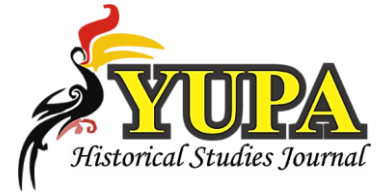


P-ISSN: 2541-6960; E-ISSN: 2549-8754

Yupa: Historical Studies Journal

Vol. 6 No. 2, 2022 (188-197)

<http://jurnal.fkip.unmul.ac.id/index.php/yupa>



## Harmonizing Economic Principles, Islamic Values, and Entrepreneurial Attitudes for a Sustainable Environment

Ernandia Pandikar<sup>1</sup>, Idrus Affandi<sup>2</sup>, Disman<sup>3</sup>, Dadang Sundawa<sup>4</sup>

<sup>1</sup> Universitas Pendidikan Indonesia, Bandung, Indonesia

<sup>2</sup> Universitas Pendidikan Indonesia, Bandung, Indonesia

<sup>3</sup> Universitas Pendidikan Indonesia, Bandung, Indonesia

<sup>4</sup> Universitas Pendidikan Indonesia, Bandung, Indonesia

[1adhie.pandikar@gmail.com](mailto:adhie.pandikar@gmail.com), [2prof.idrusaffandi@gmail.com](mailto:prof.idrusaffandi@gmail.com), [3disman@upi.edu](mailto:disman@upi.edu), [4d\\_sundawa@yahoo.com](mailto:d_sundawa@yahoo.com)

Received	Accepted	Published
03/08/2022	15/10/2022	10/12/2022

**Abstract** *The pressing environmental challenges of climate change, resource depletion, biodiversity loss, and pollution demand integrated solutions combining economic principles, Islamic values, and entrepreneurial attitudes. This study investigates how reorienting economic models to include environmental costs, guided by Islamic principles of stewardship (khalifah), balance (mizan), and justice (adl), can promote sustainability. It highlights the role of entrepreneurial innovation in developing sustainable technologies and business models. A qualitative methodology, including literature review and thematic analysis, aims to develop a conceptual framework that harmonizes these elements. By integrating green accounting, ethical teachings, and social entrepreneurship, this approach provides a comprehensive strategy for achieving a sustainable environment, supported by policy development, education, and community engagement.*

**Keywords:** *economic principles, Islamic values, entrepreneurial attitudes, sustainable environment*

**Tantangan** *Tantangan lingkungan disebabkan perubahan iklim, penipisan sumber daya, hilangnya keanekaragaman hayati, dan polusi menuntut solusi terpadu yang menggabungkan prinsip-prinsip ekonomi, nilai-nilai Islam, dan sikap kewirausahaan. Studi ini menyelidiki bagaimana reorientasi model ekonomi untuk memasukkan biaya lingkungan, dipandu oleh prinsip-prinsip Islam kepemimpinan (khalifah), keseimbangan (mizan), dan keadilan (adl), dapat mempromosikan keberlanjutan. Penelitian ini menyoroti peran inovasi kewirausahaan dalam mengembangkan teknologi dan model bisnis yang berkelanjutan. Penelitian ini menggunakan metodologi kualitatif, termasuk tinjauan literatur dan analisis tematik, yang bertujuan untuk mengembangkan kerangka konseptual yang menyelaraskan elemen-elemen tersebut. Pengintegrasian akuntansi berbasis lingkungan, ajaran etis, dan kewirausahaan sosial, pendekatan ini memberikan strategi komprehensif untuk mencapai lingkungan yang berkelanjutan, didukung oleh pengembangan kebijakan, pendidikan, dan keterlibatan masyarakat.*

**Kata kunci:** *prinsip ekonomi, nilai-nilai Islam, sikap kewirausahaan, lingkungan yang berkelanjutan*



This work is licensed under a

[Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

## INTRODUCTION

The world is currently facing a critical environmental sustainability challenge characterized by climate change, resource depletion, biodiversity loss, and pollution. These issues are interconnected and exacerbate each other, posing a severe threat to the planet's ecosystems and human societies. Understanding the problem's roots and implications is essential for developing effective solutions. Climate change, driven by human activities such as burning fossil fuels, deforestation, and industrial processes, leads to rising global temperatures, sea-level rise, changing precipitation patterns, and increased frequency and severity of extreme weather events (IPCC, 2021). These changes disrupt agricultural productivity, threaten food security, displace coastal communities, and cause widespread economic losses.

