>

- Carrera-Rivera, A., Ochoa, W., Larrinaga, F., & Lasa, G. (2022). How-to conduct a systematic literature review: A quick guide for computer science research. *MethodsX*, 9, 101895. <https://doi.org/10.1016/j.mex.2022.101895>
- Charles, G. (2024). *How Political Institutional Arrangements Shape Public Policy* [PDF]. <https://doi.org/10.5526/ESJ.370>
- Cooper-Stanton, G. R., Gale, N., Sidhu, M., & Allen, K. (2022). A qualitative systematic review and meta-aggregation of the experiences of men diagnosed with chronic lymphoedema. *Journal of Research in Nursing*, 27(8), 704–732. <https://doi.org/10.1177/17449871221088791>
- Dodman, D., Hayward, B., & Pelling, M. (Eds). (2023). *Climate Change 2022 - Mitigation of Climate Change: Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (1st edn). Cambridge University Press. <https://doi.org/10.1017/9781009157926>
- Earle, A. G., & Leyva-de La Hiz, D. I. (2021). The wicked problem of teaching about wicked problems: Design thinking and emerging technologies in sustainability education. *Management Learning*, 52(5), 581–603. <https://doi.org/10.1177/1350507620974857>
- Figueiredo, M., Dias, A., Neves, J., & Vicente, H. (2023). Assessment of Literacy to Biotechnological Solutions for Environmental Sustainability in Portugal. *Sustainability*, 15(13), 10056. <https://doi.org/10.3390/su151310056>
- Flemming, K., & Noyes, J. (2021). Qualitative Evidence Synthesis: Where Are We at? *International Journal of Qualitative Methods*, 20, 1609406921993276. <https://doi.org/10.1177/1609406921993276>
- Garousi, V., Felderer, M., & Mäntylä, M. V. (2019). Guidelines for including grey literature and conducting multivocal literature reviews in software engineering. *Information and Software Technology*, 106, 101–121. <https://doi.org/10.1016/j.infsof.2018.09.006>
- General Election Commission Number 5 of 2020 Concerning The Third Amendment To The General Election Commission Regulation Number 15 Of 2019 Concerning The Stages, Program, And Schedule of The 2020 Election Of Governor And Vice Governor, Regent And Vice Regent, And/or Mayor and Vice Mayor, State News No. 615 7 (2025). <https://peraturan.bpk.go.id/Details/173389/peraturan-kpu-no-5-tahun-2020>
- General Election Commission Regulation Number 15 of 2023 Concerning General Election Campaigns, State News No. 548 57 (2025). <http://peraturan.bpk.go.id/Details/263594/peraturan-kpu-no-15-tahun-2023>
- General Election Supervisory Agency Regulation Number 5 of 2022 concerning Supervision of the Implementation of General Elections, Pub. L. No. State Gazette The Republic Of Indonesia 2022 Number 1071, 16 (2025). <http://peraturan.bpk.go.id/Details/254603/peraturan-bawaslu-no-5-tahun-2022>
- Gopinath, S., & Kumar, A. (2025). The effect of an environmental education program based on empathy and reflective thinking on preadolescents' environmental values and knowledge. *International Research in Geographical and Environmental Education*, 34(2), 100–119. <https://doi.org/10.1080/10382046.2024.2349430>
- Gusenbauer, M., & Gauster, S. P. (2025). How to search for literature in systematic reviews and meta-analyses: A comprehensive step-by-step guide. *Technological Forecasting and Social Change*, 212, 123833. <https://doi.org/10.1016/j.techfore.2024.123833>
- Hasibuan, S. A. (2023). Sistem Pemilihan Umum dalam Kaitan dengan Negara Demokrasi. *Warta Dharmawangsa*, 17(2), 602–609. <https://doi.org/10.46576/wdw.v17i2.3174>
- Heriyanto, H. (2022). Dinasti Politik Pada Pilkada Di Indonesia Dalam Perspektif Demokrasi. *Journal of Government and Politics (JGOP)*, 4(1), 29. <https://doi.org/10.31764/jgop.v4i1.7778>

- Hirvonen, S., Lassander, M., Sääksvuori, L., & Tukiainen, J. (2024). Mobilizing young voters with short text messages in nationwide field experiments. *Aboa Centre for Economics (ACE)*, 166.
