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# TRANSITION TOWARDS A GREEN ECONOMY IN SUSTAINABLE GROWTH: AN ANALYSIS OF REGULATION AND PRACTICE IN INDONESIA

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## ABSTRACT

**Objectives:** This study aims to analyze the challenges and opportunities in implementing the green economy in Indonesia, focusing on regulatory consistency, dependence on extractive industries, and the effectiveness of government stimulus in supporting sustainable economic growth.

**Research Design & Methods:** The research employs a qualitative approach by reviewing relevant policies, financial mechanisms, and sectoral implementations of the green economy in Indonesia. Data is collected from policy documents, industry reports, and academic literature to provide a comprehensive analysis.

**Findings:** The findings show that Indonesia is committed to a green economy through environmentally friendly policies and practices in various sectors. The government sets targets for low-carbon development, resource efficiency, and social inclusiveness. Progress is seen in the banking sector with green credit, the furniture industry with eco-innovation, and agriculture through ISPO. Green technology and innovation play a crucial role in enhancing efficiency and promoting environmental protection. This transition represents a strategic step toward balancing economic growth, environmental sustainability, and social welfare.

**Implications & Recommendations:** The transition to a sustainable green economy requires aligned policies, strong financial support, and effective collaboration between government, industry, and academia. Strengthened regulation, increased investment in renewable energy, and stakeholder engagement can accelerate the shift to an inclusive and resilient green economy.

**Contribution & Value Added:** This study provides a strategic insights into Indonesia's green economy transition by highlighting key challenges and offering policy recommendations. The findings contribute to the literature on sustainable development by bridging the gap between policy implementation and sectoral economic adaptation.

**Keywords:** Green Economy, Sustainable Development, Green Finance.

JEL codes: Q56, O44, G28

**Article type:** research paper

## INTRODUCTION

Currently, countries around the world are facing various problems in implementing the Green Economy as part of sustainable growth, including Indonesia. Indonesia faces the challenge of the "middle income trap," where stable economic growth is not enough to push the country into the category of developed countries, especially post-Covid-19 economic recovery, which includes poverty alleviation, achieving sustainable development, and transitioning to a green economy. Sustainable economic recovery requires a strategy that focuses not only on economic growth but also on mitigating social inequality and minimizing environmental impacts. However, in practice, this implementation still faces various challenges. The adoption of the green economy in various sectors is still limited, partly due to low literacy and public awareness of the concept ([Anantyasari](#)

et al., 2024). The lack of understanding of the green economy has resulted in people being less engaged in environmentally friendly practices, such as the consumption of sustainable products and energy efficiency. Low economic literacy also has an impact on consumption behavior, which is more inclined toward a consumptive lifestyle than toward consumption patterns that prioritize environmental sustainability.

One of the biggest challenges is the inconsistency between development plans and on-the-ground implementation, economic dependence on the extractive sector, and underutilization of government stimulus to accelerate the transition to a green economy (Martawardaya et al., 2022). Many policies have been designed to promote a green economy, but they are often hindered in execution due to a lack of inter-agency coordination and weak regulatory enforcement. In addition, the economy's dependence on extractive sectors, such as mining and fossil energy, is a major obstacle, as these sectors remain the backbone of many countries' economies. The unpreparedness of various sectors to adopt more environmentally friendly practices leads to resistance to implementing green policies. Furthermore, the underutilization of government stimulus, such as tax incentives for renewable energy and subsidies for green technologies, has hindered the transition to a green economy. Many industry players are reluctant to transition to a green economy because they believe they will not benefit significantly enough to offset the associated costs. Therefore, a stronger commitment from the government is needed to provide consistent policies and more concrete financial support, thereby accelerating the shift to a green economy (Gharistiara & Widyasamratri, 2019). The economic and fiscal constraints faced by Indonesia necessitate special attention and the establishment of appropriate economic policy criteria.

"Green" stimulus is one of the alternative post-pandemic proposals to support economic recovery while encouraging its transition to a more environmentally friendly and sustainable path (Chen et al., 2020). The Indonesian government has made transitioning to a green economy part of its national development strategy. This effort reflects a commitment to achieving sustainable growth by considering environmental aspects (Martawardaya et al., 2022). The green economy is an alternative concept in growth and development that not only encourages economic progress but also improves the quality of life and social and environmental welfare (Li & Leung, 2021). According to Isa et al. (2021), the green economy can be defined as an economic system that is oriented toward the preservation of natural resources, with minimal or even zero carbon dioxide emissions, and the principle of social justice. Unlike conventional economic approaches, green economics directly assesses the economic value of natural capital and ecological services. It relates the impacts generated by human activities back into the form of obligations, ensuring that environmental assets are not neglected or destroyed (Hidayattuloh et al., 2020).