Resource depletion is another major concern, with non-renewable resources like fossil fuels, minerals, and metals being consumed faster than they can be replenished, and even renewable resources like forests, water, and fisheries being exploited beyond their regenerative capacities. Biodiversity loss, driven by habitat destruction, climate change, pollution, and overexploitation of species, threatens ecosystem services vital for human well-being, such as crop pollination, air and water purification, and climate regulation (Ceballos et al., 2015). Pollution, in its various forms—air, water, soil, and plastic—further degrades the environment, impacting human health and ecosystems (WHO, 2018; Geyer et al., 2017).

Addressing these complex and interrelated environmental issues requires a comprehensive approach that integrates economic principles, ethical values, and innovative attitudes. Traditional economic models often fail to account for environmental externalities, leading to policies and practices that harm the environment. Ethical frameworks, such as those provided by religious teachings, can offer valuable guidance for promoting environmental stewardship and social justice. Entrepreneurial innovation can drive the development of sustainable technologies and business models that mitigate environmental impacts. This study plans to explore the integration of economic principles, Islamic values, and entrepreneurial attitudes through an extensive literature review, identifying key concepts, frameworks, and case studies that illustrate successful harmonization of these elements in promoting sustainability.

The primary objectives of this research are: 1. To analyze existing literature on economic principles, Islamic values, and entrepreneurial attitudes in relation to environmental sustainability; 2. To identify and synthesize key themes and patterns from the literature that highlight successful integration of these elements; 3. To develop a conceptual framework that outlines how economic principles, Islamic values, and entrepreneurial attitudes can be harmonized to promote a sustainable environment; 4. To validate the proposed framework through an iterative review process, refining it based on feedback from academic and practical perspectives.

The theoretical foundation of this research is built on several key studies and frameworks related to environmental sustainability: 1. Sustainable Development and Economic Principles, the concept of sustainable development, as defined by the Brundtland Report, emphasizes meeting present needs without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). Recent studies advocate for incorporating environmental costs into economic decision-making, promoting models such as the "triple bottom line" which considers social, environmental, and financial performance (Elkington, 1997; Boyd, 2010); 2. Islamic Environmental Ethics, Islamic teachings provide a rich ethical framework for environmental stewardship, emphasizing principles such as balance (mizan), stewardship (khalifah), unity (tawhid), justice (adl), and moderation (wasatiyyah). These principles advocate for the sustainable use of natural resources and care for all creation, aligning closely with modern sustainability goals (Kamali, 2010; Nasr, 2003; Abdullah, 2013); 3. Entrepreneurial Attitudes and Innovation, is crucial for developing sustainable technologies and business models. Social entrepreneurship, which focuses on creating social and environmental value alongside economic returns, is particularly relevant. Concepts such as the circular economy emphasize reuse, recycling, and regeneration of materials, showcasing how entrepreneurial efforts can contribute to sustainability (Dees, 2007; Cohen & Winn, 2007; Ellen MacArthur Foundation, 2013).

By integrating insights from these theoretical studies, this research aims to develop a holistic framework that effectively addresses environmental sustainability challenges through the alignment of economic principles, Islamic values, and entrepreneurial attitudes.

## **METHOD**

To explore the integration of economic principles, Islamic values, and entrepreneurial attitudes in promoting a sustainable environment, this study adopts a qualitative research methodology based solely on literature studies. This approach ensures a thorough and systematic review of existing research, providing a robust theoretical foundation for understanding the complex interrelationships between these elements. The methodology is structured into three key phases: literature review, thematic analysis, and framework development.

