
INDONESIA'S POLICIES AND STRATEGIES FOR EMBRACING INCLUSIVE AND ENVIRONMENTALLY FRIENDLY RECOVERY

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ABSTRACT

The COVID-19 pandemic has significantly impacted various aspects of life, including economic, social, and environmental dimensions. In Indonesia, post-pandemic recovery challenges encompass the need for inclusive and sustainable economic recovery while maintaining ecological sustainability. This research aims to analyze the policies and strategies implemented by Indonesia to achieve a truly inclusive and environmentally friendly recovery after the COVID-19 pandemic. Utilizing a literature study method with a qualitative approach, the data was collected from statutory regulations, books, scientific journals, and other legal sources. Data analysis involved data reduction, presentation, and conclusion drawing. The results indicate that Indonesia has adopted several innovative policies and strategies to promote an inclusive and environmentally friendly recovery, such as the National Economic Recovery Policy Strategy (PEN), diversification of exports, and initiatives aimed at enhancing productivity while ensuring environmental protection. However, the novelty of this research lies in identifying how these strategies uniquely integrate social equity and environmental stewardship in a post-pandemic context, contrasting with previous recovery frameworks. By highlighting the interplay between economic policies and social inclusion, this research contributes to a deeper understanding of sustainable development pathways in Indonesia.

Keywords: environmentally friendly; inclusive recovery; policy; strategy

INTRODUCTION

The COVID-19 pandemic has caused severe and widespread impacts on various aspects of life, including the economic, social, and environmental sectors. The pandemic has led to a halt in business activities, business closures, and a global decline in economic activity in the financial industry. Many companies have been forced to lay off employees or even stop their operations, which has resulted in unemployment and a widespread decline in people's income (Hamstra et al., 2023; Liu-Lastres et al., 2023; Zhao et al., 2024). In addition, the tourism, transportation, and retail sectors also experienced a drastic decline due to travel restrictions and decreased demand (Cao & Hamori, 2022; Chen et al., 2023).

The social impact of the pandemic is also significant. Social restrictions and physical distancing have changed the way we interact and communicate, resulting in social isolation and psychological effects such as anxiety and depression (Agung, 2020). In addition, the pandemic has also exacerbated social inequalities, with vulnerable groups such as people experiencing poverty, informal workers, and those living in densely populated urban areas becoming more susceptible to economic and health impacts.

From an environmental perspective, the pandemic has produced complex effects. On the one hand, restrictions on human activity and decreased mobility have reduced air pollution and carbon emissions, partially allowing the environment to recover (Maqbool et al., 2024; Marais-Potgieter et al., 2024; Natembeya et al., 2024). However, the increased use

of single-use plastics and medical waste has also become a new problem, increasing litter and plastic pollution (Lemma et al., 2022; Olawade et al., 2024; Shang et al., 2021). Therefore, an inclusive economic recovery is crucial to ensure that every layer of society has equal access to economic opportunities and a sustainable recovery in the long term. In addition, there is a need for sustainable policies and strategies to protect the environment in the post-pandemic economic recovery process.

Previous research by Adiputra & Nataherwin (2023) examined the effect of the Indonesian G20 presidency on Indonesia's economic growth. The results showed that there was a significant increase in Indonesia's financial performance before and after the Indonesian G20 presidency by observing data on Gross Domestic Product, Economic Growth, Composite Stock Price Index (JCI), Inflation, and Trade Balance as well as Labor Force Index through the Wilcoxon Signed-Rank Test and Two-Sample Average Test.

Another study by Deng et al. (2024) examined the challenges and strategies in the carbon tax policy implementation process. The results showed that the challenges faced by the government in the carbon tax policy implementation process in Indonesia can be caused by political system factors and governance of government institutions, business and economic influences, and public rejection. These challenges can be overcome by using a strategy of gradual policy implementation and coalition building that supports the policy, proper revenue management, and, most importantly, making carbon tax policy part of the policy mix to address climate problems quickly and achieve long-term decarbonization.

