

## GREEN ECONOMY AND GREEN OPENNESS OVERVIEW INDONESIA & MALAYSIA GREEN BUSINESS

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### Abstract

This study analyzes the influence of openness, capital, and labour credit on the Green GDP and their impact on Green GDP its implications for income disparity/gap. Knowing the comparison of the green GDP in Indonesia and in Malaysia. The study used secondary data annual 1990-2019 obtained through related agencies. The data analysis method uses OLS Multiple Linear Regression which begins with the Stationarity Test and Cointegration Test. Determination of the dominant factor and the amount of contribution using the beta value ( $\beta$ ). The dependent variable difference test (t test difference) is to determine the comparison of the green GDP in Indonesia and Malaysia. The result of research For the Green Economy Valuation calculated from Conventional GDP minus the Depletion Natural Source value, we get Semi Green GDP, while the Green GDP value is obtained from Semi Green GDP minus the Degradation value. The degradation value is obtained from the total costs incurred to overcome air pollution by planting trembles trees. For Indonesia and Malaysia there is a positive partial influence between Green Openness on Green GDP. For the t-test difference on the Green GDP and Green Openness variable, it states that there is a significant difference in Green GDP and Green Openness Variables between Indonesia and Malaysia.

**Keyword:** Green Economy, Green Openness, Valuation.

### A. INTRODUCTION

The concept of sustainable development is currently attracting the attention of various stakeholders. Population density is a key factor in determining the need for adequate access to natural resources. This is a big problem that needs to be found efficiently and quickly. Sustainable development refers to the economic and environmental integration of human efforts to improve the quality of life. Economic development based on natural resources without concern for environmental sustainability will harm the environment itself. In general, natural resources and the environment have limited transport capacity. On the other hand, economic development that does not take into account the potential of natural resources and the environment will create problems for future development (Burhanudin, 2016).

The green economy has become an important policy framework for sustainable development in developed and developing countries. A green economy is attractive for efficient resource creation, a low-carbon, environmentally friendly and inclusive society (Georgeson et al., 2017). The transition to a green economy must be based on long-term economic development, biodiversity, climate change and green economic policies. Based on all these premises, they must be connected with each other, so the end result is sustainable development, which is seen

as an important pillar of global economic growth. Achieving a green economy requires the development of a sound action plan aimed at promoting long-term sustainable development, taking into account a number of key factors (Postolache & Troaca, 2018).

Green economic strategies often revolve around markets and technological solutions to global crises, especially in developed countries. However, in resource-rich developing countries, environmental change often means upgrading various forms of resource management and management (Buseth, 2021). Green economic development strategies and the transition from the traditional economic development model to a green economy are essential. Because the traditional model of economic development has a negative impact on the local and global environment. It is important for decision makers to develop strategies that capitalize on strengths and opportunities and offer solutions to address weaknesses and threats. In addition, it is important that policy makers prioritize science and technology education in support of green economy development (Ali et al., 2021).

The actual model combines three main concepts: (2) "Green GNP" - means the current measure of national income, which is GNP minus capital use, but, as a rule, also the estimated decrease in environmental assets. At current values of efficiency, too. (3) "Technical progress" - means the so-called "remainder of Thoreau" forecast for the future. A simple general formula comes from. Some rough calculations suggest that there may be significant residual effects, suggesting that the best current estimates of long-term sustainability can be heavily influenced by projections of future technological advances (Weitzman, 1997). Gross domestic product/GDP (GNP/GDP) is a reliable indicator of a country's economic performance, but environmental damage caused by the depreciation of non-market economic assets and especially growth is still minimal. The environmental sustainability of economic growth is one of the most important pillars of growth and sustainable development. To address many of the challenges associated with so-called green growth and sustainable development, we are developing new/replacement green GDP indicators. Environment and ecological degradation (Stjepanovic et al., 2017). The understanding of the green economy among companies will help to increase the level of environmental sustainability and thus improve the state of the green economy in Malaysia (Kasayanond et al., 2019).

In the traditional economic system, economic growth is the most important economic indicator. Economic growth rates are calculated based on the increase in the value of gross domestic product (GDP). Gross domestic product is now known as traditional GDP or brown GDP. Brown / Traditional GDP is a sustainable economy. It is believed that it is impossible to describe the conditions of development. The growth taking place in the economic system is facing unfavorable conditions for the ecosystem. The amount of matter and energy stored by an ecosystem does not increase. Therefore, in some cases, we reach the peak of economic growth. When the optimal point is reached, the amount of losses due to the disposal and degradation of environmental materials and services will exceed economic growth (Rahmat, 2016).

