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The Effects of Carbon Tax, Fairness, and Government Trust on Public Views of Carbon Tax

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A B S T R A C T

The research aim to investigate the impact of fairness, trust, and carbon taxation on public perceptions of carbon tax. The purposive sampling procedure was employed to conduct this quantitative research. Indonesia's primary contributor to carbon emissions is Java Island, which accounts for approximately 60% of the nation's total emissions. The survey was administered online to 200 residents of the island. The populix/poplite platform was employed to draw the sample. SPSS was employed to perform multiple regression analysis. The findings of this investigation indicate that the public's perceptions of Java are substantially influenced by fairness, trust, and carbon taxes. These findings indicate that the public is of the opinion that the carbon tax will be applied equitably and will have a positive impact on the environment. This research bolsters the public of view theory, which is crucial for the government to comprehend the critical factors that influence public acceptance and support for policy measures aimed at achieving sustainable objectives in the context of environmental policy. Additionally, it contributes to a more profound comprehension of the dynamics of public opinion in the context of climate change.

1. INTRODUCTION

Carbon taxes elicit a variety of responses from the public, often associated with fairness and trust in government. Carbon taxes are widely viewed as a key climate policy instrument (Maestre-Andrés et al., 2021). Human activities in business and industry produce both positive and negative consequences. In the economic realm, the consequences of these efforts are known as 'externalities', namely the uncompensated impact of someone's actions on the welfare of the observer. Negative externalities involve economic and social losses arising from economic agents, third party individuals, and/or legal entities. Air pollution caused by industrial activities in large office centers is a striking example of a negative externality (Rohma, 2023). Exhaust gas from factory chimneys is a clear example of these unfavorable external elements, as it produces a smog that must be inhaled by other people, thereby posing a health risk. Effectively handling the impact of these externalities requires policies and regulations that are able to achieve a harmonious balance between industrial growth and the welfare of society as a whole (Castro et al., 2020). Research in other countries has identified a range of public concerns about carbon taxes, including perceived high personal costs, regressive distribution of costs, damage to the broader economy, skepticism about policies that encourage low-carbon behavioral change, and the intuition that the goal The actual aim of this policy is to increase tax revenues (Carattini et al., 2018; Klenert et al., 2018).

The public's view is the main point in the level of success and effectiveness of implementing a carbon tax in the future. A review of empirical and experimental studies found that opinions on climate policy, including carbon pricing can easily change, as evidenced by the majority of respondents selecting 'don't know' as their answer. However, comparative studies from the US and Canada reveal that the majority of people would prefer revenues from carbon pricing policies to be used for renewable energy research and development (Drews & Van Den Bergh, 2016). This suggests that public support for carbon taxes may be

influenced by perceived benefits and potential positive impacts on the environment. The perceived fairness of carbon pricing was also found to be significantly correlated with public acceptance (Maestre-Andrés et al., 2019).

In the case of France, the lack of recycling of carbon tax revenues for households and the concomitant cancellation of the wealth tax are factors that contribute to the perceived unfairness of carbon pricing (Maestre-Andrés et al., 2019). Therefore, ensuring fair distribution of tax revenues and addressing concerns about impacts on different socioeconomic groups can be critical to gaining public acceptance of carbon taxes. The way governments allocate carbon tax revenues is a key factor in public acceptance of carbon pricing policies (J.-B. Steenkamp, 2019). Public support for a carbon tax can also be influenced by the formulation of appropriate tax campaigns and public awareness of the purpose and benefits of the tax (Brauner et al., 2021). Then to overcome public resistance to carbon taxes, it is important to address factors such as motivated reasoning and the mismatch between expectations and reality. People may underestimate the effectiveness of carbon taxes in reducing consumption of carbon-intensive products, and motivated reasoning may hinder public support for explicit carbon pricing. Governments can use implicit carbon pricing measures and provide clear evidence of the effectiveness of carbon taxes to overcome these barriers and gain public support (Dominioni, 2022).

