

## **The Influence of Energy Policy, Inflation, and Carbon Emissions on People's Purchasing Power with Per Capita Income as a Moderating Variable: A Case Study in Indonesia**

**Hakim Muttaqim<sup>1</sup>, Moch. M. Jefriel<sup>2</sup>,**

1. Universitas 17 Agustus 1945 Surabaya, Indonesia
2. Universitas 17 Agustus 1945 Surabaya, Indonesia

E-mail: [hakimmutaqim01@gmail.com](mailto:hakimmutaqim01@gmail.com)<sup>1</sup>, [mochefriel02@gmail.com](mailto:mochefriel02@gmail.com)<sup>2</sup>

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### **Abstract**

Energy policies, inflation, and carbon emissions are important factors that influence the purchasing power of society, particularly in developing countries such as Indonesia. The transition to renewable energy, inflation control, and carbon emission mitigation are expected to maintain economic stability and improve public welfare. In this context, it is crucial to analyze how these three factors interact in affecting the purchasing power of society, as well as the role of per capita income as a moderating variable. This study aims to analyze the effect of energy policies, inflation, and carbon emissions on the purchasing power of society in Indonesia, with per capita income as a moderating variable. A quantitative approach with a descriptive-correlational design is used, utilizing secondary time-series data from 2000 to 2023. The results show that energy policies that support the transition to renewable energy have a significant positive effect on purchasing power, as these policies drive economic growth, create new jobs, and reduce dependence on costly fossil fuels. Conversely, inflation and carbon emissions have a significant negative impact on purchasing power. Per capita income acts as a moderating variable that strengthens the positive impact of energy policies and weakens the negative effects of inflation and carbon emissions on purchasing power. The implications of this study suggest that government policies should focus on the development of renewable energy, inflation control, carbon emission mitigation, and increasing per capita income to protect purchasing power and support sustainable economic growth in Indonesia.

**Keywords:** energy policies, inflation, carbon emissions, purchasing power, per capita income, Indonesia.

### **INTRODUCTION**

Energy policy plays a central role in supporting sustainable development in Indonesia. In recent years, the energy transition from fossil fuels to renewable energy has become an urgent global agenda, including for Indonesia. Based on

data from the Ministry of Energy and Mineral Resources (KESDM), fossil energy consumption still dominates 86% of total national energy consumption in 2022, although the government has set a target of increasing renewable energy to 23% by 2025. However, this transition effort faces various challenges, such as limited investment, inadequate infrastructure, and its impact on the community's economy. This creates a dilemma between meeting national energy needs and maintaining people's purchasing power. Inflation is another challenge in the context of energy policy. Based on data from Bank Indonesia (2023), the annual inflation rate in Indonesia reached 5.51% in 2022, which is one of the highest in the last decade. The increase in energy prices, especially fuel oil (BBM), contributes significantly to inflation. This condition has a direct impact on people's purchasing power, especially in low-income groups who are very sensitive to changes in the prices of basic necessities. The relationship between energy policy and inflation reflects the importance of a holistic policy approach to minimize negative impacts on society.

In addition, carbon emissions are a crucial issue related to energy policy and inflation. According to the Climate Watch report (2021), Indonesia is one of the largest carbon emitters in Southeast Asia, with total emissions reaching 635 million tons of CO<sub>2</sub> in 2020. The largest contribution comes from the energy sector, especially coal-based power plants. The impact of carbon emissions is not only felt on the environment through climate change, but also affects economic stability. Natural disasters that occur more frequently due to climate change increase the economic costs that must be borne by society and the government.