The novelty of this research lies in its comprehensive analysis of Indonesia's policies and strategies for fostering an inclusive and environmentally friendly recovery post-COVID-19. This area has not been extensively explored. Unlike previous studies that focus primarily on economic growth or specific policy challenges, this research integrates multiple dimensions of recovery, including social equity and environmental sustainability. By examining the interplay between these elements, the study aims to reveal innovative approaches that address immediate recovery needs and lay the groundwork for long-term sustainable development. This multifaceted perspective enriches the understanding of how inclusive policies can be effectively implemented in the context of environmental challenges, providing valuable insights for policymakers and stakeholders.

This research contributes to understanding the relationship between economic policy, social inclusion, and environmental sustainability. Analyzing Indonesia's policies and strategies can identify patterns and principles that effectively achieve inclusive and sustainable development goals. The research aims to analyze the policies and strategies that Indonesia has implemented to embrace an inclusive and environmentally friendly recovery post-COVID-19 pandemic.

METHOD

This research employs a literature study method with a qualitative approach to thoroughly analyze Indonesia's policies and strategies for inclusive and environmentally

friendly recovery post-COVID-19. The qualitative methodology was selected because it allows for an in-depth exploration of the relationships, activities, and legal frameworks surrounding the research topic, emphasizing holistic descriptions rather than mere comparisons. Data collection involved extensive literature reviews of statutory regulations, academic journals, books, and other relevant legal sources. The collected data underwent a rigorous three-stage analysis: data reduction, presentation, and conclusion drawing. This method aligns with the research objectives by facilitating a comprehensive understanding of how Indonesia can achieve sustainable development while ensuring social inclusion. By focusing on qualitative data, the research seeks to uncover insights that can inform policymakers and contribute to the broader discourse on inclusive recovery strategies, ultimately supporting the goal of fostering an equitable and environmentally sustainable economy.

RESULTS AND DISCUSSION

The G20 is a forum of nineteen countries with the largest economies in the world, plus the European Union. Southeast Asia alone represents 85 percent of the global economy, 80 percent of global investment, 75 percent of international trade, and 66 percent of the world's population. The election of Indonesia as the holder of the G20 Presidency has strategic value for economic recovery and the achievement of an Advanced Indonesia if we can capitalize on opportunities and challenges with optimal benefits for Indonesia's interests. This momentum must be utilized for economic recovery and to achieve an advanced Indonesia by playing Indonesia's strategic role in encouraging joint efforts for world economic recovery (Sunge et al., 2024).

The importance of maintaining a sustainable economic climate for the welfare of the Indonesian people for current and future generations, with a primary focus on economic activities that produce products and create jobs, needs to be the focus of policymakers. The existence of a green economy aims to maintain a balance between improving people's welfare and maintaining the national economy. Therefore, the government's micro and macroeconomic development must adopt the principles of green economy in its implementation. There are five principles of green economy-based economic development. First, a green economy must create prosperity for all people. Second, it must be able to create equality for various generational periods. Third, it must be able to maintain, restore, and invest in various natural resource-based activities. Fourth, it is expected to support sustainable consumption and production levels. Fifth, it must be supported by a strong, integrated, and accountable system (Anwar, 2022).

In the National Economic Recovery effort, the Government of Indonesia is committed to restoring its economic position as before the pandemic and to an even better position (build back better). One of the efforts to achieve this commitment is to make economic changes towards a more "green" direction, more commonly called a circular economy (Husein et al., 2025). Sustainable and environmentally sound development has become a

national development philosophy. In its application, sustainable development looks at present and future generations' welfare and quality of life and supports green energy programs for available natural resources (Anwar, 2022). Law Number 23 of 1997, which discusses Environmental Management (UUPPLH), explains that everyone has the same rights to manage and maintain the environment (Özer et al., 2024).

In the global Green New Deal, the United Nations Environment Programme (UNEP) states that governments must support economic change from a profit and welfare economy to a green economy more oriented towards environmental sustainability (Nareswari et al., 2023). The Green Economy is a tool that is expected to provide three outputs, namely 1) new sources of income and employment; 2) low carbon emissions, reduced use of natural resources, and reduced increases in pollution and waste; and 3) contributing to broader social goals through the implementation of sustainable development, social equality, and poverty reduction, although these social goals sometimes do not happen automatically. However, such social objectives require specific institutional policies and should be attached to Green Economy activities (Auliya & Nurhadi, 2023).