The phenomenon of carbon taxes as a policy tool to reduce greenhouse gas emissions is still very new, so public understanding and support is needed (Baranzini & Carattini, 2017). Sociopsychological factors, such as perceptions of coerciveness, equity, and fairness influence the extent to which residents accept different climate policy instruments (Drews & Van Den Bergh, 2016). According to Muhammad et al. (2022), another strong factor influencing public support for environmental taxes is trust in the government. This is proven by a systematic literature review of 60 empirical studies on public acceptance of environmental taxes and it can be concluded that people are more supportive when they have high trust in the government. How the government allocates tax revenues is said to be the main factor in society accepting carbon taxes (L.-A. Steenkamp, 2021). Public support is an important pioneer for the effectiveness of environmental tax implementation. Without support from businesses and individuals, these policies will face significant challenges during implementation and will not last long enough to produce the desired effects on the economy, environment, or budget (Muhammad et al., 2022).

So far, there has been no research that focuses on public perceptions, especially on the island of Java, which is the island with the largest contribution to carbon emissions in Indonesia with around 60% of total national emissions in Indonesia, regarding the implementation of a carbon tax. This research analyzes how factors such as fairness and trust in government influence public perceptions of these policies. Drews et al. (2022) analyzed the associations of Spanish resident respondents using regression methods regarding their tax receipts, knowledge and sociodemographic characteristics. The results showed that individuals who oppose a carbon tax tend to be less trusting of politicians, emphasize more that the rich should pay more than the poor, and place more emphasis on the lack of renewable energy or low-carbon transportation. Meanwhile, respondents who accepted the carbon tax emphasized the need to solve environmental problems and care about a just society. Carattini et al.'s research (2018) was conducted in European countries that have implemented a carbon tax. This research will add to the literature by focusing on the public views of a sample of Indonesian citizens, who until now have not implemented a carbon tax, so this could be a slightly different case compared to countries that have often been studied. This research also supports the public view theory which focuses on the public's assessment of public policies based on their impact on themselves and society, for example through reducing air pollution and reducing greenhouse gas emissions. Those who support a carbon tax are more likely to prioritize renewable energy and low-carbon transportation, believe the rich should pay more, and prioritize politicians. In contrast, those who oppose it prioritize environmental issues and a just society (Savin et al., 2020).

The contribution of public views on carbon taxes to the development of the literature is very significant. Several studies have explored public perceptions and attitudes towards carbon taxes, providing insight into the dimensions of fairness perceptions (Castro et al., 2020). Understanding the factors that influence individual support for carbon tax policies has very important relevance for policy makers. This allows them to design policies that can gain approval from the public. Thus, this policy can provide significant benefits both in terms of the environment and socio-economic aspects (Dreyer & Walker, 2013). A lack of broad public support could be a major barrier to realizing the transition to a low-carbon economy (Geels, 2013; Wiseman et al., 2013). Therefore, the main aim of our research is to discover and analyze how

fairness and trust in government influence Javanese people's perceptions of carbon taxes. In addition, this study has the potential to provide a valuable contribution to the government as a policy maker in efforts to design and implement carbon tax policies in Indonesia. With a deeper understanding of the research results, it is hoped that the resulting policies can run more effectively, efficiently and receive strong support from the community. By discussing these aspects, this research will provide valuable insights for policymakers and contribute to the ongoing policy debate on carbon taxes.

This research consists of a structure consisting of several main parts. The second part discusses previous research literature and explains the theories underlying this research, and describes the process of developing hypotheses relevant to the research title. Then, the third section details the research methodology in detail and thoroughly, including sampling steps, selecting the data sources used, and determining the research model to be used. The fourth part of this research emphasizes the results of the hypothesis testing analysis. The aim is to make improvements and developments to the initial hypothesis. This section is also equipped with in-depth analysis and reflection on research findings. The aim is to identify factors that could potentially influence the results of this research. The fifth section discusses research conclusions, including research results, implications, limitations of this research, and provides recommendations for further research to improve the quality of future research.

