

INTEGRATION OF GREEN ECONOMY POLICIES IN POST-PANDEMIC ECONOMIC RECOVERY: OPPORTUNITIES AND CHALLENGES

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Abstract

The post-pandemic economic recovery presents a strategic opportunity to integrate green economy policies to create more sustainable and inclusive growth. These policies involve measures such as renewable energy development, resource efficiency and carbon emission reduction that can strengthen economic resilience while protecting the environment. However, their implementation faces various challenges, including high start-up costs, resistance from conventional industries, and technological and infrastructure limitations in some countries. This article examines the opportunities offered by green economy policy integration as well as the challenges that need to be overcome in the post-pandemic economic recovery process. Thus, with a collaborative approach and strategic policies, the green economy can be a key solution to realising a sustainable global economic recovery and supporting long-term development.

Keywords: Integration, Green Economy Policy, Post-Pandemic Economic Recovery, Opportunities and Challenges

Introduction

The COVID-19 pandemic has had a major impact on the global economy, causing a slowdown in economic activity, increased unemployment, and instability in various sectors. The slowdown in economic activity is one of the main consequences of the social restriction and lockdown policies implemented to control the spread of the virus (Steffen, 2018) . This situation has led to drastically increased unemployment rates, disrupted global supply chains, and widespread instability in various sectors, including industry, trade, and tourism. Countries are under pressure to formulate effective policies to restore economic conditions, while facing the uncertainty of stopping the long-term impact of the pandemic (Elkington, 2020) .

In the midst of economic recovery efforts, there is an urgent need to integrate sustainability principles in economic policy. The concept of green economy is becoming increasingly relevant, as the pandemic has exposed the weaknesses of conventional economic systems that often ignore environmental aspects. The green economy offers an approach that focuses on resource efficiency, transitioning to renewable energy, reducing carbon emissions, and inclusive development (Barbier, 2020) . However, the

implementation of green economy policies in the context of post-pandemic economic recovery faces various challenges, such as political resistance, budget constraints, and lack of integrated coordination. On the other hand, this approach also opens up great opportunities to create more resilient and sustainable economies (Food and Agriculture Organisation (FAO), 2021).

Post-pandemic economic recovery is a top priority for many countries, but the challenges faced require a strategic and sustainable approach to avoid similar crises in the future. In this context, green economy policies are emerging as one of the innovative solutions to foster resilient economic recovery while maintaining environmental sustainability (World Economic Forum, 2021).

Green economy policy is a set of strategies, programmes and actions designed to promote economic growth while maintaining a balance of environmental, social and long-term sustainability. It focuses on the efficient management of resources, the reduction of carbon emissions, and the application of environmentally friendly technologies in production and consumption processes. The goal is to create a more inclusive and resilient economic system, by reducing negative impacts on natural ecosystems and providing sustainability benefits for future generations. The green economy approach also encourages the transition to renewable energy, the development of environmentally sound industries, and the improvement of public welfare without compromising human health (Jacobs, 1991).

A green economy focuses not only on short-term economic growth, but also on transforming to a development pattern that is low in carbon emissions, efficient in resource use, and socially inclusive. Amidst increasing global awareness of climate change and environmental degradation, the integration of green economy policies is relevant to ensure that the recovery process does not come at the expense of planetary sustainability. However, the implementation of these policies is not free from various challenges, including budget constraints, political resistance, and lack of public understanding of the importance of green economy approaches (The World Economic Forum, 2020).

On the other hand, the pandemic has also opened up opportunities to accelerate the transition to a green economy through stimulus policies directed at renewable energy investment, waste management, and green technology development. Many countries are beginning to see green economy policies as an important foundation for building more stable and risk-adaptive economies of the future (Harvey, 2010).

Therefore, this research aims to examine how green economy policies can be integrated in the post-pandemic economic recovery process. It will also identify opportunities that can be utilised as well as challenges that need to be overcome in the implementation of such policies. This is important to build a framework that not only supports short-term recovery, but also ensures sustainable development in the future.

Research Methods

The study in this research uses the literature method. The literature research method is an approach that is carried out by collecting, analysing, and evaluating information that has been available from various written sources to answer research questions or support theory development. This research focuses on literature reviews such as books, scientific articles, journals, research reports, and other documents relevant to the topic under study (Carnwell & Daly, 2001) ; (Boote & Beile, 2005) . The purpose of this method is to understand and identify concepts, trends, and research gaps from previous research results. By using this method, researchers can obtain a strong theoretical foundation, build arguments based on existing evidence, and explore findings that can be used as a reference for further research (Cooper, 2010) .