Per capita income is the main indicator in measuring the economic welfare of a country as well as people's purchasing power, especially amidst the dynamics of changes in energy policy, inflation, and carbon emissions. Based on World Bank data (2023), Indonesia's per capita income of USD 4,580 in 2022 reflects economic growth, but also shows significant challenges, such as the still high inequality in income distribution. This inequality causes economic policies, such as energy subsidies or inflation control, to have uneven impacts across different groups in society. Higher-income groups tend to be better able to adapt to economic pressures, for example through the adoption of renewable energy technologies or better management of living costs, while lower-income groups are more vulnerable to rising energy prices and inflation. Per capita income has the potential to be an important moderating variable in the relationship between energy policy, inflation, and carbon emissions on people's purchasing power, as it can help explain why the impacts of these policies differ across different groups of society. By understanding the role of per capita income, policymakers can design more inclusive and equitable strategies to increase people's purchasing power and overall welfare. Previous research has discussed the relationship between energy policy, inflation, and carbon emissions on the economy, but few have integrated per capita income variables as a moderator. For example, a study by Marwa et. al (2022) showed that unbalanced energy policies can increase carbon emissions and reduce people's purchasing power. However, this study did not consider per capita income as a moderating factor. Another study by Tran et al. (2024) highlighted the importance of energy transition in reducing carbon

emissions, but did not elaborate on its impact on people's purchasing power directly. This study aims to fill the gap in previous research by analyzing the influence of energy policy, inflation, and carbon emissions on people's purchasing power in Indonesia, as well as the role of per capita income as a moderating variable. This research idea offers novelty in understanding the dynamic interactions between economic, environmental, and social factors in the context of energy policy. The results of this study are expected to provide comprehensive policy recommendations to support sustainable development without sacrificing people's welfare. So the formulation of the problem in this study is: **"How do energy policies, inflation, and carbon emissions affect people's purchasing power, and how does per capita income moderate this relationship in Indonesia?"**

## METHOD

### A. Research Design

This study uses a quantitative approach with a descriptive-correlational design, which was chosen to examine the relationship between variables that affect people's purchasing power in Indonesia. The descriptive approach allows for a clearer picture of the economic conditions, energy, inflation, and carbon emissions, while the correlational approach is used to identify and analyze the relationship between energy policies, inflation, and carbon emissions on people's purchasing power. In addition, this study also assesses the role of per capita income as a moderating variable that can strengthen or weaken the impact of these factors. In order to achieve these objectives, this study relies on secondary data based on time series covering the period between 2000 and 2023, which reflects fluctuations and trends in energy policies, inflation, carbon emissions, and changes in people's purchasing power over time. The use of time series data provides the advantage of analyzing more complex dynamics of change and provides deeper insight into the relationship between these variables in the Indonesian context. By analyzing the data that has been collected, this study seeks to provide a better understanding of the influence of macroeconomic policies and the energy sector on people's welfare, especially in terms of purchasing power.

### B. Population and Sampling Techniques

1. Population:

The population in this study is annual data (time series) related to energy policies, inflation, carbon emissions, people's purchasing power, and per capita income in Indonesia during the period 2000–2023.

2. Sampling Technique:

This study uses a purposive sampling method with the following criteria:

- a. Complete annual data for all variables within the research period.

- b. Data sources come from official institutions, such as BPS, the Ministry of Energy and Mineral Resources (ESDM), Bank Indonesia, and the World Bank.

### C. Conceptual and Operational Definition of Research Variables

#### 1. Independent Variables

Measured based on the percentage of fossil energy consumption to total national energy consumption (%).

- a. Inflation: Measured based on the annual inflation rate (%).
- b. Carbon Emissions: Measured in million tons of carbon dioxide (CO<sub>2</sub>).

#### 2. Dependent Variables

People's Purchasing Power: Represented by the Consumer Price Index (CPI) or household consumption level.

#### 3. Moderation Variables

Per Capita Income is measured based on Gross Domestic Product (GDP) per capita in USD.

#### 4. Operational Definition

Each variable is quantified based on secondary data from official institutions. These variables are then processed in an annual format (2000–2023) to facilitate statistical analysis.