The green economy has become a major policy cornerstone in sustainable development efforts in many countries, both developed and developing. This concept aims to create a society that is more efficient in resource utilization, has lower carbon emissions, and is more socially inclusive (Georgeson et al., 2017). In the context of sustainable development, the green economy emphasizes the importance of investing in renewable energy, optimizing resource use, and developing innovative technologies to reduce environmental impacts while improving people's welfare (Nesterov, 2023). The green economy plays an important role in sustainable development by encouraging resource efficiency, the use of environmentally friendly technologies, and the implementation of a circular economy to minimize waste.

The Indonesian government has demonstrated its commitment to sustainable development and a green economy. The Ministry of Finance has an important role in achieving the Sustainable Development Goals (SDGs) by allocating the National Budget to environmental programs (Anggraeni et al., 2023). Experts highlight that environmental sustainability plays an important role in realizing the overall sustainable development goals. Without integrating the principle of environmental sustainability, achieving the global Sustainable Development Goals (SDGs) will be difficult (Ziaul & Shuwei, 2023). This view highlights the urgency of addressing various environmental challenges, including carbon emissions, pollution, climate change, and the overexploitation of natural resources. Sustainable development is the main approach to ensure

economic growth that is not only oriented towards short-term profits but also considers social welfare and environmental sustainability.

To achieve sustainable green growth, Indonesia must continue to design policies that not only encourage environmentally-based innovation but also accelerate the transition to renewable energy use and the adoption of sustainable industrial practices. The government needs to optimize fiscal incentives and regulations that support green investment. At the same time, the private sector should be more proactive in adopting green technologies to reduce carbon footprint and improve resource efficiency. In addition, public engagement in supporting green economy policies is also a key factor, especially through increased environmental literacy and active participation in sustainable consumption practices. A holistic approach involving collaboration among the government, private sector, academia, and civil society is necessary to overcome various barriers, such as policy inconsistencies, limited funding, and a lack of public awareness of the long-term benefits of sustainable development. With strong synergy among stakeholders, Indonesia has a significant opportunity to accelerate the transition to a green economy that is inclusive, competitive, and environmentally sustainable.

## LITERATURE REVIEW

### Green Economy Concept and Theory

The green economy is a complex concept and has evolved into a major policy foundation in promoting growth and development in various countries, both developed and developing (Zhang et al., 2022). The green economy is a sustainability-oriented economic development strategy that aims to balance economic growth, environmental sustainability, and social inclusiveness simultaneously. This approach prioritizes efficiency in resource utilization, reduction of carbon footprint, and preservation of ecosystems and natural capital, aiming to strike a balance between economic development and environmental sustainability (Batrancea et al., 2021; Tang & Solangi, 2023). As a key pillar in sustainable development efforts, the green economy not only aims to enhance human welfare and promote social justice but also plays a crucial role in mitigating negative environmental impacts (Chaaben et al., 2022). This concept emphasizes the efficient use of resources, the application of environmentally friendly technologies, and the transformation of the economy toward a more inclusive and sustainable model. In addition, the green economy encourages innovation in various sectors, such as renewable energy, sustainable transportation, and cleaner production, thereby creating new jobs while maintaining the balance of the ecosystem.

The green economy attempts to decouple economic growth from the overexploitation of natural resources and environmental degradation. In its implementation, the green economy encompasses various aspects, including the circular economy, green innovation, renewable energy, and sustainable urbanization (Takyyi et al., 2024). This initiative has played a crucial role in addressing climate change and promoting sustainable development (Tang & Solangi, 2023). In the context of global economic development, the green economy is becoming a transformative model that not only focuses on economic growth but also ensures a balance between environmental sustainability, resource efficiency, and social welfare (Kuznecov & Nebol'sina, 2022). This transformation necessitates policies that foster investment in green technologies, reduce social inequality, and promote a healthier and more productive environment for people (Al-Taai, 2021). According to Puryandani and Syahadat (2024), the green economy emphasizes an economic system that prioritizes sustainability and environmental protection, with key aspects such as green energy, sustainable agriculture, and green finance.