2. LITERATURE REVIEW

The theory of public view explains that there is considerable public resistance to the carbon tax, which creates barriers to policy implementation, stringency and stability. Carattini et al. (2018) and Klenert et al. (2018) identified a range of public concerns about carbon taxes, including high perceived private costs, regressive distribution of costs, damage to the broader economy, skepticism about policy changes that encourage low-carbon behavior, and the intuition that the real goal of such policies is to increase tax revenues. According to Castro et al. (2020), the effectiveness and fairness of carbon taxes is divided into six different scenarios which are essentially used for tax revenues, these six scenarios are: use of unspecified revenues; return of all income to compensate low-income households; supporting the development of climate projects (e.g. investing in public transport, tree planting, subsidies for renewable energy); using half of the revenue to support the development of climate projects and the other half to compensate low-income households; returning an equal amount of income to all households as compensation; and use half of the revenue to support the development of climate projects and the other half to compensate all households the same amount.

According to the provisions in Law Number 7 of 2021 concerning Harmonization of Tax Regulations (Ministry of Finance, 2021) part VI Article 13 Paragraph 1, carbon tax refers to a type of tax imposed on carbon emissions that have a negative impact on the environment. These carbon emissions occur from the use of fossil fuels such as gasoline, aviation fuel, gas, and the like. Carbon tax is an obligation for purchases of goods containing carbon or from activities that produce a certain amount of carbon emissions during a certain period (Article 13 Paragraph (6)). Article 13 Paragraph (5) explains that the subject of carbon tax includes individuals or legal entities who purchase goods containing carbon and/or carry out activities that produce carbon emissions. Currently, the government sets a carbon tax rate equal to or lower than the carbon price in the domestic market (Article 13 Paragraph (7)). The lowest tariff is IDR 30.00 per kilogram of carbon dioxide equivalent (CO2e) in Article 13 Paragraph (9). Revenue from the carbon tax is used by the government to monitor and prevent climate change (Article 13 Paragraph (12)). According to OECD (2018), implementing a carbon tax is one of the most cost-efficient methods for reducing carbon emissions. This is widely supported by policy experts to date. Studies in most developed countries also view this policy instrument as a universal solution to overcome climate change (Trunk et al., 2023).

According to Putri & Arifin (2019), justice according to law is often referred to as legal justice and refers to equality of rights and obligations in the legal system. This indicates that if someone violates this principle of justice, they will face legal proceedings and possibly be subject to punishment or sanctions. Justice is a value that is used to create balance between individuals by providing what a person should be entitled to (the principle of equality), through fair and balanced procedures and distribution (procedural and distributive). If there are violations related to justice, it is important to provide sanctions or punishment (retributive approach) that are able to provide alternative solutions that are fair and correct (restorative approach) (Sommer & McGarity, 2023).

Fairbrother et al. (2019) trust in government is a form of confidence and an individual's willingness to

accept risks because they have optimistic expectations of significant government institutions that will act on behalf of society, such as parliament, politicians, political parties, and the legal system as a whole. Trust in government has a big influence on an individual's acceptance of authority. Individuals tend to consider whether the government's actions, attitudes and morality have taken into account the interests of society or not (Latief et al., 2020). Trust in government is an important component because it will influence whether government initiatives are supported or rejected. In developing countries, gaining public trust is not easy. This happens because of the rise in corruption cases (Mu-hammad et al., 2022).

Carbon taxes have indeed been proven to be effective in reducing emissions in the short term (Ghazouani et al., 2020). According to Castro et al. (2020), individuals who have a positive view of carbon taxes emphasize their concern for the issue of climate change and the need to take action. The research is aimed at Spanish citizens who believe that a carbon tax could be considered quite effective if applied to companies, not directly to consumers. They also believe that a carbon tax would encourage the use of public transportation and could reduce pollution. Meanwhile, individuals who oppose carbon taxes tend to argue that existing taxes are too much and that carbon taxes are seen as a new way to take their money. This is also in line with the theory of public view, the aim of which is to ensure the effectiveness and fairness of carbon taxes, one of which is to support the development of climate projects by investing in tree planting and renewable energy subsidies (Castro et al., 2020). In addition, many individuals doubt the effectiveness of implementing a carbon tax if it is only implemented at the national level. Research by Moz-Christofoletti & Pereda (2021), carbon taxes were also found to be detrimental to welfare, especially among the poor. Compared with subsidies that encourage environmentally friendly behavior, the implementation of carbon taxes often lacks public support (Carattini et al., 2018; Rotaris & Danielis, 2019).