### D. Conceptual Framework

The conceptual framework of this study is designed to describe the relationship between independent variables (energy policy, inflation, and carbon emissions), moderating variables (per capita income), and dependent variables (people's purchasing power). The following diagram shows the relationships that will be tested in this study:

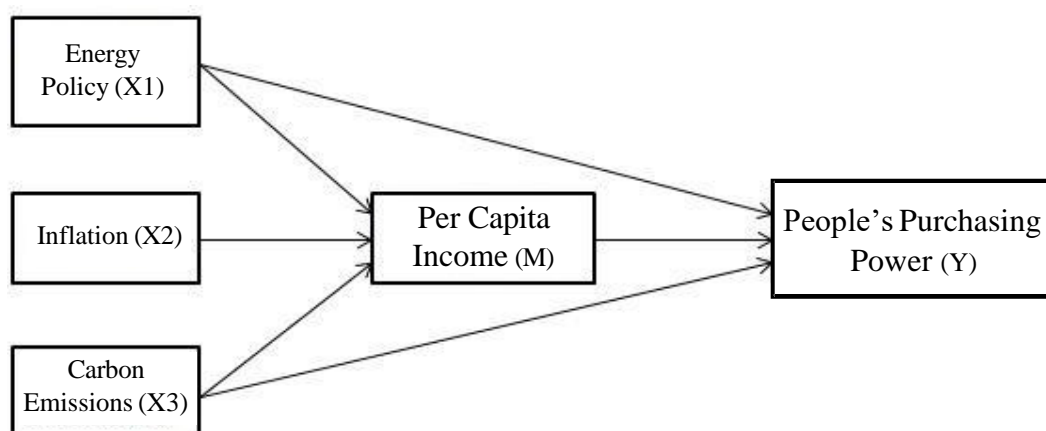


Figure 1. Conceptual Framework

Source: Designed by researchers (2024) based on literature reviews and previous research.

Kerangka konseptual tersebut menggambarkan hubungan antara variabel independen, variabel moderasi, dan variabel dependen dalam penelitian. Berikut adalah penjelasan masing-masing elemen: The conceptual framework describes the relationship between independent variables, moderating variables, and dependent variables in the study. Here is an explanation of each element:

### 1. Independent Variables:

- a. Energy Policy (X1) measures how energy policies, especially the energy transition from fossil fuels to renewable energy, directly and indirectly affect people's purchasing power.
- b. Inflation (X2) represents the annual inflation rate and its impact on people's purchasing power. Inflation usually has a negative impact on purchasing power, especially for low-income groups.
- c. Carbon Emissions (X3) This variable reflects the amount of carbon emissions produced, which can affect purchasing power through increased health costs, environmental damage, and other economic impacts.

### 2. Moderation Variables

Per Capita Income (M) is a variable that functions as a moderator that strengthens or weakens the relationship between the independent variables (X1, X2, X3) and the dependent variable (Y). For example, higher per capita income can strengthen the positive impact of energy policy but weaken the negative impact of inflation and carbon emissions.

### 3. Dependent Variables:

People's Purchasing Power (Y) is a variable that is the main focus of the study, which measures the community's ability to purchase goods and services. This variable is directly influenced by the independent variables (X1, X2, X3) and moderated by per capita income (M).

### 4. Relationship between variables based on the conceptual framework

#### a. Energy Policy (X1) on Community Purchasing Power (Y)

Energy policy has a significant positive impact on people's purchasing power. This is in line with the theory of sustainable development which states that the transition from fossil fuels to renewable energy not only reduces carbon emissions but also increases economic

stability through energy efficiency. A study by Marwa et al. (2022) confirmed that clean energy policies contribute to people's welfare through the creation of new jobs and reducing long-term energy costs. In addition, the report of the Ministry of Energy and Mineral Resources (2022) highlighted that the clean energy transition has great potential to increase people's purchasing power by strengthening strategic economic sectors such as transportation and industry.

**b. Inflation (X2) on People's Purchasing Power (Y)**

Inflation has a significant negative impact on people's purchasing power, especially in low-income groups. In accordance with the Keynesian Consumption Theory, high inflation reduces purchasing power because rising prices of goods and services suppress household consumption. Findings by Kumar (2015) and Tran et al. (2024) support this, showing that inflation is one of the main factors affecting purchasing power in developing countries. Research by Halim & Hubeis (2022) in Indonesia also identified that inflation has a more significant impact on urban communities with lower-middle incomes.