The literature review aims to provide a comprehensive understanding of existing research on economic principles, Islamic values, and entrepreneurial attitudes concerning environmental sustainability. This phase involves the following steps: 1. Identifying Sources: Academic journals, books, and reports published in the last ten years are identified using databases such as Google Scholar, JSTOR, and PubMed. Keywords include "sustainable development," "Islamic environmental ethics," "green entrepreneurship," and "environmental economics." This ensures a broad and relevant collection of literature; 2. Screening and Selection:

Sources are screened for relevance and quality. Peer-reviewed articles and books from reputable publishers are prioritized. The inclusion criteria focus on literature that addresses the integration of economic, ethical, and entrepreneurial perspectives on sustainability. This step ensures that only high-quality and pertinent studies are included; 3. Thematic Analysis: The selected literature is analyzed thematically to identify key concepts, frameworks, and case studies. Major themes include sustainable economic models, Islamic environmental principles, and entrepreneurial innovations in sustainability. This thematic analysis helps to organize the literature and highlight critical areas of convergence and divergence.

The thematic analysis phase involves synthesizing the findings from the literature review to identify recurring themes and patterns. This phase is divided into the following steps: 1. Coding and Categorization: The literature is coded using qualitative data analysis software (e.g., NVivo). Codes are grouped into categories based on themes identified in the literature review, such as economic sustainability models, Islamic environmental ethics, and entrepreneurial practices in sustainability. This process helps to systematically organize and categorize the data; 2. Thematic Synthesis: The coded data are synthesized to identify recurring themes and patterns. This synthesis helps to understand how economic principles, Islamic values, and entrepreneurial attitudes intersect and can be harmonized. This step is crucial for integrating diverse perspectives and developing a cohesive understanding of the subject.

The final phase involves developing a comprehensive conceptual framework based on the thematic synthesis. This phase includes the following steps: 1. Framework Construction: Based on the thematic synthesis, a conceptual framework is developed. This framework outlines the key components and relationships between economic principles, Islamic values, and entrepreneurial attitudes, providing a structured approach to promoting environmental sustainability; 2. Validation and Refinement: The framework is validated through an iterative process, where the initial framework is refined based on further literature insights and expert feedback. This step ensures the robustness and applicability of the framework.

The literature-based qualitative methodology is expected to yield a nuanced understanding of how economic principles, Islamic values, and entrepreneurial attitudes can be integrated to promote environmental sustainability. The expected outcomes include: 1. A Comprehensive Literature Review: Summarizing existing research and identifying gaps in the literature. This review provides a detailed overview of current knowledge and highlights areas for further research; 2. Thematic Insights: Identifying key themes and patterns in the literature, offering a deeper understanding of the integration of economic, ethical, and entrepreneurial perspectives on sustainability; 3. A Conceptual Framework: Offering a structured approach to harmonizing economic, ethical, and entrepreneurial elements for sustainability. This framework

serves as a roadmap for policymakers, educators, and practitioners to promote environmental sustainability effectively.

By focusing solely on literature studies, this methodology ensures a comprehensive and systematic exploration of the integration of economic principles, Islamic values, and entrepreneurial attitudes in promoting a sustainable environment.

## **RESULT AND DISCUSSION**

The environmental sustainability challenge is multifaceted and complex, necessitating a comprehensive approach that integrates economic principles, Islamic values, and entrepreneurial attitudes. This analysis delves into the critical environmental issues highlighted in the background and incorporates insights from experts to illustrate the importance and feasibility of such an integrated approach.

Climate change, driven primarily by greenhouse gas emissions from human activities, poses severe risks to ecosystems and human societies. Dr. Rajendra Pachauri, former Chair of the Intergovernmental Panel on Climate Change (IPCC), emphasized, "We are on the edge of possibly being too late to address climate change. The world has to wake up to this reality" (IPCC, 2021). This urgency underscores the need for economic models that integrate environmental costs and prioritize sustainability. Economic principles can be reoriented to address climate change by adopting sustainable development frameworks. The Brundtland Report's definition of sustainable development—meeting present needs without compromising future generations' ability to meet their own—remains a guiding principle (WCED, 1987). Implementing green accounting practices, which incorporate environmental assets and liabilities into national accounts, is essential for promoting sustainability (Boyd, 2010). This approach ensures that the true costs of environmental degradation are reflected in economic decisions, leading to more responsible and sustainable practices (Bebbington & Unerman, 2018).