Green growth strategies are needed to overcome the shortcomings of traditional economic growth. Green growth strategies focus on mutually beneficial aspects of economic and

environmental policy. Green growth considers the overall value of natural capital as a factor of production and its important role in growth. Green growth also focuses on finding cost-effective ways to reduce the burden on the environment so that the transition to the new growth model that can be created does not exceed the carrying capacity of the environment. Innovation plays an important role in green growth. Because the loss of natural resources at some point will seriously affect growth. Innovation can play a role in supporting growth by creating alternatives to lost natural resources. The Green Growth Strategy recognizes that any measure of economic progress must take into account the contribution of natural resources to the well-being, health and prosperity of people. Measures of economic progress are also related to the quality and composition of growth and its impact on human well-being (Dan, D.B.S.D.A, 2013).

The policy was developed to support this program in achieving the principles of sustainable development, especially in the implementation of the "green" economy in Indonesia and Malaysia. The government of the Republic of Indonesia has made real efforts, as stated in RPJPN 2005-2025, as one of the long-term development objectives. The Long Term National Development Plan (RPJPN) 2005-2025 sets out the vision for Indonesia's development, independence, progress, justice and prosperity. The conditions described in this vision are characterized by the degree of independence, progress, justice and prosperity achieved. Development to achieve independence must be an attempt to build independence. One of the eight development missions to achieve the conditions set out in the vision, especially in relation to sustainable development, and the sixth vision is Asri and Lestari in Indonesia. ( i ) Improve management of development practices that maintain a balance between usability and sustainability. (ii) Availability and use of natural resources and the environment while maintaining function, opportunity and comfort in present and future life through the use of space in harmony with housing, economic, social and environmental activities. Efforts to improve the economic use of resources. (3) Improving the management of natural resources and the environment to maintain the quality of life, ensure the beauty and comfort of life, and conserve and maintain biodiversity as an important development capital. Advertising to use.

In 2009 the Ministry of Energy, Green Technology and Water (KeTTHa), the government introduced the concept of a green economy linked to technological development. The government introduced the Malaysian Quality of Life Index (MQLI) in 1999 to provide a comprehensive measure of sustainable living (EPU, 1999). This highlights the importance of balanced development. Balanced development supports sustainable economic growth and ensures the quality of life of communities (EPU, 2011 and 2013). The proactive actions of the Malaysian government and the concept of a green economy in MQLI (2011) seem to complement each other in addressing the needs of society as a whole.

As stated in the 2013 OECD Investment Policy Review, the Malaysian government places great emphasis on the implementation of sustainable development, focusing not only on the country's economic development, but also on protecting the environment. I understand the need. Public recognition of significant changes in environmental policy and the impact of the environment on their quality of life is critical. As a result, a wide range of policies and laws have been

developed, including Malaysia's national climate change policy, clean technology policy and renewable energy policy (KeTTha , 2015). All of these positive actions are being taken to confirm the right move by the government to support green growth for the benefit of the people. According to Hezri and Ghazali (2011), Malaysia's national green economic structure reflects existing economic structures such as the United Nations Economic Program (UNEP) and the Organization for Economic Co-operation and Development (OECD). The main goal is to strengthen the Malaysian economy through tax incentives, pricing, regulatory framework and prioritization of all investments (Lestari, 1999; Abdulhamid, 2019).