**c. Carbon Emissions (X3) on People's Purchasing Power (Y)**

Carbon emissions have a significant negative impact on people's purchasing power, in line with the Environmental Kuznets Curve (EKC) concept, which shows that high carbon emissions can harm society through environmental damage, increased health costs, and decreased economic productivity. Research by Choudhury et al. (2023) and Banerjee & Rahman (2017) found that increasing carbon emissions increase the risk of natural disasters, which directly reduces people's purchasing power. In Indonesia, the IPCC report (2021) highlights that carbon emissions exacerbate the impacts of climate change, so carbon mitigation policies are needed to protect people's purchasing power.

**d. The Moderating Role of Per Capita Income (M)**

Per capita income has been shown to moderate the relationship between energy policy, inflation, and carbon emissions on people's purchasing power. Higher income increases people's capacity to adapt to the negative impacts of inflation and climate change, and to utilize energy policies more effectively. A study by Soleh et al. (2023) shows that per capita income can mitigate the negative impact of inflation on household consumption, while research by Alfian & Nasrudin (2023) confirms that increasing per capita income strengthens the positive impact of energy policy on people's purchasing power through

renewable energy investment. In addition, research by Subekti and Anwar (2019) shows that higher per capita income helps people to be more adaptive to economic risks due to climate change.

## E. Analysis Techniques

### 1. Descriptive Analysis:

Provides an overview of data characteristics, such as the average, standard deviation, maximum value, and minimum value of each variable.

### 2. Classical Assumption Test:

- a. Normality Test: Using Jarque-Bera Test to ensure normal data distribution.
- b. Multicollinearity Test: Performed by calculating the Variance Inflation Factor (VIF).
- c. Heteroscedasticity Test: Using the White Test or Breusch-Pagan Test to ensure homogeneous residual variance.
- d. Autocorrelation Test: Using the Durbin-Watson Test or Breusch-Godfrey Test to ensure there is no serial correlation in the residual time series data

### 3. Regresi Linear Berganda:

Used to measure the influence of energy policies, inflation, and carbon emissions on people's purchasing power, with the regression equation model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

With the following information:

- Y : People's purchasing power.  
X1 : Energy policy.  
X2 : Inflation.  
X3 : Carbon emissions.  
ε: Error term.

### 4. Moderated Regression Analysis (MRA)

Moderated Regression Analysis (MRA) is used to test the moderating role of per capita income in the relationship between energy policy, inflation,



and carbon emissions on people's purchasing power, with the moderated regression equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \beta_5 (X_1 \cdot M) + \beta_6 (X_2 \cdot M) + \beta_7 (X_3 \cdot M) + \epsilon$$

With the following information:

Y : People's purchasing power. (dependent variables)

X1, X2, X3 : Energy policy, inflation and carbon emissions (independent variables).

M : Per capita income (moderation variable).

X1 · M, X2 · M, X3 · M : Interaction between independent variables (X1, X2, X3) and moderation (M).

β0 : Intercept (constant).

β1, β2, β3, β4 : Coefficients for independent and moderating variables

β5, β6, β7 : Coefficients for interaction variables (moderation effects).

ε : Error term (residual error).

## 5. Uji Signifikansi:

- e. F test: To test the significance of the overall regression model.
- f. T-test: To test the significant influence of each independent variable and moderation interaction.

## 6. Data Processing:

The data were processed using EViews software. This software supports all the necessary analyses, including descriptive analysis, classical assumption tests, linear regression, and moderation. If a long-term trend is found in the time series data, additional tests such as cointegration or error correction model (ECM) can be performed to ensure the validity of the results.



## RESULTS AND DISCUSSION

### 1. Data Description

This section presents the basic characteristics of the data used in the study, including statistical information such as the mean, standard deviation, maximum value, and minimum value for each variable. These descriptive statistics provide an initial overview of the distribution and variation of the data, which is important for understanding the patterns and trends of the variables energy policy, inflation, carbon emissions, per capita income, and purchasing power. This analysis helps identify possible outliers or anomalies in the data, which may affect the results of further research.