The theory of the green economy is an economic approach that seeks to achieve sustainable development by minimizing environmental impacts and enhancing social welfare (Souad, 2023). It emphasizes the importance of balancing economic development with environmental protection and social justice (Ehresman & Okereke, 2015). This concept aims to mitigate environmental risks, enhance human well-being, and promote social justice while fostering economic growth (Chaaben et al., 2022). The main aspects of green economic theory include, 1) Environmental sustainability: emphasizing environmental sustainability by reducing carbon emissions, encouraging the use of renewable energy, and maintaining the sustainability of natural resources (Mealy & Teytelboym, 2022; Tang & Solangi, 2023), 2) Economic growth: This approach aims to promote economic

development by developing green industries, implementing sustainable technologies, and adopting environmentally friendly practices (Gao et al., 2019; Tarkhanova et al., 2020), 3) Social inclusiveness: Green economic theory emphasizes the importance of social equality and poverty alleviation efforts as part of sustainable development (Vuola et al., 2020; Zhang et al., 2022). The economic and fiscal constraints faced by Indonesia necessitate special attention and the establishment of appropriate economic policy criteria.

The environmentally friendly industry and circular economy concepts are closely related to green economy principles, where production and consumption activities are designed to minimize waste and optimize resource utilization (Innocent et al., 2022). In practice, this approach emphasizes the use of clean technologies, optimizing product life cycles, and implementing recycling and material reuse strategies to minimize environmental impacts. Moreover, the implementation of circular economy in industry not only contributes to ecosystem preservation but also opens up new economic opportunities through sustainability-based innovation. Companies that adopt this strategy can improve their competitiveness by reducing dependence on new raw materials and optimizing operational efficiency. Furthermore, integrating the green economy with sustainable industry can support the transition to a low-carbon economy, a key factor in addressing climate change and achieving sustainable development globally.

The transition to a green economy encompasses various sectors and requires a holistic approach to achieve both environmental sustainability and economic growth. One important aspect of this transition is green shipping, which aims to reduce the environmental impact of the logistics and transportation industry (Felicio et al., 2021). In addition, the concept of a circular economy is increasingly being adopted as a more sustainable approach to production and consumption, encouraging practices such as recycling, product redesign, and energy efficiency (Takyi et al., 2024). Green job creation is also integral to this transition, with employment opportunities increasing in the environmental goods and services sector (Kasayanond et al., 2019; Younas et al., 2023). These elements contribute to environmental sustainability and economic growth.

## Sustainability

In general, the concept of sustainability refers to the definition put forward by the Brundtland Commission in 1987, which defined sustainable development as a development process that can meet the needs of the current generation without reducing the ability of future generations to meet their needs (Ramsey, 2014). Bova (2022) emphasized that sustainability requires clear standards in terms of terminology and implementation, especially in the aspects of exploitation, adaptation, and mutualism relationships in a sustainable system. According to Mondal (2022), sustainability encompasses interconnected social, economic, and ecological dimensions, rooted in the concept of sustainable development first introduced by the Brundtland Commission. Sustainability can be understood through three main aspects: the goal to be maintained, the world perspective that underlies this concept, and the steps needed to realize it (Whyte & Lamberton, 2020).

Sustainability in the global context encompasses three main aspects of economy, society, and environment, often referred to as the three pillars of sustainability (Church et al., 2022). The concept is increasingly relevant in light of the challenges we face, such as climate change, resource overexploitation, and social inequality. Sustainability also involves implementing strategies that aim to balance economic growth with environmental preservation (Dabija, 2021). In the business world, sustainability has become a key element in corporate strategic planning, where business practices are not only focused on financial returns but also social responsibility and environmental sustainability (Singh, 2024).

The concept of sustainability encompasses efforts to address various global challenges, including poverty alleviation, environmental protection, and the implementation of sustainable development (Farooq et al., 2020). In support of these goals, the United Nations (UN) designed the 2030 Agenda for Sustainable Development Goals (SDGs) as a comprehensive guide to achieving sustainability across various sectors. This framework encompasses key aspects, including inclusive healthcare, equitable access to education, and socially and environmentally responsible business practices (Dal Mas et al., 2024; Farooq et al., 2020). By adopting a holistic approach, the



SDGs serve as a guide for countries, organizations, and communities in creating a balance between economic growth, social welfare, and environmental preservation for future generations.