Traditional methods of estimating GDP can explain progress in economic development, especially the impact of pollution, so the importance of estimating green GDP lies in taking into account environmental aspects that traditional GDP does not achieve. Loss of influence of economic development, neglect of environmental factors. As a benchmark for calculating green GDP, Wibowo EW et.al (2021) covers the province of Jakarta, the capital of Indonesia. In 2019, DKI Jakarta received a GDP of Rs . 1,842,996,120 (millions) - while the 2019 green GDP estimate result is Rs . 1,824,804,136 (million) Based on these results, the Jakarta provincial government actually suffered a loss of Rs . due to inefficient environmental impact on the economy . 18,191,984 (million). Similar results were obtained by Stjepanović, S et.al (2017), where GDP growth and green GDP growth in 2014 were the same for almost all countries in the same group of countries. It has been shown that there are significant differences between countries and between countries in different categories. Country. We can see that the difference between the average GDP growth rate and the green GDP growth rate is between 1% and 3%. The losses were even greater in 2014 as environmental quality was sacrificed to take advantage of higher growth rates and higher standard economic characteristics. Green economic growth is very important for sustainable development, many of which can be achieved if natural and environmental factors are not taken into account in the development process. This study examines the assessment of green GDP and openness. GDP has traditionally stated that trade openness affects economic growth (Purnomo, RN, 2018). To apply the green economy to international trade in the case of openness effects, the sign of openness is positive but the square of green openness is negative (Wang, 2011). Finally, the concept of a green economy is expected to combine the short term with the long term, maximize long term economic integration, and maximize benefits to offset short term costs (eg job creation, poverty reduction). Efficiency) and mitigation (Hallegatte, 2012). This study compares the traditional and green GDP (GDP) of two countries, Indonesia and Malaysia, and provides policy implications for governments and entrepreneurs on the best potential for a future green business / economy.

## **B. LITERATURE REVIEW**

### **Green GDP**

The concept of a green economy, initiated by the United Nations Environment Programme, seems intended to dispel an emerging myth: the trade-off between the economy and the environment. Kato (2009) in Siswanto et al. (2013) in Suhada and Setyawan (2016) argue that

a green economy is necessary because the current economic system is facing injustice and inequality (inequity measures). Today, the green economy has become an important current of economic ideas, but so far, the development of the green economy in many countries has remained at the standard level or has not occupied a significant share of the national economic system. An economic development model that includes environmental variables is known as the "green economy". Green GDP calculation, also known as green GDP, is a serious attempt to manage our environmental impact.

### **Openness**

Suliswanto (2016) an economic model that combines imports and exports is called an open economy. Two new flow analysis models in the income stream cycle: the export income stream, which is injected into the income stream, and the import purchase spending stream, which is a leak. For an income stream. These two currents affect the balance of the country's economy. Exports increase national income in a balanced way and contribute to economic growth. On the other hand, imports reduce national income in the national economic balance sheet (Sukirno, 2006).

### **Impact of economic openness on GDP /economic growth and on GDP/green economy**

Several previous studies have analyzed the impact of economic openness on traditional economic growth, including: a) Maharani, K., & Isnovaty, S. (2014) The results of changes in economic openness were statistically significant and had a negative impact on economic growth in Central Java from 1985 to 2010; b) Angraini, SD (2019). The open trade variable did not affect Indonesia's economic growth from 2013 to 2017; and c) Purnomo, R.N. (2018) Trade opening is the first independent variable that had a significant impact on ASEAN economic growth from 2013 to 2017. From the results of previous studies, it can be concluded that there is an effect on economic openness and no effect on conventional economic growth. From the results of previous studies, this will be the basis of this research by replacing the conventional economic growth variable (brown) with the green economic growth variable, so that from these results it will be known whether economic openness has an effect on green economic growth. In terms of green gdp in the case of the openness effect, a positive sign for openness, but a negative sign for the square of green openness, this represents two opposite directional effects showing a non-linear correlation between green openness and green GDP, the first green GDP rising with an increase in openness trade to a turning point, then diminishes with green openness (Wang, 2011)

### **C. METHOD**

Methods for identifying study areas and respondents were applied objectively. This is the green GDP of Indonesia and Malaysia. The survey was conducted from January to July 2022.

### **Population, modeling and research model**

The population in this study represents all of the variables studied in Indonesia. The samples in this study were taken using the intended sampling methodology, i.e. according to the

required quantity. The sample size is determined by annual data from 1990 to 2019, or just 30 samples from Indonesia and Malaysia.

### **Data methods and data collection**

The data collected in this study are secondary time series data. Secondary data was obtained from institutions involved in the study such as BPS and the World Bank.

### **Defining variables and managing variables**

In this study, independent variables of openness (X1) and green GDP (Y) were considered as coordination variables. To understand the interpretation, below are some working definitions and limitations: a) Green GDP of Indonesia and Malaysia, 1990–2019; and b) Opening the Green Economy is a comparison of exports and imports between Indonesian and Malaysian green GDP from 1990 to 2019.