The urgency to address climate change requires not just policy shifts but a fundamental reorientation of economic principles. Traditional economic growth models often fail to account for environmental degradation and climate risks. However, by internalizing environmental costs through mechanisms like carbon pricing and green accounting, economies can better reflect the true cost of greenhouse gas emissions (Boyd, 2010). This shift encourages industries to innovate and adopt cleaner technologies, driving a transition towards a low-carbon economy (Nordhaus, 2019). Additionally, international cooperation and frameworks like the Paris Agreement play crucial roles in harmonizing global efforts to combat climate change, ensuring that nations collectively work towards limiting global temperature rise (UNFCCC, 2015).

The rapid depletion of natural resources is another significant challenge. Dr. Mathis Wackernagel, founder of the Global Footprint Network, notes, "We are using the planet's

resources faster than they can regenerate, which is unsustainable in the long run" (Global Footprint Network, 2020). This calls for economic principles that emphasize resource efficiency and renewable energy investments. Islamic values provide a robust ethical framework for resource conservation. The Qur'an and Hadith emphasize balance (*mizan*) and stewardship (*khalifah*) of the Earth, encouraging sustainable use of natural resources and care for all creation (Kamali, 2010). By integrating these values into economic policies, resource depletion can be mitigated through practices that promote conservation and the use of renewable resources. For instance, the principle of *adl* (justice) mandates fairness and equity, ensuring that resource use does not disproportionately affect future generations (Nasr, 2003).

Addressing resource depletion necessitates a shift from exploitative practices to sustainable resource management. Islamic ethical frameworks offer valuable insights into achieving this shift. The principle of *mizan* (balance) emphasizes the importance of maintaining ecological equilibrium, while *khalifah* (stewardship) underscores human responsibility towards Earth. These values can be integrated into national and corporate policies to promote sustainable resource use (Kamali, 2010). For example, policies that encourage the use of renewable energy sources and sustainable agriculture can help reduce the strain on natural resources (Sachs, 2015). Moreover, incorporating these values into corporate social responsibility (CSR) initiatives can drive businesses to adopt practices that ensure long-term sustainability and resource conservation (Schaltegger, Lüdeke-Freund, & Hansen, 2016).

Biodiversity loss, driven by habitat destruction, climate change, and pollution, threatens ecosystem services vital for human well-being. Dr. Edward O. Wilson, a renowned biologist, stresses, "Biodiversity is the key to the maintenance of the world as we know it" (Wilson, 2016). Protecting biodiversity requires a combination of stringent environmental policies and community-driven conservation efforts. Entrepreneurial attitudes play a crucial role in fostering innovations that address biodiversity loss. Social entrepreneurship, which focuses on creating social and environmental value alongside economic returns, can lead to the development of new technologies and business models that reduce environmental impact (Dees, 2007). The concept of the circular economy, which emphasizes the reuse, recycling, and regeneration of materials, exemplifies how entrepreneurial innovation can contribute to sustainability (Ellen MacArthur Foundation, 2013). Sustainable entrepreneurship integrates environmental goals into the core mission of businesses, promoting eco-friendly products and services (Cohen & Winn, 2007).

The conservation of biodiversity is critical for sustaining ecosystem services that humanity depends on. Community-driven conservation efforts, supported by robust policies, can significantly impact biodiversity preservation. Entrepreneurial innovation can also play a pivotal role in this area. Start-ups and businesses that focus on conservation technologies—such as bioplastics, sustainable farming techniques, and conservation drones—can provide scalable

solutions to biodiversity loss (Hall, Daneke, & Lenox, 2010). Furthermore, fostering a culture of social entrepreneurship, where ventures aim to achieve environmental and social goals alongside financial success, can lead to more sustainable business models that prioritize biodiversity conservation (Dees, 2007). This approach not only preserves ecosystems but also creates economic opportunities and sustainable livelihoods (Elkington, 2018).

Pollution, particularly air and water pollution, has severe health and environmental impacts. Dr. Maria Neira, Director of Public Health and Environment at the World Health Organization (WHO), points out, "Air pollution is a major environmental risk to health and is estimated to cause millions of premature deaths annually" (WHO, 2018). Effective pollution control strategies must be integrated into economic policies and urban planning. Islamic values such as the prohibition of wastefulness (*israf*) and the encouragement of moderation (*wasatiyyah*) align with sustainable practices that can mitigate pollution (Abdullah, 2013). Policies that promote clean technologies and reduce emissions are consistent with these values and essential for protecting public health and the environment (Thomson & McNamara, 2021). Entrepreneurial initiatives can also contribute by developing eco-friendly technologies and business practices that minimize waste and pollution (Schaltegger & Wagner, 2017).