Sustainability theory has emerged as a response to the need for a balance between economic, social, and environmental aspects, ensuring the welfare of current generations without compromising the needs of future generations. This concept encompasses various approaches, including sustainable development theory, which emphasizes the sustainable use of natural resources and efforts to mitigate negative environmental impacts ([Hanna & Cesaretti, 2020](#)). In addition, sustainability management theory emphasizes the integration of sustainability principles into business practices and public policies by individuals, organizations, and communities ([Starik & Kanashiro, 2013](#)). Another approach emphasizes the connection between sustainability theory and green economic development, which posits that economic growth must be aligned with environmental conservation efforts ([Lu, 2022](#)).

## METHODS

This research is classified as library research, a research method that relies on literature sources as the primary material for analyzing a phenomenon. This method is used to collect, review, and analyze information from various relevant sources, such as books, scientific journals, and official documents, to gain an in-depth understanding of a topic. This approach is often employed in conceptual and theoretical studies to gain a deeper understanding of a phenomenon, allowing researchers to compare various theories and previous findings to obtain a more comprehensive synthesis of information. In the context of research on the green economy and post-pandemic economic recovery, the literature approach is particularly relevant as it allows researchers to understand the policies, challenges, and global trends related to sustainable economic transition through a review of previous studies.

## RESULT

### Green Economy Regulation and Policy

Green economy policies are increasingly becoming a primary concern in sustainable development at the global level. This concept aims to reduce environmental impacts and address resource scarcity without hampering economic growth. Some of the policy measures implemented globally include the introduction of environmental taxes, investment in renewable energy sources, optimization of resource utilization, and incentives for sustainable industries. At the international level, organizations such as the United Nations Environment Programme (UNEP) and the Group of Twenty (G20) play a role in coordinating green economy policies. However, their effectiveness could be improved ([Tienhaara, 2016](#)). This has highlighted the need for reforms in global governance structures to improve policy coordination on green economy initiatives.

Developed countries, such as Germany, have successfully adopted green economy policies by emphasizing investment in clean energy as well as the implementation of environmental taxes. On the other hand, developing countries face various obstacles in transitioning to a green economy, including limited resources and institutional capacity. However, some have made progress through more inclusive policies and support from the international community ([Wambura, 2024](#)). Green economy policies at the global level, especially for developing countries, play a crucial role in mitigating the impacts of climate change and promoting future economic sustainability.

Indonesia, as a developing country, has taken various actions to address green economy issues in order to achieve sustainable development, including the issuance of Presidential Regulation No. 98 of 2021 on Carbon Economic Value. This regulation establishes two main market-based instruments: carbon trading and result-based payments. Carbon trading allows companies with lower emissions than the specified limit to sell their excess quota to companies that struggle to meet their emissions reduction targets. Meanwhile, performance-based payments offer incentives for projects that successfully reduce carbon emissions by predetermined targets. This policy aims to encourage industry and business sectors to invest in environmentally friendly technologies and increase green finance to support economic sustainability ([Nikulina, 2021](#)).

Indonesia's commitment to the Sustainable Development Goals (SDGs) is reflected in various regulations that promote energy efficiency, reduce carbon emissions, and preserve ecosystems. The government has implemented a low-carbon development policy as part of the 2020-2024 National Medium-Term Development Plan, also known in Indonesian as Rencana Pembangunan Jangka Menengah Nasional (RPJMN), which targets green investment and an increase in the renewable energy mix (Ngabiyanto et al., 2024). In addition, regulations that support sustainable development are also stipulated in various laws, such as the Environment Law, the Energy Law, and the Law on Ratification of the Paris Agreement that directs Indonesia to reduce greenhouse gas emissions (Doman & Doman, 2020).

Table 1. Regulation of the Green Economy in Indonesia

Law	Policy Content	Objective
Law No. 32 of 2009 on Environmental Protection and Management	Provides principles of sustainable development, environmental protection, and environmentally sound natural resource management.	Prevent environmental pollution and damage in economic development.
Law No. 16 of 2016 on the Ratification of the Paris Agreement	Committing Indonesia to reducing greenhouse gas emissions by its global commitments under the Paris Agreement.	Promote the transition to a low-carbon economy and the adoption of renewable energy.
Law No. 30 of 2007 on Energy	Encourages energy diversification and the utilization of new and renewable energy sources.	Reduce dependence on fossil energy and support green energy.
Law No. 41 of 1999 on Forestry	Organize sustainable forest management to prevent deforestation.	Maintain ecosystem balance and support a sustainable forestry-based economy.
Presidential Regulation No. 61 Year 2011 on the National Action Plan for Reducing Greenhouse Gas Emissions	Regulate climate change mitigation strategies in various economic sectors.	Reduce carbon emissions through concrete national policies.