### **Data analysis methods**

#### **Formulation Model:**

It is used to determine the impact of openness on green GDP, Model 1a for Indonesia and Model 1b for Malaysia data  $Y = b_0 + b_1 X_1 + e$

Note:

Y = green GDP

x<sub>1</sub> = open

### **Data analysis methods**

Valuation green GDP, the following data analysis methods were used:

#### **(1) Semi green of GDP**

According to Suparmoko (2006) in (Mulya, 2016), the semi-green GDP is the gross domestic product, which includes elements of natural resources and environmental degradation. Mathematically they can be defined as:

Semi green GDP is the value of traditional GDP (or brown GDP) minus the amount of depleted natural resources. The cost of extraction is the amount extracted from each natural resource multiplied by the rent or unit price.

$$D = Q \times U$$

Where:

D = depletion value

Q = amount of natural resources seized

U = unit rental

How to calculate unit rent is by subtracting the cost of taking per unit from the price of natural resources including the value of profit per unit (remuneration for investment expenses) that is acceptable to investors. The proper profit value is the same as the interest rate on loans in banks as an alternative cost of capital invested to exploit natural resources in the area concerned. Here's how to calculate unit rent.

## (2) Green GDP

To get the green GDP value, subtract the environmental damage or degradation value from the semi-green GDP value to get the green GDP value. The calculation of environmental damage is more complex, since different estimates must be used depending on the type of natural resources and the degree of environmental degradation. The procedure for calculating the environmental damage assessment is as follows (Ratnaningsih, 2012) in (Mulya, 2016): a) Degraded environment identification; b) Physical assessment of environmental degradation; and c) economic assessment of environmental damage.

## Stationary Tes

The data analysis method in this study uses OLS multiple linear regression to determine the effect of the dependent variable on the independent variable in each model for both Indonesian and Malaysian green GDP data with the analysis stages using Stationarity Test.

## Hypothesis testing (t-Test)

The t-test is used to determine the impact of the openness on green GDP.

## T-test other tests

An independent t-sample test for different tests is a test of two groups with the same variables.

## D. RESULT AND DISCUSSION

### Green Economy Assessment in Indonesia and Malaysia

Based on a number of previous studies, the assessment of the structure of the green economy implemented in this study, which analyzes two countries, Indonesia and Malaysia, is as follows:

**Table 1: Assessing the structure of the green economy**

<b>GDP CONVENTIONAL</b>	<b>XXX</b>
<b>DEPLETION</b>	
Depletion of Natural Source	<u>(XXX)</u>
<b>Semi Green GDP</b>	<b>XXX</b>
<b>Degradation</b>	
Pollution Cost (Trembesi Tree)	<u>(XXX)</u>
<b>Green GDP</b>	<b>XXX</b>

A green economy valuation that subtracts the value of declining natural resources from traditional GDP yields half of green GDP, but the value of green GDP is half of green GDP minus the cost of degradation. The cost of the damage is the sum of the total cost of overcoming the pollution by planting trembeshi trees.

### Stationary Test

To test whether the time series data is stationary and does not contain spurious regression, the unit root testing stage is carried out using the Augmented Dicky Fuller (ADF) method (Gujarati, 2012).

**Table 2: Stationary Test**

Static testing	Indonesia	Malaysia
Turns green	0.0000	0.0000
Green GDP	0.0002	0.0002

The stability test yields a p value of less than 0.05, and we conclude that the data for the green GDP variable and the green open variable are constant.

### Differences t-tests

The questionnaire is designed to test the difference between Indonesia's green GDP and Malaysia's green GDP (Pramana, 2012; idtesis.com, 2019, Resmi et al., 2020).

**Table 3: Differences t. test**

Differential testing t	Indonesia and Malaysia
Green GDP	<b>0000</b>
Turns green	<b>0.018</b>

Based on the results of various t-tests of green GDP and green discovery, which are less than 0.05, it can be concluded that there is a significant difference between the green GDP and green discovery variables in the countries of Indonesia and Malaysia.

### Hypothesis Test

T-test (partial test), Checks if independent variables affect dependent variables.

- Accepts  $H_0$  if  $t$  is a number  $< \text{table } t (= 0.05)\alpha$
- Accept  $H_a$  if  $t$  is a number  $> \text{Table } t (= 0.05)\alpha$



**Table 4: Test**

<b>t. Test</b>	<b>Indonesia</b>	<b>Malaysia</b>
Probably	0.002	0.023
t. Statistics	3.4	2.405
Mathematical coefficients or powers	0.000195	0.000199
Ha	0.10438	0.10924

If the green openness to green GDP of Indonesia and Malaysia p is less than 0.05 and the statistics are positive, it can be concluded that the green open variable has a positive effect on green GDP.