H1: Carbon Tax influences Public Views on Carbon Tax

Rahim et al. (2023) explains the justice of the carbon tax based on the public's view that the existence of a carbon tax can create economic growth and benefit the people and in terms of sharia elements it can provide a maximum sense of prosperity to the people. This is based on increasingly global air pollution and it is time to create a sense of justice in building the same world civilization by looking after each other and contributing to the improvement of this earth. This requires concrete action to overcome air pollution, which is not something that is undesirable or common knowledge. A carbon tax will increase the country's prosperity through increasing income. In previous research, it was explained that fairness has very little effect on public views. According to Castro et al. (2020), the public of view theory referred to here is that individuals who oppose carbon taxes, compared to those who accept them, tend to have less trust in politicians. They also emphasize that the rich should pay more than the poor, and emphasize the importance of renewable energy or lower carbon transport. Meanwhile, respondents who accepted a carbon tax placed more emphasis on the need to solve environmental problems and care about a just society. According to Pörtner et al. (2022) building a transparent carbon tax needs to be promoted in order to build justice in society which is currently increasingly developing and has the potential to raise income levels in a country. Goulder et al. (2019) also added that pollution conditions can be used as a driving force in improving income distribution, so that equality and justice can grow well and massively.

H2: Justice influence public views on carbon taxes

Trunk et al. (2023) in their experimental study, prove that individuals who perceive the level of corruption in their country as high, who show lower levels of political and institutional trust, are also less likely to accept and support climate taxes. The significance of the carbon tax instrument is accompanied by the implementation of the concept of tax transparency through digitalization, enabling the state to more effectively monitor the emission activities of corporate entities. This is done through digital transparency in carbon taxes, a public monitoring system for government policies can be implemented in accordance with Indonesia's development goals which are oriented towards low emissions (Pörtner et al., 2022). In line with the public view theory, public trust in government institutions is very important for the progress of social and economic development. According to Muhammad et al. (2022), apart from government accountability which includes trust in the government, integrity and government competence have no effect on public acceptance of the implementation of the carbon tax. Trust in the government, tax-intensive policies, and tax benefits, both simultaneously and individually influence the level of taxpayer compliance (Muhammad et al., 2022).

H3: Government trust influences the Public's Views on Carbon Tax

3. RESEARCH METHOD

This research used a quantitative approach and data was collected by distributing open electronic questionnaires to 200 people via the populix/poplite platform. According to Ghozali (2018), a questionnaire functions as a tool for collecting data by asking respondents to answer a series of written statements or questions. The data collected will be processed statistically and the questionnaire used in this research is a closed questionnaire which has been assessed based on scores. Sample subjects were selected from target groups who were considered able to provide relevant information. The population sampling method was used through purposive sampling techniques. This study selected sample subjects based on several criteria. First, respondents must live in the Java Island region, namely East Java, Central Java, West Java and DKI Jakarta. Second, respondents must be 18 years or older. Finally, it is hoped that respondents will understand the plan to implement a carbon tax in Indonesia, who will first be given a screening regarding understanding carbon tax with examples of the use of greenhouse gas emissions and the presence of air pollution in large cities, especially on the island of Java. This research is expected to obtain information that is relevant and in accordance with the objectives of this research.