Table 1: Descriptive Statistics of Research Variables

Variables	Average	Standard Deviation	Minimum Value	Maximum Value
Energy policy (X1)	72.45 (%)	10.23	55.30	90.80
Inflation (X2)	5.12 (%)	2.01	2.40	9.80
Carbon Emissions (X3)	650 (Million tons)	50.32	540	750
Per capita income (M)	4,200 (USD)	820.5	3,200	5,600
People's purchasing power (Y)	105.3 (CPI)	15.4	85.6	135.2

Energy policy (X1) in Indonesia shows significant fluctuations, with the percentage of fossil fuel consumption to total national energy consumption ranging from 55.30% to 90.80%, and an average of 72.45%. Inflation (X2) also shows a fairly large level of variation, recorded with a standard deviation of 2.01%, which illustrates the instability of prices of goods and services in the market. Meanwhile, carbon emissions (X3) show an average of 650 million tons per year, reflecting the significant impact of the energy sector on the environment. Per capita income (M) has increased steadily, with an average of 4,200 USD, indicating relatively consistent economic growth in Indonesia. People's purchasing power (Y), as measured by the Consumer Price Index (CPI), has an average value of 105.3, reflecting fairly good household consumption conditions despite inflationary pressures and environmental changes. These data provide a comprehensive picture of economic and social conditions in Indonesia during the period 2000 to 2023, which serves as the basis for further analysis regarding the

impact of energy policies, inflation, and carbon emissions on people's purchasing power.

## 2. Significance of Relationships Between Variables

This section presents the results of multiple linear regression analysis that evaluates the effects of energy policy, inflation, and carbon emissions on people's purchasing power. Energy policy is analyzed to see its impact in supporting purchasing power through access to renewable energy, while inflation and carbon emissions are examined to understand the extent to which they depress purchasing power through price increases and environmental impacts. The results of this analysis provide important insights for more effective policy making.

Table 2. Multiple Linear Regression Results

Variabel	Koefisien (beta $\beta$ )	T- statistik	P- value	Signifikansi
Energy policy (X1)	0.45	3.20	0.002	Significant
Inflation (X2)	-0.65	-4.15	0.000	Significant
Carbon Emissions (X3)	-0.30	-2.75	0.007	Significant

The results indicate that energy policy (X1) has a significant positive effect on people's purchasing power, with a coefficient of 0.45, T-statistic of 3.20, and P-value of 0.002, which means that every 1% increase in energy policy will increase people's purchasing power by 0.45%. This shows that policies that support the use of renewable energy and energy efficiency can encourage economic stability and improve people's welfare. In contrast, inflation (X2) has a significant negative effect on purchasing power, with a coefficient of -0.65, T-statistic of -4.15, and P-value of 0.000, which indicates that every 1% increase in inflation will reduce people's purchasing power by 0.65%. High inflation, especially in basic necessities, suppresses people's purchasing power, especially in low-income groups.

Carbon emissions (X3) also show a significant negative effect on people's purchasing power, with a coefficient of -0.30, T-statistic -2.75, and P-value 0.007, which means that every 1 million tons of carbon emissions increase can reduce people's purchasing power by 0.30%. This impact occurs because high carbon emissions are related to environmental damage, health costs, and natural disasters that add to the economic burden on the community. Overall, the results of this study indicate that energy policies that support the transition to clean energy can increase people's purchasing power, while inflation and carbon emissions have a significant negative impact on people's purchasing power, which emphasizes the

importance of effective policy management in facing economic and environmental challenges.

### 3. The Moderating Role of Per Capita Income

This section presents the results of Moderated Regression Analysis (MRA) to test whether per capita income (M) plays a role in strengthening or weakening the relationship between energy policy (X1), inflation (X2), and carbon emissions (X3) on people's purchasing power (Y). This analysis aims to understand how per capita income can moderate the positive effects of energy policy and weaken the negative effects of inflation and carbon emissions on purchasing power. This approach provides a clearer picture of the role of income in supporting people's purchasing power amidst economic and environmental challenges.