### Discussion

Green Openness on Green GDP, probability value less than 0.05, with a t statistic of positive, it can be concluded that the green openness variable has a positive effect on Green GDP, with the regression formula :

- Indonesia  $Y = 0.10438 + 0.000195 X_1$  Green openness
- Malaysia  $Y = 0.10924 + 0.000199 X_1$  Green openness

This can be interpreted when green openness increases 1 time, Indonesia Country, there will also be an increase in Green GDP as much as 0.104 times. Malaysia Country, there will also be an increase in Green GDP as much as 0.109 times.

The results of this study are consistent with previous studies by Purnomo, R N (2018). Open trade as the first independent variable will have a significant impact on ASEAN economic growth in 2013-2017. The results of this study show that green openness has a positive impact on green GDP, which can be improved by increasing net trade.

Indonesia's export activity continues to grow year by year (Hardi et al., 2021) According to the latest report, Indonesia will become the world's largest exporter by 2021 with a value of US\$231.54 million. One of the most populous countries in the world. It is rich in natural resources. Malaysia is valued at US\$195.7 million due to its dependence on natural resources for its export activities. Indonesia's largest export is the processing and accumulation industry, while Malaysia's largest export is agricultural processing and palm oil.

While these export activities are good, they also have environmental impacts, such as increased carbon dioxide emissions. One example is China's rapid economic growth, which has led to increased energy consumption and carbon emissions despite significant improvements in energy efficiency (Owen, 1997). Land use disputes in Africa are generally thought to be caused primarily by a lack of natural resources and environmental degradation due to population growth, but how storytelling itself can be a major driver of conflict. For investment in agriculture and environmental protection in Africa. In The Green Economy (Bergius et al., 2020).

On a global scale, there are social, economic and environmental challenges associated with sustainable development. These challenges include climate change, the need to feed a rapidly growing population, rising poverty rates, and environmental degradation (Musvoto et al., 2015). Critics of growth maximization, the main goal of economic policy, argue that self-growth is not always good, especially for the environment (Anderson, 2014).

Green credit is one of the most important financial instruments to promote sustainable development (Lei et al., 2021). The concepts of the circular economy, green economy and bioeconomy are linked to the common goal of bringing together economic, environmental and social goals (D'Amato et al., 2017); (Tarkhanova et al., 2020); (Stankevičienė et al., 2020); (Bogovic & Grdic, 2020); (Stukalo & Sisihova, 2019); (Loiseau et al., 2016).

This concept allows the integration of traditional economic indicators into the "green" GNP (Nikulina et al., 2021). From this perspective, the implications of these impacts on various renewable energy pathways for ecosystem biodiversity and the transition to a green economy are clear as future policies (Gasparatos et al., 2017). Biodiversity development, climate change and long-term environmental policy. From all these sites, they must be interconnected, so the end result is sustainable development, which is an important pillar of global economic growth. To realize a green economy, a number of key points need to be considered and a robust action plan must be developed to promote long-term sustainable development (Postolache & Troaca, 2018). Decision-making environment, economic programs and financial recovery, governance, environmental monitoring and national planning (Vukovic et al., 2019); (Mikhno et al., 2021).

Hybrid policies, including hybrid renewable energy targets (supply policy) and carbon tariffs (demand policy), are viable options for reducing GDP losses, income inequality and carbon emissions. However, the transition to renewable energy comes with challenges for Indonesia (Mahaadevan & Nugroho, 2021). There is a growing need to integrate green options into the research and implementation of green supply chain management (Srivastava, 2007). Malaysia is focused on developing a clean and efficient economy.

In other words, a "green" economy. This means encouraging the development of green businesses and green products, thereby creating green jobs. Companies' awareness of the green economy will increase the level of environmental sustainability and thus improve the state of the green economy in Malaysia (Kasayanond et al., 2019). The same is being done in many countries through their green economy programs requiring green jobs, such as the Blue Carbon project in Kenya, the Ecosystem Services project in the Philippines, and the Reducing Emissions from Deforestation and Forest Degradation (REDD+) project in Cambodia. We emphasize the need to understand the vulnerabilities and confusion that such a division of environmental work can create in new offerings of ecosystem products and services.