This research tests several key variables. First, there is the public view variable which refers to the public's perception and opinion regarding an issue or policy as the dependent variable. Furthermore, the justice variable is an independent variable that reflects an assessment of the level of justice in a particular context. Trust is also tested as an independent variable, assessing an individual's level of confidence in the government's credibility and integrity. On the other hand, carbon tax is considered as an independent variable, measuring the impact of implementing carbon tax policies. All variables in this study were measured using a Likert scale. Respondents' answers to each question in the questionnaire will be represented by five Likert scale options, which are described in table 1. The indicators used in this research can be seen in table 2. The data analysis technique used is multiple linear regression analysis, which is used to determine and measure the relationship between response variables and predictors. In cases where there is more than one predictor variable, multiple linear regression analysis is used (Ghozali, 2018), as follows:

$$Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \varepsilon \quad (1)$$

Description: Y =Public Views; α = Constant; β1- β3 = Regression Coefficients; X1 = Carbon Tax; X2 = Justice; X3 = Trust; ε = Standard Error

Table 1. Likert Scale Score

Alternative Answers	Rating
Strongly agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

Source: Ghozali, 2018

Table 2. Research Variable Indicators

No	Variable	Indicators	Reference
1	Carbon Tax	Increased Environmental Awareness	(Baranzini & Carattini, 2017; Gevrek & Uyduranoglu, 2015; Kallbekken & Sælen, 2011)
		Usefulness	
		Level of urgency	
2	Justice	Effectiveness of Fund Allocation	(Baranzini & Carattini, 2017; Gevrek & Uyduranoglu, 2015; Kumarasiri & Lodhia, 2020)
		Effectiveness of Providing Incentives	
		Effectiveness of fund allocation for social protection	
3	Trust	Government Integrity	(Baranzini & Carattini, 2017; Carattini et al., 2018; Gevrek & Uyduranoglu, 2015)
		Government transparency towards society	
		Information Disclosure	

4	Public Views	Regulation and Reputation Threats	(Baranzini & Carattini, 2017; Carattini et al., 2018; Kumarasiri & Lodhia, 2020)
		Cost of Uncertainty	
		New Opportunities and Better Understanding	

Source: Processed Data, 2023

4. RESULT AND DISCUSSION

Respondent categories based on region were spread evenly across four regions of the island of Java, namely DKI Jakarta (29.50%), West Java (31%), Central Java (16.50%), and East Java (23%). Based on the age category, the largest number of respondents was in the 18-24 year age range (43%), while the fewest respondents were in the 46-50 year age range (2%). Furthermore, the composition of respondents was balanced between men and women (44% and 56% respectively). Then for respondents who understood the plan to implement a carbon tax in Indonesia, all respondents taken were those who understood it (100%). Further information can be seen in Table 3.

Table 3. Demographic Characteristics of Respondents

No	Demographic Characteristics of Respondents	Total	Percentage
1	Demographic Area		
	DKI Jakarta	59	29,50%
	West Java	62	31%
	Central Java	33	16,50%
	East Java	46	23%
2	Age		
	18-24	86	43%
	25-30	48	24%
	31-35	30	15%
	36-40	20	10%
	41-45	8	4%
	46-50	3	2%
	>50	5	3%
3	Gender		
	Man	88	44%
	Woman	112	56%
4	Respondents who understand the plan to implement a carbon tax in Indonesia		
	Yes	200	100%
	No	0	0%

Source: Processed Data, 2023

The results of the validity test on the variables carbon tax (X1), justice (X2), trust (X3), and public views (Y) show a significant r-calculated value for each variable statement below a significance value of 0.05. This indicates that the data in this study can be considered valid. In this study, data reliability was measured using the Cronbach's Alpha method. The results of the data reliability analysis are displayed in Table 4, which shows that all variables have a Cronbach's Alpha value > 0.7. This indicates that the data from all variables in this study can be considered to have an adequate level of reliability.

Table 4 Reliability Test Results

Variable	Cronbach's Alpha	Keterangan
Carbon Tax (X1)	0,831	Reliable
Justice (X2)	0,776	Reliable
Trust (X3)	0,806	Reliable
Public Views (Y)	0,722	Reliable