Effective pollution control requires an integrated approach that combines stringent regulatory policies with entrepreneurial innovation. Governments can implement policies that limit emissions, enhance waste management, and promote clean energy (Thomson & McNamara, 2021). For instance, regulations that mandate the reduction of industrial emissions and incentives for adopting cleaner production technologies can significantly reduce pollution levels. Additionally, the entrepreneurial sector can contribute by developing innovative solutions such as biodegradable materials, advanced recycling technologies, and pollution-monitoring systems (Hall et al., 2010). By fostering a synergy between policy measures and entrepreneurial initiatives, societies can effectively address pollution challenges, ensuring a cleaner and healthier environment for future generations.

To harmonize economic principles, Islamic values, and entrepreneurial attitudes, a multidimensional strategy is required. This strategy should focus on policy development, education, and community engagement:

1. **Policy Development:** Governments can create policies that incentivize sustainable practices and penalize environmental degradation. Policies should align with Islamic ethical principles, promoting justice, equity, and stewardship. For instance, implementing green taxation and providing subsidies for renewable energy projects can drive sustainable economic activities (Thomson & McNamara, 2021).
2. **Education and Awareness:** Integrating environmental education with Islamic teachings in schools and universities can foster a generation of environmentally conscious

individuals. Entrepreneurial education should emphasize sustainability and ethical considerations, preparing future leaders to balance economic goals with environmental stewardship (Sachs, 2015).

3. **Community Engagement:** Grassroots initiatives and community-based projects can play a crucial role in promoting sustainable practices. Islamic organizations and entrepreneurs can collaborate on projects that address local environmental issues, leveraging community support and resources (Elkington, 2018).

To achieve a sustainable future, a multidimensional strategy that integrates economic principles, Islamic values, and entrepreneurial attitudes is essential. Policymakers must create frameworks that incentivize sustainable practices while penalizing environmentally harmful activities. Educational institutions should incorporate environmental and ethical teachings into their curricula, fostering a generation of environmentally conscious and ethically driven leaders. Community engagement is also crucial; grassroots initiatives can mobilize local resources and knowledge to address environmental issues effectively. By leveraging the strengths of economic principles, ethical values, and innovative entrepreneurship, a holistic and sustainable approach to environmental challenges can be realized, ensuring the well-being of both current and future generations (Schaltegger et al., 2016).

This integrated approach ensures a holistic and sustainable response to the pressing environmental challenges faced globally. By combining economic incentives, ethical values, and innovative practices, it is possible to achieve a balanced and sustainable future.

## CONCLUSION

The pressing environmental sustainability challenges of climate change, resource depletion, biodiversity loss, and pollution necessitate an integrated approach that combines economic principles, Islamic values, and entrepreneurial attitudes. This study underscores the importance of reorienting traditional economic models to internalize environmental costs and promote sustainability. By incorporating green accounting and sustainable development frameworks, economies can better reflect the true costs of environmental degradation and encourage industries to adopt cleaner technologies. This transition towards a low-carbon economy is further supported by international cooperation through agreements like the Paris Agreement, which harmonize global efforts to combat climate change.

Islamic ethical frameworks offer a robust foundation for addressing resource depletion and promoting environmental stewardship. Principles such as *mizan* (balance), *khalifah* (stewardship), and *adl* (justice) emphasize the sustainable use of natural resources and care for creation, aligning closely with modern sustainability goals. Integrating these values into national



policies and corporate practices can drive long-term resource conservation and ensure fairness and equity in resource use. Additionally, fostering entrepreneurial innovation through social entrepreneurship and the circular economy can provide scalable solutions to biodiversity loss and pollution. By developing eco-friendly technologies and sustainable business models, entrepreneurs can significantly reduce environmental impacts, contributing to a cleaner and healthier environment. This multidimensional strategy, encompassing policy development, education, and community engagement, is essential for achieving a balanced and sustainable future, ensuring the well-being of current and future generations.