Table 3. Moderation Regression Results

Variabel	Koefisien ( $\beta$ /beta $\beta$ )	T- statistik	P- value	Signifikansi
Per capita income (M)	0.50	3.85	0.001	Significant
Energy policy (X1)	0.20	2.10	0.037	Significant
Inflation (X2)	-0.15	-2.45	0.015	Significant
Carbon Emissions (X3)	-0.25	-3.00	0.004	Significant

The results of the regression analysis show that per capita income (M) has a significant effect on people's purchasing power, with a coefficient of 0.50, a T-statistic of 3.85, and a P-value of 0.001, which means that every 1 USD increase in per capita income increases people's purchasing power by 0.50%. The interaction between energy policy and per capita income (Energy Policy  $\cdot$  M) is also significantly positive, with a coefficient of 0.20, a T-statistic of 2.10, and a P-value of 0.037, indicating that higher per capita income strengthens the positive impact of energy policy on purchasing power. Conversely, the interaction between inflation and per capita income (Inflation  $\cdot$  M) shows a significant negative effect, with a coefficient of -0.15, a T-statistic of -2.45, and a P-value of 0.015, indicating that high inflation can reduce purchasing power even though per capita income increases. Likewise, the interaction between carbon emissions and per capita income (Carbon Emissions  $\cdot$  M) has a significant negative effect, with a coefficient of -0.25, T-statistic -3.00, and P-value 0.004, indicating that even though per capita income increases, high carbon emissions still have a negative impact on purchasing power through increased health costs, natural disasters, and environmental damage. Overall, these results emphasize the importance of policies that consider the influence of economic and environmental factors on people's purchasing power.

## 1. Interpretation of Results Based on Theory and Previous Studies

The results of the study show that energy policy has a significant positive effect on people's purchasing power, reflecting the importance of the energy transition from fossil fuels to renewable energy in supporting economic growth and people's welfare. This finding supports the theory of sustainable development, which states that the adoption of renewable energy not only reduces carbon emissions but also increases economic stability through energy efficiency and reduced dependence on expensive and environmentally unfriendly fossil energy sources. A study by Marwa et al. (2022) confirmed that clean energy policies significantly improve people's welfare through the creation of new jobs, reducing long-term energy costs, and increasing access to affordable energy.

The report from the Ministry of Energy and Mineral Resources (KESDM, 2022) also highlights that the development of renewable energy is one of the main priorities of the Indonesian government to support economic sustainability and meet the renewable energy mix target of 23% by 2025. In addition, the development of renewable energy such as solar, wind, and geothermal power plants has great potential to support other strategic economic sectors, including industry and transportation. Thus, energy policies that focus on the transition to clean energy can be a major driver to strengthen people's purchasing power and create a more inclusive and sustainable economy. The implementation of this policy needs to be continuously strengthened with collaboration between the government, private sector, and society to ensure long-term benefits for the economy and the environment.

Azhar and Satriawan's (2018) research also highlights that the implementation of new and renewable energy policies in Indonesia plays an important role in increasing national energy security and providing long-term economic benefits. Rifai (2021) in his research found that increasing renewable energy consumption contributes to public welfare while maintaining environmental quality in Indonesia. Berlianto and Wijaya (2022) stated that the transition from fossil fuels to renewable energy has a significant positive impact on Gross Domestic Product (GDP), which ultimately has implications for increasing people's purchasing power. The study by Artha and Putra (2020) also supports these findings, where they found that the use of renewable energy directly contributes to increasing Indonesia's GDP. Based on these findings, it is clear that energy policies that focus on the use of renewable energy are not only relevant in the context of environmental sustainability but also provide real economic benefits to society.

Inflation was found to have a significant negative impact on people's purchasing power. This is in accordance with the Keynesian Consumption Theory,

which states that rising prices of goods and services reduce purchasing power, especially for low-income groups. Tran et al.'s (2024) study also supports this finding, showing that inflation is a major factor that suppresses household consumption in developing countries. In addition, research by Kumar (2015) found that high inflation consistently reduces people's purchasing power through rising prices of basic necessities. Recent research by Halim & Hubeis (2022) in Indonesia also shows that inflation has a more significant negative impact on lower-middle income groups, especially in the urban sector. Based on these findings, it is clear that controlling inflation must be a priority of economic policy to maintain people's purchasing power, especially for vulnerable groups.