Results and Discussion

Potential Integration of Green Economy Policy in Post-Pandemic Economic Recovery Strategy

The COVID-19 pandemic has had a significant impact on the global economy, including a decline in economic activity, rising unemployment, and pressure on crucial sectors. In the recovery effort, the integration of green economy policies offers a strategic approach that not only accelerates economic recovery, but also builds a more sustainable system. Green economy policies can be an important step to address the growing environmental challenges, while reviving key affected sectors (Stern, 2006) .

The great potential of green economy policies lies in their ability to create new jobs. Investments in renewable energy sectors, such as solar and wind power, can open up huge opportunities for people to engage in clean technology industries. In addition, the development of green infrastructure, such as electricity-based public transport and efficient waste management systems, can have a multiplier effect on local and national economies. This green sector not only promises economic sustainability but also provides a solution to reduce the soaring unemployment rate due to the pandemic (Nordhaus, 2013) .

Green economy policy integration also promotes natural resource efficiency. Their utilisation aims to reduce reliance on environmentally damaging practices, such as fossil fuel exploitation or deforestation without careful planning. In the long run, economic activities based on resource efficiency can provide stability and minimise dependence on economic activities that are vulnerable to external fluctuations, such as global energy prices. As such, post-pandemic economic recovery can be designed to be more resilient to future crises (Sachs, 2015) .

On the other hand, these policies contribute to the reduction of carbon emissions and environmental pollution. The pandemic provided important lessons regarding the positive impacts of reduced human activity on ecosystems, such as reduced air pollution and improved air quality. Green economy integration can help

sustain this momentum by ensuring the energy transition from fossil fuels to cleaner, more environmentally friendly energy sources. This is in line with global commitments to mitigate climate change, as enshrined in the sustainable development goals (SDGs) (McNeill, 2001).

Furthermore, green economy policies can trigger significant technological innovation. New insights into energy demand, transport and resource management drive the development of more innovative technologies, such as high-energy batteries, smart irrigation systems or net-zero buildings. Innovation not only brings economic impact but also increases the country's competitiveness in the international market. The pandemic has shown how important adaptation and innovation are in facing global challenges, where green economy policies can play a strategic role (Jackson, 2016).

In the context of post-pandemic economic recovery, the integration of green policies also opens up opportunities to strengthen the sustainable agriculture sector. The pandemic has emphasised the need for a resilient and equitable food system for all. By encouraging environmentally friendly agricultural practices - such as organic farming, agroforestry, or the use of efficient agricultural technologies - these policies can improve food security while reducing adverse impacts on natural ecosystems (Rockström., 2009)

In addition, the implementation of green policies has the potential to improve the overall quality of life of society. The green economy is oriented towards the concept of social inclusion, where the benefits can be felt by all groups of people regardless of social or economic background. For example, investments in green infrastructure not only boost the economy but also give people access to cheap transport, clean energy, and a healthy environment (Goodland, 2004).

However, to realise the integration of green economy policies, strong support from the government, private sector and society is required. The government needs to launch incentives for companies that adopt green practices, such as tax rebates or financial assistance (Spash, 2002). Meanwhile, the private sector can collaborate in creating businesses that support sustainability, from developing green products to investing in research and technology. People also have an important role to play through lifestyle changes that support sustainability, such as reducing the use of single-use plastics, supporting local products, or using public transport (World Economic Forum, 2021).

The effectiveness of green economy policy integration in post-pandemic economic recovery also depends heavily on global co-operation. The pandemic has shown that the world is interdependent, and efforts to rebuild economies cannot be made in isolation. Countries need to collaborate in sharing technologies, knowledge, as well as providing financial support to developing countries to adopt effective green policies. In this way, global recovery can be more equitable and fair (United Nations Environment Programme (UNEP), 2020).

In addition, to ensure the sustainability of green economy policy implementation, strict monitoring and evaluation are required. The government must ensure that the policies designed are able to achieve the expected economic and environmental impacts. For example, incentive programmes should be evaluated regularly to find out whether they are successful in encouraging the green sector while ensuring that there are no policies that harm nature or society (Intergovernmental Panel on Climate Change (IPCC), 2018).

Thus, the integration of green economy policies in post-pandemic economic recovery strategies is a golden opportunity to realise a more equitable, innovative and sustainable economic system. By incorporating green principles in the ongoing economic transformation, countries can create a future that is more resilient to crises and friendlier to the environment. However, its successful implementation depends on the commitment of all parties, from governments, economic actors, to the global community, in supporting the change towards a more inclusive and environmentally sound economy.

Opportunities and Challenges of Green Economy Policy Implementation in Post-Pandemic Economic Recovery Strategy

Since the last few years, green economy policies have increasingly become a global concern as a solution to overcome various problems arising from climate change, environmental degradation, and economic inequality. In the context of post-pandemic economic recovery, the implementation of a green economy can provide a new direction that is not only oriented towards economic growth, but also environmental sustainability and community welfare. The COVID-19 pandemic has taught the world the importance of maintaining a balance between health, economy and environment, so green economy policies are considered relevant to address current challenges and opportunities (International Renewable Energy Agency (IRENA), 2020).