The concept of a Green economy is economic development based on environmental sustainability. Green economy or green economy is the concept of economic behavior that pays attention to economic growth and prevents damage to the natural environment and the decline in environmental quality, which results in increased human welfare and social welfare. One of the concepts of preserving the environment is using home yard land that can be utilized according to taste and desire, for example, by planting productive plants such as horticultural and medicinal plants. Moreover, it plays a role in environmental preservation in the form of coolness, integrity, beauty, and biodiversity, and even helps sustainably mitigate greenhouse gases in residential areas (Anwar, 2022).

According to the green economy training offer letter Number 0317/P.01/01/2003 issued by the Ministry of National Development Planning, the definition of the green economy is "A new economic order that uses less energy and natural resources." So, applying the green economy is a new economic concept oriented toward improving economic aspects while still paying attention to environmental sustainability in development activities (Auliya & Nurhadi, 2023).

The COVID-19 pandemic hurt the world economy yesterday; for example, in Indonesia in 2020, the formal job market decreased below 40%. The green economy is a principle that advances the economy and the welfare of society while still paying attention to the surrounding environment (Nareswari et al., 2023). The main challenge in realizing a green economy is transforming the established economic system to fit the sustainability principles. Efficient and sustainable use of natural resources, reduction of greenhouse gas emissions, and protection of natural ecosystems are all part of this transformation (Auliya & Nurhadi, 2023). One of them is exclusive economic development to realize a green economy. Inclusive economic development ensures that the benefits of sustainable and environmentally friendly economic practices are also equitably obtained by the whole

community, including those who may be more vulnerable to the negative impacts of economic activity. As such, efforts to promote a green economy should also consider aspects of exclusionary economic development to ensure that no one is left behind on the path to sustainable economic growth.

Inclusive economic development is a concept that emphasizes equality for all people to take part in economic development. Inclusive economic development can enhance sustainable economic development and grow pretty and equitably. It can also help the government reduce poverty, promote fair opportunities, improve social welfare, and enhance capacity building. According to (Bhinadi, 2017), here are some of the benefits of inclusive economic development:

1. Reducing poverty. Inclusive economic development helps reduce poverty by providing opportunities for disadvantaged people to gain employment and increase their income.
2. Improving equality. Inclusive economic development helps improve equality in society, as everyone has equal opportunities to obtain employment and generate income.
3. Promoting sustainable development. Inclusive economic development focuses on developing economic sectors that can provide long-term benefits to society. This helps promote sustainable economic development.
4. Inclusive economic development can help improve social stability by creating jobs and improving people's welfare. This can reduce social discontent and minimize conflict.
5. Inclusive economic development can improve people's quality of life by providing better access to healthcare, education, and infrastructure, which can improve their overall well-being and health.

Press release HM.4.6/131/SET.M.EKON.3/3/2022 on Green Economy and Low Carbon Development to Drive Economic Growth and Improve Social Welfare reminds us that the role of energy in assisting development has become one of the most important efforts or elements in national development. As is well known, Indonesia is one of the countries that has a variety of energy sources, both non-renewable and renewable. Rapid development and a vast population result in the need for energy support, which is also very large (Gao et al., 2024). In various sectors of life, such as industrial, commercial, transportation, household, and so on, energy certainly plays a significant role. One of the essential ones is in the transportation sector because it cannot be denied that the level of air pollution caused by motor vehicles is very concerning (Xin et al., 2023).

Renewable energy is a group of energy produced by various sources that will be naturally renewable and available continuously. Many government policies in the energy sector can be used to encourage increased utilization of various renewable energy sources (Xin et al., 2023). Renewable energy development itself is one of the efforts to realize sustainable development. Sustainable development is related to sustainable energy development efforts because, so far, many industrial activities use fuel oil and non-renewable energy; of course, this can damage the environment and the existing ecosystem order. Renewable energy development efforts are a very appropriate answer to efforts to

realize renewable energy. The existence of renewable energy will directly protect the environment and reduce pollution. Of course, there is no need for massive exploration and exploitation of the environment to get the energy (Meidenbauer et al., 2025).