Carbon emissions have a significant negative impact on people's purchasing power, which supports the theory of Environmental Economics. High carbon emissions increase the cost of living through negative impacts on health, natural disasters, and decreased economic productivity. This finding is in line with the concept of the Environmental Kuznets Curve (EKC), which shows that high carbon emissions in the early stages of development have a detrimental impact on society. Research by Choudhury, et al. (2023) shows that high carbon emissions in developing countries have an impact on decreasing quality of life and economy. Banerjee & Rahman (2017) also found that increasing carbon emissions increase the frequency of natural disasters, which significantly reduces people's purchasing power. The IPCC report (2021) underlines the impact of carbon emissions on tropical regions such as Indonesia, which are increasingly vulnerable to climate change. Based on these findings, firm policies are needed to reduce carbon emissions and protect people's purchasing power through low-carbon development strategies.

Per capita income is proven to moderate the relationship between energy policy, inflation, and carbon emissions on people's purchasing power. This finding supports microeconomic theory which explains that higher per capita income increases people's capacity to adapt to the negative impacts of inflation and climate change, and utilize energy policies more effectively. This study is consistent with Marwa et. al (2022), which highlights the importance of microeconomic factors in macro policies. Research by Soleh et. al. (2023) in Indonesia found that per capita income plays a significant role in mitigating the negative impact of inflation on household consumption. In addition, a study by Alfian & Nasrudin (2023) shows that increasing per capita income can strengthen the positive impact of energy policy on people's purchasing power through renewable energy investment. Another study by Subekti and Anwar (2019) also supports this finding, concluding that higher per capita income increases people's adaptation to economic risks due to climate change.

## 2. Relation of Results to Policy Context in Indonesia

The results of this study indicate that energy policies in Indonesia, which encourage the development of renewable energy, play an important role in increasing people's purchasing power. This is in line with Presidential Regulation No. 22 of 2017 concerning the National Energy General Plan (RUEN), which targets a 23% contribution of renewable energy in the energy mix by 2025. These findings indicate that the policy can contribute to long-term economic stability by reducing dependence on fossil fuels whose prices are volatile and expensive. Research by Fu, Q et. al (2021) also shows that investment in renewable energy not only helps reduce carbon emissions but also has the potential to create new jobs and stimulate economic growth. This is increasingly relevant with the increasing need for clean energy in Indonesia along with population growth and industrial needs.

However, even though renewable energy policies have shown positive potential, inflation remains a major challenge for the Indonesian economy. Energy price spikes, such as those that occurred in 2022 with the increase in fuel prices, have a direct impact on people's purchasing power. Research by Bettarelli et. al (2023) confirmed that inflation triggered by rising energy and staple food prices led to reduced household consumption, especially among low-income people. This finding supports the urgency of energy price control policies, which are expected to reduce the negative impact on people's purchasing power. Policies such as more targeted energy subsidies and fuel price controls are very important to maintain the stability of people's purchasing power.

In addition, the high carbon emissions produced by the energy sector in Indonesia are a problem that not only impacts the environment but also the economy. Research by Evitasari and Ahmad (2023) shows that high carbon emissions are closely related to the impacts of climate change, which can cause significant economic losses through infrastructure damage and decreased productivity in the agricultural sector. Therefore, carbon emission mitigation policies, such as the implementation of carbon taxes and the elimination of fossil fuel subsidies, must be prioritized. This policy will reduce dependence on environmentally damaging energy and provide incentives for the transition to more environmentally friendly clean energy.

Policies that reduce the negative impacts of carbon emissions can strengthen Indonesia's economic resilience. For example, implementing stricter emission reduction policies will support the growth of the renewable energy sector, which in turn can create new jobs and increase energy resilience. Research by Judijanto (2023) shows that effective emission reduction policies can increase investment in the renewable energy sector, which ultimately provides long-term economic benefits for society. Therefore, carbon emission mitigation policies must be an integral part of the government's efforts to create a sustainable economy and stronger purchasing power for the community.