This structure encourages ongoing job review, which is an important part of the green economy debate (Neimark et al., 2020). Finally, a green economy is one of the sustainable development solutions (Lavrinenko, et.al. 2019); (Vertakova et.al, 2017); (Sulich, A. 2020) (Lorek, S., & Spangenberg, J. H., 2014); (Cook, S. ., & Smith, K. 2012). The green economy is the key to

building green business and sustainable development in Indonesia, Malaysia and countries around the world.

## **E. CONCLUSION**

A green economy valuation that subtracts the value of declining natural resources from traditional GDP yields half of green GDP, but the value of green GDP is half of green GDP minus the cost of degradation. The cost of the damage is the sum of the total cost of overcoming the pollution by planting trembeshi trees. The assessment of the green economy can be further improved by taking the degradation caused by the decline in rice acreage as a basic requirement.

There is a positive impact of green openness on green GDP in Indonesia and Malaysia. Test differences between GDP green variables and green open variables show that there is a significant difference between GDP green variables and green open variables between Indonesia and Malaysia. Research has shown that green openness has a positive impact on green GDP, but can be achieved to a greater extent through the development of green economic development programs (green campaigns), such as increasing agricultural activity in cities and reducing carbon, air and water pollution. The green economy is very important for the development of green business and sustainable development in Indonesia, Malaysia and countries around the world.

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## **REFERENCES**

- Abdul Hamid, N., Muda, R., & Alam, M. (2019). Contribution of Islamic Social Capital on Green Economic Growth in Malaysia. Mahmudul and Omar, Normah, Contribution of Islamic Social Capital on Green Economic Growth in Malaysia (May 4, 2019). Hamid, NA, Muda, R., Alam, MM, Omar, N. & Nadzri, FAA, 239-256.
- Adipuryanti, N. L. P. Y., & Sudibia, I. K. (2015). Analisis Pengaruh Jumlah Penduduk yang Bekerja dan Investasi terhadap Ketimpangan Distribusi Pendapatan melalui Pertumbuhan Ekonomi Kabupaten/Kota di Provinsi Bali. Piramida Jurnal Kependudukan dan Pengembangan Sumber Daya Manusia, 11(1), 20-28.
- Ali, E. B., Anufriev, V. P., & Amfo, B. (2021). Green Economy Implementation in Ghana as a Road Map for a Sustainable Development Drive: A Review. Scientific African, 12, e00756.
- Alvarez, C. H., McGee, J. A., & York, R. (2019). Is Labor Green?: A Cross-National Panel Analysis of Unionization and Carbon Dioxide Emissions. Nature and Culture, 14(1), 17-38.
- Anderson, V. (2014). Alternative Economic Indicators (Routledge Revivals). Routledge.
- Barimbing, Y. R., & Karmini, N. L. (2015). Pengaruh PAD, Tenaga Kerja, dan Investasi terhadap Pertumbuhan Ekonomi di Provinsi Bali. E-Jurnal Ekonomi Pembangunan Universitas Udayana, 4(5), 434-450.
- Bergius, M., Benjaminsen, T. A., Maganga, F., & Buhaug, H. (2020). Green Economy, Degradation Narratives, and Land-Use Conflicts in Tanzania. World Development, 129, 104850.