Through the regulations outlined in Table 1, Indonesia aims to accelerate the transition to a green economy by implementing various strategic policies that integrate economic, social, and environmental aspects. This effort not only aims to promote sustainable economic growth but also ensures that the exploitation of natural resources is carried out responsibly, thereby maintaining the balance of the ecosystem in the long term. The implementation of this regulation encompasses various sectors, including energy, industry, forestry, and agriculture, with a focus on promoting resource efficiency, reducing carbon emissions, and increasing investment in environmentally friendly technologies. The government also encourages active involvement from the private sector and communities through tax incentives, carbon trading schemes, and strengthening partnerships between various stakeholders. In addition, education and raising public awareness about the importance of sustainability are integral parts of this policy, aimed at creating behavioral changes that support a green economy. With a comprehensive approach, Indonesia not only targets inclusive and sustainable economic growth but also plays an active role in mitigating climate change at the global level.

One of the policies implemented is green fiscal policy, which includes tax incentives for environmentally friendly sectors as well as budget allocations for green projects such as renewable energy and environmental conservation. The government continues to prioritize achieving sustainable development targets as part of its efforts to address the challenges of global climate change through the implementation of green economic policies. This commitment is reflected in various initiatives that focus on optimizing resources to accelerate the transition to sustainable energy. One of the concrete steps taken is to encourage investment in renewable energy sources, such as solar, wind, and biomass, and to develop incentive policies for industrial sectors that incorporate green economy principles. Additionally, the government plays a crucial role in raising awareness of sustainability in both the public and private sectors through regulation, education, and cooperation with various stakeholders at national and international levels. With a holistic and strategic approach, this policy is expected not only to reduce carbon

emissions and environmental impacts but also to create new, more inclusive, and sustainable economic opportunities for society.

The government is also developing locally-based policies to support the sustainability of natural resources, with approaches that adapt to the social, economic, and ecological conditions in each region. One concrete example is the policy in the fisheries sector, implemented through the Co-Management approach, which encourages cooperation among the government, local communities, and other stakeholders in managing aquatic resources (Nurhayati, 2012). Through this approach, coastal communities and fishers are given a more active role in preserving marine ecosystems, such as through water conservation programs, fish stock monitoring, and the implementation of sustainable fishing zones. The government also supports this initiative by providing training, funding, and regulations that enable more sustainable fisheries management. Additionally, environmentally friendly technologies, such as the use of fishing gear that does not harm habitats, are also encouraged to mitigate the impact of marine resource exploitation. With this locally based approach, green economy policies not only contribute to environmental sustainability but also enhance community welfare through more inclusive and sustainable economic practices.

### Implementation of Green Economy Practices in the Context of Sustainable Growth

Indonesia has been actively implementing green economy practices as part of its commitment to sustainable development and environmental protection. The country has set targets for low-carbon development, resource efficiency, and social inclusiveness as key indicators of its green economy efforts (Anggraeni et al., 2023). The implementation of Green Economy practices in Indonesia has grown in recent years, especially in supporting sustainable development and reducing environmental impacts. Research by Qalbie and Rahmaniah (2023) shows that Indonesia has great potential in implementing a green economy, especially in an effort to achieve net-zero emissions. With abundant natural resources, including renewable energy sources such as solar, wind, and geothermal, Indonesia has a significant opportunity to reduce its dependence on fossil fuels and lower carbon emissions. In addition, government policies that increasingly support the green economy, including incentives for sustainable investment and strengthening environmental regulations, are further accelerating the transition to low-carbon development.