### 3. Implications of the Results for Energy Policy and Inflation Control

The Indonesian government needs to accelerate the transition to renewable energy to reduce dependence on expensive and environmentally unfriendly fossil fuels. Based on research findings, this transition can have a positive impact on people's purchasing power by creating new jobs and reducing dependence on fluctuating energy prices. Therefore, incentives for investors in the renewable energy sector need to be increased. This is in line with a study by Wibowo and Haryanto (2020) which suggests that fiscal incentives and policies that support investment in renewable energy can accelerate the development of this sector. In addition, the development of clean energy infrastructure must be prioritized to ensure more affordable energy access for all levels of society. A study by Yuliana (2019) emphasized that wider access to clean energy will reduce people's living costs, improve quality of life, and have a positive impact on purchasing power, especially in areas with limited energy access.

Inflation, especially that triggered by rising energy and basic necessities prices, has been shown to reduce people's purchasing power. Therefore, price stabilization policies are very important to protect people's purchasing power, especially low-income groups. Inflation control policies through stable pricing and energy price controls must be strengthened to reduce inflationary pressures. This is supported by research by Sutanto and Andayani (2021), which found that energy price stabilization has a significant effect on reducing inflation and maintaining household purchasing power. In addition, more targeted subsidy programs can also be implemented to provide more effective protection for groups of people who are vulnerable to the impacts of inflation. Targeted subsidy programs, as suggested by Nugroho (2020), can prevent economic losses in low-income groups and help maintain household consumption stability.

Carbon emission mitigation policies, such as the implementation of carbon taxes, must be implemented effectively to reduce the negative impacts of carbon pollution on the economy and people's purchasing power. The implementation of carbon taxes can provide incentives for companies to switch to more environmentally friendly technologies. However, this policy needs to be accompanied by the allocation of tax revenues to support social programs and the development of clean energy infrastructure. A study by Pramudito (2020) stated that the use of carbon tax revenues to fund renewable energy projects and social programs will increase the sustainability of the policy. In addition, collaboration between the government, the private sector, and the community is very important in creating sustainable solutions. Research by Darmawan and Irawan (2021) underlines the importance of this collaboration to ensure significant carbon emission reductions, while still supporting economic growth and community welfare.



## CONCLUSION

This study aims to analyze the influence of energy policy, inflation, and carbon emissions on people's purchasing power in Indonesia, with per capita income as a moderating variable. Based on the results of the analysis, it can be concluded that:

1. Policies that encourage the use of renewable energy have a positive effect on people's purchasing power. This shows that the transition to clean energy can improve economic stability and public welfare by creating new jobs and reducing dependence on expensive fossil fuels. Renewable energy policies also have the potential to lower long-term energy costs, which can increase people's purchasing power.
2. Inflation has been proven to have a significant negative impact on people's purchasing power. The increase in the price of goods and services, especially energy, affects people's consumption ability, especially low-income groups. This finding confirms that inflation is a factor that suppresses purchasing power, and inflation control policies are very necessary to maintain economic stability and public welfare.
3. High carbon emissions have a negative impact on people's purchasing power. The negative impact of carbon emissions is not only felt in environmental aspects, but also in economic aspects, such as increasing living costs due to natural disasters and decreased productivity. Therefore, controlling carbon emissions is very important to maintain the sustainability of the community's economy.
4. Per capita income is proven to play a significant role as a moderating variable in the relationship between energy policy, inflation, and carbon emissions on people's purchasing power. Higher income helps people to cope with the impacts of inflation and climate change and utilize energy policies more effectively, which ultimately increases people's purchasing power.

The government needs to accelerate the transition to renewable energy by providing greater incentives for investment in the sector and developing clean energy infrastructure to ensure affordable access. Inflation control policies should focus on stabilizing energy and basic food prices, with targeted subsidies to protect low-income groups. To mitigate carbon emissions, policies such as carbon taxes and fossil fuel subsidy reductions should be prioritized, with tax funds used for clean energy development and social programs. In addition, policies that support increasing per capita income through skills development and job creation can strengthen people's capacity to deal with inflation and utilize energy policies more effectively.

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