## REFERENCES

- Abdullah, M. (2013). Islamic teachings and the prevention of waste: The importance of sustainable practices. *Journal of Islamic Ethics*, 3(2), 189-210.
- Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: An enabling role for accounting research. *Accounting, Auditing & Accountability Journal*, 31(1), 2-24.
- Boyd, J. (2010). Green accounting. In N. S. Souleles (Ed.), *The Routledge Handbook of Environmental Economics* (pp. 234-248). Routledge.
- \_\_\_\_\_. (2010). Green accounting. *Journal of Economic Perspectives*, 24(4), 179-198.
- Ceballos, G., Ehrlich, P. R., Barnosky, A. D., García, A., Pringle, R. M., & Palmer, T. M. (2015). Accelerated modern human-induced species losses: Entering the sixth mass extinction. *Science Advances*, 1(5), e1400253.
- Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22(1), 29-49.
- Dasgupta, P. (2021). *The Economics of Biodiversity: The Dasgupta Review*. HM Treasury.
- Dees, J. G. (2007). Taking social entrepreneurship seriously. *Society*, 44(3), 24-31.
- Elkington, J. (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Capstone Publishing.
- \_\_\_\_\_. (2018). 25 years of triple bottom line thinking. *California Management Review*, 60(3), 5-12.
- Ellen MacArthur Foundation. (2013). *Towards the Circular Economy Vol. 1: an economic and business rationale for an accelerated transition*. Ellen MacArthur Foundation.
- Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3(7), e1700782.
- Global Footprint Network. (2020). Ecological footprint accounting: Measuring our impact on the planet. Retrieved from <https://www.footprintnetwork.org/>
- Hall, J. K., Daneke, G. A., & Lenox, M. J. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing*, 25(5), 439-448.

- Intergovernmental Panel on Climate Change (IPCC). (2021). *Climate Change 2021: The Physical Science Basis*. Cambridge University Press.
- Kamali, M. H. (2010). *The Environmental Dimensions of Islam*. The Islamic Foundation.
- \_\_\_\_\_ (2010). *The Right to Life, Security, Privacy and Ownership in Islam*. Islamic Texts Society.
- Nasr, S. H. (2003). *The Heart of Islam: Enduring Values for Humanity*. HarperOne.
- Nasr, S. V. R. (2003). *Islamic ethics and the environment*. In R. Foltz, F. M. Denny, & A. Baharuddin (Eds.), *Islam and Ecology: A Bestowed Trust* (pp. 25-35). Harvard Divinity School.
- Nordhaus, W. D. (2019). Climate change: The ultimate challenge for economics. *American Economic Review*, 109(6), 1991-2014.
- Raworth, K. (2017). *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Chelsea Green Publishing.
- Rodin, J. (2014). *The Resilience Dividend: Being Strong in a World Where Things Go Wrong*. PublicAffairs.
- Sachs, J. D. (2015). *The Age of Sustainable Development*. Columbia University Press.
- Schaltegger, S., & Wagner, M. (2017). Managing the business case for sustainability: The integration of social, environmental, and economic performance. *Business Strategy and the Environment*, 26(4), 435-456.
- Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2016). Business models for sustainability: A co-evolutionary analysis of sustainable entrepreneurship, innovation, and transformation. *Organization & Environment*, 29(3), 264-289.
- Thomson, G., & McNamara, T. (2021). Green taxes and their impact on environmental sustainability. *Journal of Environmental Economics and Policy*, 10(2), 175-192.
- UNFCCC. (2015). Adoption of the Paris Agreement. *Conference of the Parties on its twenty-first session*.
- WCED. (1987). *Our Common Future* (The Brundtland Report). World Commission on Environment and Development.
- WHO. (2018). Air pollution and child health: Prescribing clean air. World Health Organization.
- Wilson, E. O. (2016). *Half-Earth: Our Planet's Fight for Life*. Liveright.
- World Commission on Environment and Development. (1987). *Our Common Future*. Oxford University Press.
- World Health Organization (WHO). (2018). Ambient (outdoor) air pollution. Retrieved from [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)
- World Wildlife Fund (WWF). (2020). *Living Planet Report 2020: Bending the Curve of Biodiversity Loss*. Retrieved from <https://www.wwf.org.uk/our-reports/living-planet-report-2020>