- Huang, H., & Hsin, C. T. (2023). Environmental Literacy Education and Sustainable Development in Schools Based on Teaching Effectiveness. *International Journal of Sustainable Development and Planning*, 18(5), 1639–1648. <https://doi.org/10.18280/ijstdp.180535>
- Hwang, E., Kim, S., & Kim, S. (2024). Is it possible to manage energy politics? Exploring the direct and indirect effects of political factors on the acceptance of solar energy. *Energy Strategy Reviews*, 55, 101532. <https://doi.org/10.1016/j.esr.2024.101532>
- Kelly, M. M., Martin-Peters, T., & Farber, J. S. (2024). Secondary Data Analysis: Using existing data to answer new questions. *Journal of Pediatric Health Care*, 38(4), 615–618. <https://doi.org/10.1016/j.pedhc.2024.03.005>
- Kharchenko, T., Hatska, L., Sagaydack, J., & Chubuk, L. (2020). Education System Environmentalization in Ukraine within the Modern Context. *Journal of Environmental Management and Tourism*, 11(3), 704. [https://doi.org/10.14505/jemt.v11.3\(43\).24](https://doi.org/10.14505/jemt.v11.3(43).24)
- Koçak, E., Yalçın Çelik, A., & Uluyol, Ç. (2023). Pre-service Teachers' Environmental Literacy: The Role of STEM-Based Environmental Education with Microcontrollers. *Participatory Educational Research*, 10(5), 233–247. <https://doi.org/10.17275/per.23.84.10.5>
- Kronborg, A., Hedegaard, F., Klindt, I., & Vandeweerd, C. (2024). Do green parties in government benefit from natural catastrophes? How wildfires are linked to voting. *Electoral Studies*, 88, 102749. <https://doi.org/10.1016/j.electstud.2024.102749>
- Lam, W. W.-L. (2019). *The Fight for China's Future: Civil Society vs. the Chinese Communist Party* (1st edn). Routledge. <https://doi.org/10.4324/9780429198915>
- Law Number 1 of 2015 Concerning the Stipulation Government Regulation in Lieu of Law Number 1 of 2014 Concerning the Election of Governors, Regents, and Mayors to Become Law, Pub. L. No. State Gazette The Republic Of Indonesia 2014 Number 245, 130 (2025). <http://peraturan.bpk.go.id/Details/37341/uu-no-1-tahun-2015>
- Law The Republic Indonesia Number 7 of 2017 Concerning General Elections, Pub. L. No. State Gazette Of The Republic Of Indonesia Year 2017 Number 182, 317. Retrieved 21 July 2025, from <https://peraturan.bpk.go.id/details/37644/uu-no-7-tahun-2017>
- Liang, S.-W., Fang, W.-T., Yeh, S.-C., Liu, S.-Y., Tsai, H.-M., Chou, J.-Y., & Ng, E. (2018). A Nationwide Survey Evaluating the Environmental Literacy of Undergraduate Students in Taiwan. *Sustainability*, 10(6), 1730. <https://doi.org/10.3390/su10061730>
- Libório, M. P., Martins, C. A. P. S., Laudaes, S., & Ekel, P. I. (2023). Method of preparing an international and national literature review for novice researchers. *MethodsX*, 10, 102165. <https://doi.org/10.1016/j.mex.2023.102165>
- Lim, W. M. (2025). Systematic Literature Reviews: Reflections, Recommendations, and Robustness Check. *Journal of Consumer Behaviour*, 24(3), 1498–1510. <https://doi.org/10.1002/cb.2479>
- Lindgren, K.-O., Nyman, P., & Oskarsson, S. (2025). Examining Voting Spillover Effects of Text Message Reminders. *British Journal of Political Science*, 55, e21. <https://doi.org/10.1017/S0007123424000504>
- Liu, S., & Luo, L. (2023). A Study on the Impact of Ideological and Political Education of Ecological Civilization on College Students' Willingness to Act Pro-Environment: Evidence from China. *International Journal of Environmental Research and Public Health*, 20(3), 2608. <https://doi.org/10.3390/ijerph20032608>
- Long, D. E., & Henderson, J. A. (2024). Emergent forms of 'Dark Green Religion' and the (ecofascist) future of environmental education in the United States. *Environmental*

- Education Research*, 30(9), 1500–1518.  
<https://doi.org/10.1080/13504622.2024.2359455>
- Luo, L., Qiao, D., Tang, J., Wan, A., Qiu, L., Liu, X., Liu, Y., & Fu, X. (2022). Training of Farmers' Cooperatives, Value Perception and Members' Willingness of Green Production. *Agriculture*, 12(8), 1145. <https://doi.org/10.3390/agriculture12081145>
- MacManus, K., Balk, D., Engin, H., McGranahan, G., & Inman, R. (2021). Estimating population and urban areas at risk of coastal hazards, 1990–2015: How data choices matter. *Earth System Science Data*, 13(12), 5747–5801. <https://doi.org/10.5194/essd-13-5747-2021>
- Maninggesa, S. (2022). Pentingnya Peranan Pemerintah Daerah dalam Penyelenggaraan Pemilihan Umum. *AHKAM*, 1(1), 166–176. <https://doi.org/10.58578/ahkam.v1i1.749>
- Martin, J. (2017). © Joanna Briggs Institute 2017 *Critical Appraisal Checklist for Systematic Reviews and Research Syntheses*.