In order to realize energy security and environmental protection, the government has issued various policies to accelerate the development of renewable energy. One of the policies is Presidential Regulation (Perpres) No. 55 of 2019 concerning the Acceleration of the Battery-Based Electric Motor Vehicle (BEV/battery electric vehicle) Program. The government has issued Minister of Energy and Mineral Resources Regulation Number 50 of 2017 concerning Utilization of Renewable Energy Sources for Electricity Supply (hereinafter referred to as Permen ESDM 50/2017) as amended by Minister of Energy and Mineral Resources Regulation Number 53 of 2018 concerning Amendments to Minister of Energy and Mineral Resources Regulation Number 50 of 2017 concerning Utilization of Renewable Energy Sources for Electricity Supply (Permen ESDM 53/2018). The regulation of EBT issues is regulated in Article 4, paragraphs (2) and (3) of the Energy Law, where it is stated that:

Article 4 Paragraph (2)

"New energy resources and renewable energy resources are regulated by the State and utilized for the greatest prosperity of the people";

Article 4 Paragraph (3)

"The Government organizes the control and regulation of energy resources by the State following the provisions of laws and regulations."

The Energy Law mandates the government to develop a National Energy Policy (KEN). KEN is an energy management policy based on justice, sustainability, and environmental insight to create energy independence and national security (Møller, 2024). Before Permen of ESDM No. 12/2017 was issued, the development of hydropower plants was qualified into two types: small-scale plants with a capacity of up to 10 MW and plants with a capacity above 10 MW. This refers to Permen of ESDM No. 19 of 2015 concerning the Purchase of Electricity from Hydropower Plants with a Capacity of Up to 10 MW, which was later revoked through Permen of ESDM No. 9 of 2018 concerning Revocation of Minister of Energy and Mineral Resources Regulations Related to New, Renewable Energy and Energy Conservation Business Activities (Sakhraoui et al., 2024). About New and Renewable Energy, Indonesia has implemented a mandatory B30 biodiesel program. The impact of the mandatory biodiesel policy includes reducing greenhouse gas emissions by 23.3 million tons of CO₂e (*carbon dioxide equivalent*). Thus, using renewable energy is one way to achieve a green economy.

The government also established the Draft Law on New and Renewable Energy to create explicit legal provisions. New energy in the EBET Bill is derived from new technologies in processing energy sources, including non-renewable and renewable energy sources, as outlined in Article 1 of the EBET Bill (Peñasco, 2024). The New and Renewable Energy Bill is

a law that aims to regulate and encourage the utilization of new and renewable energy sources in Indonesia. New and renewable energy refers to unlimited and renewable natural resources like solar, wind, water, biomass, and geothermal energy. The bill recognizes the importance of removing dependence on finite fossil fuels that hurt the environment (Shimba et al., 2024).

The EBET Bill helps reduce dependence on finite fossil fuels and reduces greenhouse gas emissions and air pollution. The EBET Bill also helps build the foundation for sustainable economic development that is resilient to climate change by the principles of sustainable development. The concept of sustainable development encourages the formation of green legislation, which regulates aspects of development and an environment-based economy that is responsive to the protection of environmental functions in the future.

The New and Renewable Energy Bill (RUU EBET) is closely related to the concept of green economy. The EBET Bill aims to regulate the utilization of environmentally friendly energy sources, such as renewable energy (solar, wind, water, biomass, etc.), which can help reduce greenhouse gas emissions and other negative environmental impacts. By strengthening renewable energy-related infrastructure and regulations, the EBET Bill can promote sustainable economic growth and direct investment to sectors supporting green technologies and clean energy-related jobs. As such, the EBET Bill helps build the foundation for a more environmentally friendly and sustainable economy, in line with green economy principles.

Adopting a green economy as a sustainable economic development concept demands transformation in the economic system toward efficient and sustainable use of natural resources and reduction of greenhouse gas emissions. This effort is implemented through various policies and regulations, including developing renewable energy, such as the mandatory B30 biodiesel program. Thus, Indonesia is moving towards inclusive, sustainable, and environmentally friendly economic development to contribute to global economic recovery and environmental protection.