- Burhanuddin, S. H. (2016). Integrasi Ekonomi dan Lingkungan Hidup dalam Pembangunan yang Berkelanjutan. *EduTech: Jurnal Ilmu Pendidikan dan Ilmu Sosial*, 2(1).
- Buseth, J. T. (2021, January). Narrating Green Economies in the Global South. In *Forum for Development Studies* (Vol. 48, No. 1, pp. 87-109). Routledge.
- Cook, S., & Smith, K. (2012). Introduction: Green Economy and Sustainable Development: Bringing Back the 'Social'. *Development*, 55(1), 5-9.
- D'Amato, D., Droste, N., Allen, B., Kettunen, M., L\"{a}htinen, K., Korhonen, J., & Toppinen, A. (2017). Green, Circular, Bio Economy: A Comparative Analysis of Sustainability Avenues. *Journal of Cleaner Production*, 168, 716-734.
- Denona Bogovic, N., & Grdic, Z. S. (2020). Transitioning to a Green Economy—Possible Effects on the Croatian Economy. *Sustainability*, 12(22), 9342.
- Dickel, S., & Petschow, U. (2013). Green Economy. *Ökologisches Wirtschaften-Fachzeitschrift*, 28(3), 14-16.
- Georgeson, L., Maslin, M., & Poessinouw, M. (2017). The Global Green Economy: A Review of Concepts, Definitions, Measurement Methodologies and Their Interactions. *Geo: Geography and Environment*, 4(1), e00036.
- Hallegatte, S., Heal, G., Fay, M., & Treguer, D. (2012). From Growth to Green Growth-A Framework (No. w17841). National Bureau of Economic Research.
- Hardi, I., Dawood, T. C., & Syathi, P. B. (2021). Determinants Comparative Advantage of Non-Oil Export 34 Provinces in Indonesia. *International Journal of Business, Economics, and Social Development*, 2(3), 98-106.
- Hidayat, M. H., & NUGROHO, S. (2014). Analisis Pengaruh Pertumbuhan Ekonomi, Investasi, dan IPM terhadap Ketimpangan Pendapatan Antar Daerah di Provinsi Jawa Tengah Tahun 2005-2012 (Doctoral Dissertation, Fakultas Ekonomika dan Bisnis).
- Kasayanond, A. (2019). Environmental Sustainability and Its Growth in Malaysia by Elaborating the Green Economy and Environmental Efficiency. 670216917.
- Lavrinenko, O., Ignatjeva, S., Ohotina, A., Rybalkin, O., & Lazdans, D. (2019). The Role of Green Economy in Sustainable Development (Case Study: The EU States). *Entrepreneurship and Sustainability Issues*, 6, 1113-1126.
- Lei, X., Wang, Y., Zhao, D., & Chen, Q. (2021). The Local-Neighborhood Effect of Green Credit on Green Economy: A Spatial Econometric Investigation. *Environmental Science and Pollution Research*, 28(46), 65776-65790.
- Lorek, S., & Spangenberg, J. H. (2014). Sustainable Consumption within a Sustainable Economy—Beyond Green Growth and Green Economies. *Journal of Cleaner Production*, 63, 33-44.
- Lu, W. M., & Lo, S. F. (2007). A Closer Look at the Economic-Environmental Disparities for Regional Development in China. *European Journal of Operational Research*, 183(2), 882-894.
- Mahadevan, R., & Nugroho, A. (2021). Balancing Equity, Environmental and Growth Objectives: A Case Study of Electricity Subsidy Reform in a Large Polluting Developing Country. *Australasian Journal of Environmental Management*, 28(4), 316-338.
- Maharani, K., & Isnowati, S. (2014). Kajian Investasi, Pengeluaran Pemerintah, Tenaga Kerja dan Keterbukaan Ekonomi terhadap Pertumbuhan Ekonomi di Propinsi Jawa Tengah. *Jurnal Bisnis dan Ekonomi*, 21(1).
- Marlina, I. (2015). Pengaruh Akumulasi Kapital dan Perkembangan Infrastruktur Jalan terhadap Pertumbuhan Ekonomi dan Jumlah Penduduk Miskin di Kabupaten Kutai Timur. *Jurnal Eksekutif*, 12(2).
- Masruri, M. (2016). Analisis Pengaruh Pertumbuhan Ekonomi, IPM, TPAK dan Pengangguran Terbuka terhadap Ketimpangan Pendapatan Antar Daerah di Provinsi Jawa Tengah Tahun 2011-2014. *Jurnal Ilmiah Mahasiswa*

FEB, 5(1).

Mikhno, I., Koval, V., Shvets, G., & Garmatiuk, O. Ta mo šiūnienė, R.(2021). Discussion: Green Economy in Sustainable Development and Improvement of Resource Efficiency. *Central European Business Review*, 10(1), 15.

Mulya, Y., Adi, I. S. S., & Supani, S. S. (2014). Valuasi Ekonomi Lingkungan Perkotaan Indo-nesia dalam Pengukuran PDRB Hijau: Studi Kasus pada Kota Bogor. *Artikel Researchgate*, September.

Musvoto, C., Nortje, K., De Wet, B., Mahumani, B. K., & Nahman, A. (2015). Imperatives for an Agricultural Green Economy in South Africa. *South African Journal of Science*, 111(1-2), 01-08.