- Mulyadi, D., St May, N., Hidayat, S., Egas, & Adawiah, I. (2024). Evaluation of the Performance of the General Election Commission Based on the Principles of Clean and Good Governance in the 2024 Election. *Indonesian Journal of Law and Justice*, 2(2), 17. <https://doi.org/10.47134/ijlj.v2i2.3435>
- Najmi, A., Ibad, S., & Dairani, D. (2024). Politik Blater dalam Perspektif UU. Pemilu No.7 Tahun 2017. *HUKMY: Jurnal Hukum*, 4(2), 725–733. <https://doi.org/10.35316/hukmy.2024.v4i2.725-733>
- Negm, E. (2024). Recognizing the impact of value-belief-norm theory on pro-environmental behaviors of higher education students: Considering aspects for social-marketing applications. *International Journal of Sustainability in Higher Education*, 25(2), 289–305. <https://doi.org/10.1108/ijshe-04-2023-0135>
- Nuangchalerm, P., El Islami, R. A. Z., & Prasertsang, P. (2022). Science Attitude on Environmental Conservation of Thai and Indonesian Novice Science Teacher Students. *International Journal of STEM Education for Sustainability*, 2(2), 148–155. <https://doi.org/10.53889/ijses.v2i2.62>
- Otrachshenko, V., & Popova, O. (2026). Environment vs. economic growth: Do environmental preferences translate into support for Green parties? *Ecological Economics*, 239, 108779. <https://doi.org/10.1016/j.ecolecon.2025.108779>
- Ouyang, S., Zhang, W., Xu, J., Mat Rashid, A., How, S. P., & Bin Hassan, A. (2024). Unmasking the challenges in ideological and political education in China: A thematic review. *Heliyon*, 10(8), e29176. <https://doi.org/10.1016/j.heliyon.2024.e29176>
- Papp, Z. (2022). Environmental attitudes, environmental problems and party choice. A large-N comparative study. *Political Geography*, 97, 102652. <https://doi.org/10.1016/j.polgeo.2022.102652>
- Polandos, L., Niode, B., & Lengkong, J. P. (2023). Peran Media Sosial dalam Partisipasi Politik Kaum Milenial: Studi Pada Pemilihan Gubernur Dan Wakil Gubernur Sulawesi Utara Tahun 2020 di Kecamatan, Langowan Selatan. *POLITICO: Jurnal Ilmu Politik*, 12(2), 153–169. <https://doi.org/10.35797/jp.v12i2.47191>
- Polat, S. (2020). Multidimensional Analysis of the Teaching Process of the Critical Thinking Skills. *Research in Social Sciences and Technology*, 5(2), 134–157. <https://doi.org/10.46303/ressat.05.02.8>
- Presidential Decree No. 16 of 1999 concerning the Establishment of the General Election Commission and the Determination of the Organization and Work Procedures of the General Secretariat of the General Election Commission, 12. Retrieved 21 July 2025, from <http://peraturan.bpk.go.id/Details/55305/keppres-no-16-tahun-1999>

- Prusinski, E. (2024). What is political about a tree? Grappling with partisan divides in environmental education. *Environmental Education Research*, 30(9), 1460–1476. <https://doi.org/10.1080/13504622.2024.2330988>
- Putra, N. S., Sukma, H. N., & Setiawan, H. (2021). Level of Environmental Literacy of Students and School Community in Green Open Space: Is There any Difference between Both of Them? *Jurnal Pendidikan IPA Indonesia*, 10(4), 627–634. <https://doi.org/10.15294/jpii.v10i4.31083>
- Rahman, A., & Suharno, S. (2020). Pelaksanaan Pendidikan Politik Melalui Pembelajaran Pendidikan Pancasila dan Kewarganegaraan untuk Meningkatkan Kesadaran Politik Siswa. *Jurnal Ilmiah Pendidikan Pancasila Dan Kewarganegaraan*, 4(2), 282. <https://doi.org/10.17977/um019v4i2p282-290>
- Ruijter, E., Van Twist, A., Haaker, T., Tartarin, T., Schuurman, N., Melenhorst, M., & Meijer, A. (2023). Smart Governance Toolbox: A Systematic Literature Review. *Smart Cities*, 6(2), 878–896. <https://doi.org/10.3390/smartcities6020042>
- Sasa, T., Ahmad, W. A., Bahtiti, N. H., Abujaber, M., Adeyleh, A., & Miri, O. (2022). Assessment Level of Environmental Literacy among Applied Science Private University (ASU) students. *Wseas Transactions On Environment And Development*, 18, 1012–1020. <https://doi.org/10.37394/232015.2022.18.97>