The first opportunity in implementing a green economy is to strengthen competitiveness at the global level. Countries that are able to utilise green technologies and produce sustainable goods and services have great potential to attract foreign investment. The global market increasingly appreciates products that support sustainability, including products with a low carbon footprint and efficient resource management. In this case, green economy policies can be a strategic instrument to create a competitive advantage for a country (Schlosberg, 2009).

In addition, the green economy also has the opportunity to create new jobs. The transition to renewable energy and implementation of green technologies require a workforce with new skills. Sectors such as solar energy, wind, waste management and sustainable agriculture offer great opportunities to create jobs that support sustainability goals. Countries can capitalise on these opportunities by supporting

relevant training and education programmes to enable the workforce to adapt to changing market needs (Millar, 2017) .

Another opportunity is in terms of industrial transformation. Companies that apply green economy principles have long-term benefits, such as operational efficiency, waste reduction, and improved reputation in the eyes of consumers. The pandemic has made many companies realise the importance of operating with lower environmental impact, so this could be a momentum to drive industrial transformation towards a more sustainable direction (Hawken, 2017)

However, despite these opportunities, there are challenges that must be overcome. The first challenge is funding limitations. The implementation of green projects often requires large initial investments, while the fiscal capacity of many countries is currently limited due to the pandemic. Therefore, synergies between governments, the private sector and international financial institutions are needed to support green economy projects (Kallis, 2016) .

The second challenge is resistance from some stakeholders. Not everyone is ready to shift to green policies, especially industries that have been intensively dependent on natural resources. Policy changes may raise concerns about increased operational costs or threats to their business sustainability. Governments need to offer incentives and support the transition of these industries to remain competitive in a green economy framework. (World Bank, 2021) .

Technology inequality is also a significant challenge. Not all countries have equal access to green technologies, so green economy policies risk creating a larger gap between developed and developing countries. Internationalisation of green technologies and knowledge transfer are expected to help address this imbalance so that all countries have equal opportunities to contribute to global sustainability (OECD, 2020) .

Green economy policies also often face barriers in terms of culture and mindset. The shift towards sustainable lifestyles takes time to change societal perspectives that have been formed over many years. Comprehensive education and campaigns are essential to build public awareness of the benefits of a green economy, both economically and environmentally (Ostrom, 2010) .

Post-pandemic economic recovery strategies must also consider inclusiveness. Green economy policies should not only benefit certain groups, but also ensure that all levels of society, including those in remote or poor areas, can benefit from this transformation. The gap in access to green infrastructure is one of the challenges that must be addressed so that this policy can be felt equally (Dietz, 2021) .

Governments have a key role to play in creating effective green economy policies. Regulations that support sustainability such as subsidies for renewable energy, fiscal incentives for green industries, and carbon taxes can be strategic tools in encouraging investment in and adaptation of green technologies. In addition,

international cooperation, particularly through global environmental agreements such as the Paris Agreement, is also important to support the implementation of green policies at the national level (Raworth, 2017).

Finally, successful implementation of green economy policies requires long-term commitment. Transformation towards a green economy cannot be done in a short period of time; it requires patience and consistency in implementation. By regularly evaluating and adapting policies, the government and the business sector can jointly ensure that the green economy brings maximum benefits to the country's ecosystems, society and economy (Spash., 2002)

Overall, the implementation of green economy policies in the post-pandemic economic recovery strategy is an important step to ensure future sustainability. The great opportunities offered by this policy must be addressed with a well-thought-out strategy to overcome various challenges. With good coordination between the government, private sector, communities, and the international community, a green economy can be the foundation of a strong economic recovery while preserving the place where people live.

Conclusion

The post-pandemic economic recovery provides an opportunity to integrate green economy policies that can help rebuild the global economy in a more sustainable way. These policies include initiatives that focus on renewable energy, resource efficiency and reducing carbon emissions. By investing in green sectors, countries can create new jobs, improve quality of life and reduce dependence on environmentally unfriendly fossil fuels.

However, the integration of green economy policies is not free from challenges. Key barriers include high start-up costs, resistance from conventional industries, and lack of adequate infrastructure and technology in some countries. In addition, there is an urgent need for international coordination to ensure that recovery efforts are in line with global sustainable development goals. Green economy policies also need to be customised to the economic and social conditions of specific countries in order to be effectively implemented.

Overall, while there are significant challenges, the opportunities offered by green economy policy integration are far greater. With commitment and sustained support from various parties, green economy policies can be an effective way out for a more resilient and inclusive post-pandemic global economic recovery. This requires collaboration between governments, the private sector, and civil society to create a solid and strategic framework to deal with economic and environmental changes going forward.

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