CONCLUSIONS

In conclusion, this research underscores Indonesia's commitment to implementing various policies and strategies to achieve an inclusive and environmentally friendly recovery following the COVID-19 pandemic. The key findings reveal that initiatives such as the National Economic Recovery Policy (PEN), export diversification, and active participation in the G20 presidency play crucial roles in enhancing economic resilience while promoting social inclusion. These strategies not only address the immediate impacts of the pandemic but also align with sustainable development goals. Future research should explore the long-term effectiveness of these policies and assess their adaptability in different socio-economic contexts. Additionally, practical applications of this research could guide policymakers in refining existing strategies and developing new frameworks that prioritize both

environmental sustainability and social equity. By focusing on these areas, Indonesia can better navigate future challenges and foster a more resilient economy.

REFERENCES

- Adiputra, I. G., & Nataherwin, N. (2023). Pengaruh Presidensi G20 Indonesia Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Serina Ekonomi Dan Bisnis*, 1(2), 292–301.
- Agung, I. M. (2020). Understanding the COVID-19 pandemic in the perspective of social psychology. *Psychobulletin: Psychology Scientific Bulletin*, 1(2), 68–84.
- Anwar, M. (2022). Green Economy as a Strategy in Addressing Economic and Multilateral Problems. *Journal of Tax and State Finance (PKN)*, 4, 343–356.
- Auliya, F. N., & Nurhadi, N. (2023). Towards A Sustainable Green Economy: Challenges And Opportunities For Long-Term Environmental And Economic Stability. *Pengabmas Nusantara*, 5(2), 97–102.
- Bhinadi, A. (2017). Poverty reduction and community empowerment. *Yogyakarta: Deepublish*.
- Cao, J., & Hamori, M. (2022). Adapting careers to the COVID crisis: The impact of the pandemic on employees' career orientations. *Journal of Vocational Behavior*, 139. <https://doi.org/10.1016/j.jvb.2022.103789>
- Chen, Y., Debnath, S., Sekhri, S., & Sekhri, V. (2023). The impact of Covid-19 containment lockdowns on MSMEs in India and resilience of exporting firms. *Journal of Economic Behavior and Organization*, 210, 320–341. <https://doi.org/10.1016/j.jebo.2023.04.001>
- Deng, H., Wu, X., Xu, H., & Zhang, D. (2024). Aggregated economic damages and the role of dynamic carbon tax under climate change: A dynamic general equilibrium model. *Economic Analysis and Policy*, 84, 1099–1119. <https://doi.org/10.1016/J.EAP.2024.10.025>
- Gao, Z., Zhang, Q., Wang, Y., Jv, X., Dzakpasu, M., & Wang, X. C. (2024). Evolution of water quality in rainwater harvesting systems during long-term storage in non-rainy seasons. *Science of the Total Environment*, 912. <https://doi.org/10.1016/j.scitotenv.2023.168784>
- Hamstra, M. R. W., Schreurs, B., Maxim Laurijssen, L., & Marescaux, E. (2023). Who wants to leave when facing mass lay-off: a regulatory focus perspective on turnover intentions and mobility-oriented behavior. *Career Development International*, 28(2), 145–159. <https://doi.org/10.1108/CDI-11-2022-0315>
- Husein, R. A., Aburajouh, H., & Catal, C. (2025). Large language models for code completion: A systematic literature review. *Computer Standards and Interfaces*, 92. <https://doi.org/10.1016/j.csi.2024.103917>
- Lemma, H., Asefa, L., Gameda, T., & Dhengesu, D. (2022). Infectious medical waste management during the COVID-19 pandemic in public hospitals of West Guji zone, southern Ethiopia. *Clinical Epidemiology and Global Health*, 15. <https://doi.org/10.1016/j.cegh.2022.101037>
- Liu-Lastres, B., Wen, H., & Okumus, F. (2023). Examining employees' affective and behavioral responses to internal crisis communication in times of COVID-19. *International Journal of Hospitality Management*, 111. <https://doi.org/10.1016/j.ijhm.2023.103494>