Neimark, B., Mahanty, S., Dressler, W., & Hicks, C. (2020). Not Just Participation: The Rise of the Eco-Precariat in the Green Economy. *Antipode*, 52(2). <https://doi.org/10.1111/anti.12593>

Nikulina, S. N., Cherikanova, E. A., Chelenko, A. V., & Grishakova, V. V. (2021). Analysis of the Prospects for the Introduction of a Closed-Loop Economy in the Russian Federation Using the Example of the Kaluga region. *Science Intensive Technologies*.

Owen, A. D. (1997). *Integrated Economy-Energy-Environment Policy Analysis: A Case Study for the People's Republic of China: Zhong Xiang Zhang Landbouwniversiteit, Wageningen, The Netherlands, 1996, US \$35.00. Energy Policy*, 25(2), 268-269.

Pangkiro, H. A. (2016). Analisis Pertumbuhan Ekonomi dan Kemiskinan terhadap Tingkat Ketimpangan di Provinsi Sulawesi Utara. *Jurnal Berkala Ilmiah Efisiensi*, 16(1).

Purnomo, R. N. (2020). Analisis Pengaruh Keterbukaan Ekonomi terhadap Pertumbuhan Ekonomi (Studi Kasus: Asean Tahun 2007–2017). *Jurnal Dinamika Ekonomi Pembangunan*, 2(2), 20-35.

Situmorang, A. T., & Sugiyanto, F. X. (2011). Pengaruh Efisiensi Perekonomian terhadap Pertumbuhan Ekonomi 32 Provinsi di Indonesia (Doctoral dissertation, Universitas Diponegoro).

Srivastava, S. K. (2007). Green Supply-Chain Management: A State-Of-The-Art Literature Review. *International Journal of Management Reviews*, 9(1), 53-80.

Stankevičienė, J., Nikanorova, M., & Čera, G. (2020). Analysis of Green Economy Dimension in the Context of Circular Economy: The Case of Baltic Sea Region. *E & M Ekonomie a Management*.

Stjepanović, S., Tomić, D., & Škare, M. (2017). A New Approach to Measuring Green GDP: A Cross-Country Analysis. *Entrepreneurship and Sustainability Issues*, 4, 574-590.

Stukalo, N., & Simakhova, A. (2019). Social Dimensions of Green Economy. *Filosofija. Sociologija*, 30(2).

Sulich, A. (2020). The Green Economy Development Factors. *Vision*, 6861-6869.

Talberth, J., & Bohara, A. K. (2006). Economic Openness and Green GDP. *Ecological Economics*, 58(4), 743-758.

Tarkhanova, E. A., Chizhevskaya, E. L., Fricler, A. V., Baburina, N. A., & Firtseva, S. V. (2020). Green Economy in Russia: The Investments' Review, Indicators of Growth and Development Prospects. *Entrepreneurship and Sustainability Issues*, 8(2), 649.

Tiwari, R., & Babu, N. R. (2016). Recent Developments of Control Strategies for Wind Energy Conversion System. *Renewable and Sustainable Energy Reviews*, 66, 268-285.

Vertakova, Y., & Plotnikov, V. (2017). Problems of Sustainable Development Worldwide and Public Policies for Green Economy. *Economic Annals-XXI*, (166), 4-11.

Vukovic, N., Pobedinsky, V., Mityagin, S., Drozhzhin, A., & Mingaleva, Z. (2019). A Study on Green Economy Indicators and Modeling: Russian Context. *Sustainability*, 11(17), 4629.

- Wang, X. (2011). Green GDP and Openness: Evidence from Chinese Provincial Comparable Green GDP.
- Weitzman, M. L. (2017). Sustainability and Technical Progress. In *The Economics of Sustainability* (pp. 329-341). Routledge.
- Wibowo, E. W., Susilastuti, D., & Meirinaldi, M. (2021). Valuasi Ekonomi Lingkungan Kota Jakarta Berbasis Pdrb Hijau Tahun 2019. *COMSERVA Indonesian Jurnal of Community Services and Development*, 1(8), 460-465.
- Yusof, N. A., Abidin, N. Z., Zailani, S. H. M., Govindan, K., & Iranmanesh, M. (2016). Linking the Environmental Practice of Construction Firms and the Environmental Behaviour of Practitioners in Construction Projects. *Journal of Cleaner Production*, 121, 64-71.