Different sectors have shown progress in implementing green economy practices, including the banking sector, which has started to adopt the concept of green credit to encourage capital allocation to sustainable projects. Green credit in the banking sector acts as a catalyst for sustainable development by supporting environmentally friendly projects such as renewable energy and green infrastructure (Andaiyani et al., 2023). However, its implementation still faces challenges, including short-term profitability concerns, high project risk, and a lack of awareness about the benefits of green financing (Cholidah, 2019). The Indonesian government supports green credit through the Indonesian Green Taxonomy, which guides financial institutions in channeling sustainable finance. National banks have begun to incorporate ESG-based schemes into their credit evaluation processes, while fiscal policies offer incentives such as interest subsidies and risk guarantees to promote green lending (Yusa & Hermanto, 2018). The adoption of fintech and digital transformation has pushed banks toward more sustainable performance by improving operational efficiency, reducing costs, and expanding access to financial services. Additionally, the digitization of banking contributes to reducing environmental impact by minimizing the use of physical documents and lowering energy consumption. Green finance serves as a bridge between fintech and green initiatives, while competitiveness drives innovation in digital services. Thus, the synergy between fintech, green finance, and competitiveness will ultimately form a more efficient, innovative, and sustainable banking ecosystem in the long run (Hidayat-ur-Rehman & Hossain, 2024). The implementation of green economy practices in the banking sector involves the adoption of financial technology, digital transformation, environmentally friendly human resource management practices, and the development of green financial products and services. This integrated approach can improve banks' sustainability performance, drive operational efficiency, and contribute to their broader sustainability goals.

The furniture manufacturing industry in Indonesia continues to grow in implementing eco-innovation practices, especially through the production of environmentally friendly furniture that

prioritizes the use of sustainable raw materials and energy efficiency in the production process (Fernando et al., 2016). One tangible manifestation of this effort is the implementation of ecolabel certification on wood-based furniture, which ensures that raw materials originate from legally sourced and sustainably managed sources. Additionally, some furniture manufacturers have begun to incorporate the concept of wood recycling into their production processes, such as CV. Dbest Furniture in Yogyakarta utilizes used wood as its primary raw material and has obtained a Timber Legality Verification System (SVLK) permit, thereby enhancing product competitiveness in the global market (Kurniawati & Yanti, 2018). Several furniture manufacturers in Indonesia have implemented sustainable innovations, including the use of certified raw materials, the processing of waste into value-added products, and the optimization of production processes to minimize their carbon footprint. In addition to having a positive impact on environmental sustainability, these strategies also help optimize production costs and expand export opportunities as global demand for eco-friendly furniture continues to increase. With the implementation of these eco-innovations, the Indonesian furniture industry is increasingly contributing to supporting the green economy and promoting sustainable growth.

In the agricultural sector, the Indonesian Sustainable Palm Oil (ISPO) Program is the sustainability standard that is applied in the oil palm plantation sector to ensure environmentally responsible practices. ISPO aims to minimize the negative impacts of oil palm plantation expansion, including deforestation, land degradation, and environmental pollution, by requiring companies and independent smallholders to implement cultivation practices based on sustainable principles. Although ISPO certification has been in place since 2011, its implementation still faces various challenges, especially for independent smallholders who experience constraints related to land legality, technology readiness, and access to financing to meet the set standards (Dharmawan et al., 2019). The use of environmentally friendly technologies, such as water-saving irrigation, organic fertilizers, and plant-based pesticides, is also a crucial component of the green economy in the agricultural sector (Nwachukwu, 2023). The implementation of a green economy also requires the application of green technologies and innovative practices to monitor and control operations, thereby improving environmental performance (Lutfi et al., 2023). This approach not only increases agricultural productivity but also maintains ecosystem sustainability and reduces environmental pollution. The implementation of the green economy in the agricultural sector aims to enhance the efficiency of natural resource use, mitigate environmental impacts, and improve the welfare of farmers.

The green economy plays a crucial role in various sectors by prioritizing resource efficiency, environmental protection, and social welfare as a key step towards sustainable development. It also opens up new employment opportunities in environmentally friendly sectors, which not only improves people's welfare but also creates a more inclusive business ecosystem. Thus, the transition to a green economy is necessary to achieve a balance between economic growth, environmental sustainability, and social welfare sustainably.