- Maqbool, M. E., Farhan, A., & Qamar, M. A. (2024). Global impact of COVID-19 on food safety and environmental sustainability: Pathways to face the pandemic crisis. *Heliyon*, 10(15). <https://doi.org/10.1016/j.heliyon.2024.e35154>
- Marais-Potgieter, A., Thatcher, A., & Siemers, I. (2024). Modelling associations between mortality salience, environmental concerns, and climate change risk perception in the context of the pandemic. *Heliyon*, 10(17). <https://doi.org/10.1016/j.heliyon.2024.e36722>
- Meidenbauer, K. L., Schertz, K. E., Janey, E. A., Stier, A. J., Samtani, A. L., Gehrke, K., Tucker, R., Hasan, M. M., & Berman, M. G. (2025). Evidence for environmental influences on impulsivity and aggression. *Urban Forestry & Urban Greening*, 103, 128594. <https://doi.org/10.1016/J.UFUG.2024.128594>
- Møller, K. M. (2024). Domestic renewable energy industries and national decarbonization policy. *Energy Policy*, 192. <https://doi.org/10.1016/j.enpol.2024.114249>
- Nareswari, N., Tarczyska-Luniewska, M., & Al Hashfi, R. U. (2023). Analysis of Environmental, Social, and Governance Performance in Indonesia: Role of ESG on Corporate Performance. *Procedia Computer Science*, 225, 1748–1756. <https://doi.org/10.1016/j.procs.2023.10.164>
- Natembeya, M. C., Anudjo, M. N. K., Ackah, J. A., Osei, M. B., & Akudjedu, T. N. (2024). The environmental sustainability implications of contrast media supply chain disruptions during the COVID-19 pandemic: A document analysis of international practice guidelines. *Radiography*, 30, 43–54. <https://doi.org/10.1016/j.radi.2024.05.017>
- Olawade, D. B., Ling, J., Wada, O. Z., Ore, O. T., Egbewole, B. I., David-Olawade, A. C., & Esan, D. T. (2024). Environmental impacts of COVID-19 pandemic on selected global regions: Precursors of sustainable development. *Total Environment Advances*, 11, 200108. <https://doi.org/10.1016/j.teadva.2024.200108>
- Özer, G., Aktaş, N., & Çam, İ. (2024). Corporate environmental, social, and governance activities and financial reporting quality: An international investigation. *Borsa Istanbul Review*, 24(3), 549–560. <https://doi.org/10.1016/j.bir.2024.03.001>
- Peñasco, C. (2024). From policy to practice: The role of national policy instruments and social barriers in UK energy efficiency adoption in households. *Energy Policy*, 194. <https://doi.org/10.1016/j.enpol.2024.114308>
- Sakhraoui, K., Agadi, R., von Hirschhausen, C., & Ege, G. S. (2024). Energy policy in morocco: Analysis of the national energy strategy's impact on sustainable energy supply and transformation. *Next Research*, 1(2), 100072. <https://doi.org/10.1016/J.NEXRES.2024.100072>
- Shang, W. L., Chen, J., Bi, H., Sui, Y., Chen, Y., & Yu, H. (2021). Impacts of COVID-19 pandemic on user behaviors and environmental benefits of bike sharing: A big-data analysis. *Applied Energy*, 285. <https://doi.org/10.1016/j.apenergy.2020.116429>
- Shimba, H. A., Pauline, N. M., & Luhende, B. (2024). Towards developing a national climate change framework in Tanzania: Evidence from taxing energy sources to enhance use of renewable energies as a mitigation policy. *Energy and Climate Change*, 5. <https://doi.org/10.1016/j.egycc.2024.100148>
- Sunge, R., Mudzingiri, C., & Mkhize, N. (2024). The COVID-19 pandemic and economic recovery: The mediating role of governance, a global perspective. *Heliyon*, 10(22). <https://doi.org/10.1016/j.heliyon.2024.e39869>

Xin, L., Xi, C., Sagir, M., & Wenbo, Z. (2023). How can infectious medical waste be forecasted and transported during the COVID-19 pandemic? A hybrid two-stage method. *Technological Forecasting and Social Change*, 187. <https://doi.org/10.1016/j.techfore.2022.122188>

Zhao, D., Zhang, J., & Tang, J. (2024). Job insecurity and fertility: Evidence from massive lay-offs in urban China. *Journal of Asian Economics*, 94. <https://doi.org/10.1016/j.asieco.2024.101789>



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