- Sepúlveda Hernández, E. (2024). Socio-educational practices of community environmental educators from territories affected by socio-environmental conflicts and socio-natural disasters in Chile: Roles, ethics, and methodologies. *The Journal of Environmental Education*, 55(6), 446–459. <https://doi.org/10.1080/00958964.2024.2364179>
- Shange, H. S., Zogli, L.-K. J., & Bongani I. (2025). Green campus initiatives and strategies for sustainability in higher education. *Transformation in Higher Education*, 10. <https://doi.org/10.4102/the.v10i0.364>
- Shen, L., Qian, J., & Chen, S. C. (2020). Effective Communication Strategies of Sustainable Hospitality: A Qualitative Exploration. *Sustainability*, 12(17), 6920. <https://doi.org/10.3390/su12176920>
- Singh, A. K., & Mishra, S. (2025). &#039;One Nation, One Election&#039; in India: An analysis of costs, energy and sustainability. *International Journal of Political Science and Governance*, 7(9), 199–203. <https://doi.org/10.33545/26646021.2025.v7.i9c.680>
- Sloman, P. (2020). Squeezed Out? The Liberal Democrats and the 2019 General Election. *The Political Quarterly*, 91(1), 35–42. <https://doi.org/10.1111/1467-923x.12816>
- Svensson, M. (2023). Chinese Youth and the Communist Party of China: Cultivating a Loyal Generation through Ideological and Political Education. *China: An International Journal*, 21(2), 72–91. <https://doi.org/10.1353/chn.2023.a898342>
- Szczytko, R., Stevenson, K., Peterson, M. N., Nietfeld, J., & Strnad, R. L. (2019). Development and validation of the environmental literacy instrument for adolescents. *Environmental Education Research*, 25(2), 193–210. <https://doi.org/10.1080/13504622.2018.1487035>
- Thalib, A. S. (2024). Analisis Sistematis Praktik Pemilu Hijau Di Indonesia Untuk Pilkada Serentak Tahun 2024. *Electoral Governance Jurnal Tata Kelola Pemilu Indonesia*, 5(2), 138–158. <https://doi.org/10.46874/tkp.v5i2.1212>
- Triana, Y., Khairina, E., & Iqbal Fadhlurrohman, M. (2023). Kajian Prinsip Demokrasi Dalam Pemilihan Umum di Indonesia. *Jurnal Transformatif*, 9(1), 66–83. <https://doi.org/10.21776/ub.transformatif.2023.009.01.4>
- Wahyuni, S., & Adnan, M. F. (2024). Pengaruh Media Sosial terhadap Partisipasi Politik Kaum Perempuan dalam Pemilihan Umum Presiden dan Wakil Presiden 2024 di Kab. Solok. *Jurnal ISO: Jurnal Ilmu Sosial, Politik Dan Humaniora*, 4(2), 13. <https://doi.org/10.53697/iso.v4i2.1927>

- Wang, R., Jia, T., Qi, R., Cheng, J., Zhang, K., Wang, E., & Wang, X. (2021). Differentiated Impact of Politics- and Science-Oriented Education on Pro-Environmental Behavior: A Case Study of Chinese University Students. *Sustainability*, 13(2), 616. <https://doi.org/10.3390/su13020616>
- Wardani, R. A. K., Karyanto, P., & Ramli, M. (2018). Analysis of high school students' environmental literacy. *Journal of Physics: Conference Series*, 1022, 012057. <https://doi.org/10.1088/1742-6596/1022/1/012057>
- Willeck, C., & Mendelberg, T. (2022). Education and Political Participation. *Annual Review of Political Science*, 25(1), 89–110. <https://doi.org/10.1146/annurev-polisci-051120-014235>
- Yang, M., Wang, J., & Yasmin, F. (2021). Does Higher Business Education Champion Environmental Sustainability for Next Generation of Leaders? An Assessment of In-School Students and Alumni's Perspective. *Polish Journal of Environmental Studies*, 30(6), 5317–5332. <https://doi.org/10.15244/pjoes/135715>
- Zieger, M., & Scudder, N. (2025). Ethical and legal reflections on secondary research using genetic data acquired for criminal investigation purposes. *Forensic Science International: Genetics*, 75, 103178. <https://doi.org/10.1016/j.fsigen.2024.103178>
- Zuiderwijk, A., Chen, Y.-C., & Salem, F. (2021). Implications of the use of artificial intelligence in public governance: A systematic literature review and a research agenda. *Government Information Quarterly*, 38(3), 101577. <https://doi.org/10.1016/j.giq.2021.101577>