## DISCUSSION

The green economy is a development concept that emphasizes the balance between economic growth, environmental conservation, and social welfare. In the face of the climate crisis and limited natural resources, implementing a green economy is a crucial strategy for ensuring sustainable development. The transition to a green economy is a strategic step towards achieving sustainable development, which requires the right combination of policies and strong financial support. One of the main approaches is to attract green investment to encourage innovation and the development of environmentally friendly industries. Additionally, economic diversification, which involves shifting from dependence on primary commodities to secondary and tertiary sectors, can increase value-added and enhance long-term economic resilience. Another policy that supports this transition is the end of incentives for the extractive sector and coal-fired power plants, which have contributed to high carbon emissions and environmental degradation. Consistency in policies related to the green economy is also an important factor so that existing regulations can provide certainty for investors and industry players in adopting sustainable practices (Martawardaya et al., 2022). The Ministry of Finance, meanwhile, plays a crucial role in supporting this transition through the allocation of the State Budget or Anggaran Pendapatan dan Belanja Negara (APBN) in favor of



environmental programs. Fiscal policies that support sustainable development, such as tax incentives for green businesses and increased state spending on renewable energy projects and environmental conservation, can accelerate the shift toward a more inclusive and sustainable green economy (Anggraeni et al., 2023).

Implementing a green economy necessitates close collaboration between government, industry, and academia to ensure a sustainable and inclusive transition. The government has a key role in creating policies that support the green economy, both through financial incentives and regulations that encourage sustainable practices. One strategic step is to subsidize green innovations, such as the development of renewable energy, energy efficiency technologies, and circular economy-based industries. Additionally, stringent regulations on carbon emissions, waste management, and sustainable production standards will encourage industries to adopt more environmentally friendly practices. The government can also encourage green investment through fiscal policies, such as tax incentives for companies that implement sustainability principles (Nilimaa, 2023).

Industries have a significant responsibility to adopt green technologies and mitigate the environmental impact of their business activities, thereby supporting the transition to a sustainable economy. Increasingly, companies are investing in low-carbon technologies and renewable energy to meet global sustainability standards and improve their competitiveness in international markets (Dewi et al., 2024). On the other hand, academia also plays a crucial role in providing research, innovation, and science-based solutions to support the transition to a green economy. One approach that has proven effective in accelerating green innovation is the Triple Helix Model, which integrates the roles of academia, industry, and government in creating a collaborative ecosystem that encourages the development of green technologies and sustainable education (Moshi et al., 2024). Collaboration between these three parties enables a more optimized exchange of knowledge and resources, thereby accelerating the implementation of green policies and creating innovative solutions to achieve sustainable development.

The implementation of a green economy has the potential to promote sustainable growth in Indonesia by striking a balance between economic growth, social welfare, and environmental conservation. It also contributes to economic growth by creating new job opportunities in sectors such as renewable energy, sustainable agriculture, and green industries. The development of solar, wind, and biomass, for example, creates jobs for technicians, engineers, and local labor that support the clean energy transition. In the agricultural sector, the adoption of sustainable practices, such as agroforestry and organic farming, increases productivity while maintaining ecosystem balance. In addition, investments in green transportation, such as electric vehicles and clean energy-based transportation systems, not only drive innovation in the automotive industry but also reduce dependence on fossil fuels. Energy efficiency in the manufacturing and residential sectors also plays a role in reducing operational costs and increasing economic competitiveness at the global level (Khatsieva et al., 2022). With the development of environmentally friendly technologies and the right policy support, the green economy is a strategic solution in creating inclusive, sustainable, and future-oriented economic growth.

## CONCLUSION

Indonesia faces various challenges in implementing a green economy as part of a sustainable growth strategy, including policy inconsistencies, dependence on the extractive sector, and underutilization of government stimulus that can support the transition to a low-carbon economy. Nevertheless, the Indonesian government has demonstrated its commitment to sustainable development by issuing various regulations and policies that promote green economy practices across different sectors. The implementation of green economy in Indonesia continues to grow, especially in the banking sector through the application of green credit concepts that support the financing of environmentally friendly projects, the furniture manufacturing sector with production based on recycled materials and more energy efficient processes, and the agricultural sector that implements sustainability standards such as the Indonesian Sustainable Palm Oil (ISPO) to ensure more environmentally responsible palm oil cultivation practices. However, the transition to a green economy cannot be optimized without the right combination of policies, strong financial support, and close collaboration between government, industry, and academia in creating sustainable

innovations and solutions. With its integrated and inclusive approach, the green economy has significant potential to drive sustainable economic growth in Indonesia, not only by maintaining a balance between development and environmental sustainability, but also by enhancing social welfare and national competitiveness in the global economy.

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