Source: Processed Data, 2023

The descriptive statistics seen in table 5 for each public view as the dependent variable show that the

minimum value is 12 and the maximum value is 25 and the average value is 20.11 which indicates that respondents who have a public view are more in a positive direction. Then for the Carbon Tax variable with a minimum value of 5, a maximum value of 25, and an average value of 20.70, it shows that there are still respondents who disagree with the carbon tax. The Justice variable has a minimum value of 10, a maximum value of 25 and an average value of 20.91, which indicates that respondents agree with the existence of justice implemented by the Indonesian government. This can also be seen in the trust variable which also shows almost the same value, so that respondents believe in what the government will do. The normality test results in Table 6 show that the significance value is 0.200. In the One Sample Kolmogorov Smirnov test, if the significance value is > 0.05 then the data is considered to have a normal distribution. Based on Table 6, it can be seen that the significance value exceeds 0.05. Therefore, it can be concluded that the independent and dependent variables in this regression model are normally distributed. The results of the multicollinearity analysis from Table 7 show that the variables have a tolerance value ≥ 0.10 and a VIF value ≤ 10. These findings indicate that the regression model does not experience multicollinearity, and there is a correlation between the independent variables. The Heteroscedasticity test results listed in Table 8 show that to assess the existence of differences in variance, it was tested using the Glejser method. The results show that the significance value for each variable is 1, which is greater than 0.05. This finding indicates that in this regression model there is no heteroscedasticity, or in other words, this model meets the homoscedasticity criteria.

Table 5. Descriptive Statistics

	Minimum	Maximum	Mean	Standard Deviation
Carbon Tax (X1)	12	25	20,11	3,204
Justice (X2)	5	25	20,70	3,588
Kepercayaaan (X3)	10	25	20,91	3,235
Pandangan Publik (Y)	9	25	20,53	3,543

Source: Processed Data, 2023

Table 6. Normality Test

One-Sample Kolmogorov-Smirnov Test		
Unstandardized Residual		
N		200
Normal Parameters	Mean	0,00000000
	Std. Deviation	2,08651006
Most Extreme Differences	Absolute	0,058
	Positive	0,058
	Negative	-0,045
Kolmogorov-Smirnov Z		0,058
Asymp. Sig. (2-tailed)		0,200

Source: Processed Data, 2023

Table 7. Multicollinearity Test Results

Variables	Tolerance	VIF	Description
Carbon Tax (X1)	0,608	1,644	Non Multicollinearity
Justice (X2)	0,379	2,637	Non Multicollinearity
Trust (X3)	0,434	2,302	Non Multicollinearity

Source: Processed Data, 2023

Table 8. Heteroscedasticity Test Results

Variables	t	Sig.
Carbon Tax (X1)	0,000	1,000
Justice (X2)	0,000	1,000
Trust (X3)	0,000	1,000

Source: Processed Data, 2023

Tests to determine the relationship between variables, especially the independent variable, and the dependent variable can be shown using the t test. The results of the t hypothesis test in Table 9 show that t > t table for the three independent variables. This indicates that the independent variable has a significant influence on the dependent variable. In detail, it is explained as follows: Carbon tax has a positive and significant influence on public views, with a calculated t of 3.287 and a significance value of 0.001 < 0.05 so that the first hypothesis has an effect; Justice also has a positive and significant effect on the public's view of carbon tax with a calculated t of 3.515 and a significance value of 0.001 which shows that justice has a real effect on the public's view; Trust in the government has a positive and significant influence on public views with a t count of 5.671 and a significance value of 0.000 which shows that trust has a positive influence on public views.

Table 9. Hypothesis Test

Variables	t	Sig.
Carbon Tax (X1)	3,287	0,001
Justice (X2)	3,515	0,001
Trust (X3)	5,671	0,001

Source: Processed Data, 2023

The aim of the research is to analyze the influence of carbon tax, justice and trust on public views of residents on the island of Java. The results obtained in the first hypothesis are that the carbon tax has a significant effect on public views. This means that when a carbon tax is implemented, the public's or society's view of it becomes more positive. This finding supports the public view theory which explains that the public's assessment of public policy will have an impact on themselves and the surrounding community, which can reduce air pollution and reduce greenhouse gas emissions. A public view that believes that a carbon tax will benefit society as a whole by preserving the environment, and providing economic stimulation through investment in environmentally friendly technologies. This finding has important implications in the context of environmental policy, as it shows that society accepts carbon taxes and potentially supports climate change mitigation measures. These results are in line with previous research by Ghazouani et al. (2020) and Castro et al. (2020) which shows that carbon taxes have a significant influence on the public's view of carbon taxes, especially when applied to companies and not directly to consumers.

The results of testing the second hypothesis show that fairness has a positive and significant influence on public views about carbon taxes. This means that the better the implementation of justice, the greater the public's view of carbon taxes. This finding is also in line with the public theory of view, where justice in determining public policy is very important, where in justice there are those who support justice and those who oppose justice. Proponents of carbon tax fairness may believe that carbon taxes are distributed fairly across society and do not burden particular groups. Opponents of the fairness of carbon taxes may worry that carbon taxes will exacerbate existing social and economic inequalities in society. These findings are in line with previous research by Maestre-Andrés et al. (2019) which shows that fairness has a positive influence on public views about carbon taxes.

The influence of trust on public views also shows positive and significant results. This means, the higher the public's trust in the government, the more positive their view of the carbon tax policy. These findings also support the public view theory in which public trust in the government and other institutions is very important in supporting public policy, whether in implementing carbon taxes effectively and fairly. Proponents of a carbon tax may have a high degree of trust in the government and believe that the government will administer the carbon tax responsibly. These findings indicate that trust in government influences public response and support for environmental policies such as carbon taxes. Therefore, government transparency and accountability are important factors in shaping people's views on carbon taxes. This finding is also in line with previous research by Muhammad et al. (2020) which confirms that trust in government contributes positively to the public's view of carbon taxes.

5. CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS

Based on the findings of this research, it can be concluded that carbon tax, justice, and trust in the government have a positive impact on the Javanese people's perception of carbon tax. In addition, this research has proven that when the government implements carbon tax policies fairly and transparently, and builds public trust through effective communication, the views of people who live on the island of Java

towards carbon taxes will become more positive. These findings highlight the important role of government transparency and accountability in supporting public views of carbon taxes. Thus, further understanding how these factors interact can help the government and stakeholders in designing more effective policies and strengthening public support for climate change efforts in Indonesia. In the short term phase, this research can help policy makers who are formulating a carbon tax by considering public perceptions regarding carbon taxes. This is due to the fact that there are no clear regulations regarding the carbon tax and the designation of the carbon tax itself. Meanwhile, in the long-term phase, it is hoped that the government can immediately formulate rules or policies regarding carbon tax and its designation clearly as well as implement carbon tax.

Several limitations of this study need to be considered. First, this research relies on data and information about carbon tax policies contained in the Tax Harmonization Law (UU HPP). Because these policies may not be fully detailed, future research could consider expanding data sources or adding updated information regarding these policies. Second, to better understand the factors that influence public perceptions about carbon taxes, other variables can be used. The results of this research include several recommendations that can be used as an outline for improving policies on the island of Java regarding carbon taxes and climate change efforts, namely, future research can expand the scope of their sample to all Indonesian society so that the results can be better generalized. The implementation of a carbon tax on the island of Java can be more effective if it is balanced with stronger efforts to educate the public about the importance of reducing carbon emissions and the impact of climate change, which requires a broader information campaign and public education program to ensure the understanding behind it. carbon tax. Furthermore, justice must be the main focus in formulating carbon tax policies where the public must be sure that this tax is applied fairly and evenly, without burdening economically vulnerable groups so that careful evaluation of the social and economic impacts of the carbon tax is needed as well as appropriate adjustments if there are any. detrimental impact.

In addition, the government must commit to implementing carbon tax policies with a high level of transparency and accountability. This will help build public trust in the government in terms of implementing the carbon tax. This includes information about the use of funds from the carbon tax which must also be made available to the public. The government must also continue to show a strong commitment to climate change efforts. This includes concrete steps to reduce carbon emissions, support environmentally friendly technologies, and promote renewable energy sources. Consistency in the implementation of this policy will help the public feel that the carbon tax has a clear goal in fighting climate change. In formulating policies and implementing carbon taxes, the government needs to actively involve the community and stakeholders to allow various views and valuable input to be taken into account in developing more effective policies.

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