

DRIVERS OF ELECTRIC VEHICLE PURCHASE INTENTION: ENVIRONMENTAL CONCERN, GREEN TRUST, AND GOVERNMENT POLICIES KNOWLEDGE

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Abstract

The increasing sales of electric vehicles (EVs) over the years indicate a growing public interest in electric mobility. Additionally, public awareness of environmental issues has been on the rise. This study aims to analyse the influence of environmental concern, green trust, and knowledge of government policies on the intention to purchase electric vehicles. A quantitative approach was employed using a voluntary sampling technique. Data were collected through an online survey distributed via Google Forms. The sample consisted of 145 individual consumers who have their own income. The data were analysed using descriptive analysis and Structural Equation Modelling (SEM) with the aid of SPSS 25.0 and Smart PLS software. The findings revealed that although the respondents demonstrated a high level of environmental concern, their intention to purchase electric vehicles remained low. This is in line with their limited knowledge of government policies and the fact that their level of green trust was, on average, moderate. The results of the SEM analysis indicate that green trust and knowledge of government policies significantly influence the intention to purchase electric vehicles. In contrast, environmental concern does not directly affect purchase intention, although it does have an indirect influence through green trust. Therefore, it is essential to enhance public awareness of government policies and the benefits of using electric vehicles in order to strengthen green trust and increase purchase intention.

Keywords: electric vehicle, environmental concern, green trust, government policy, purchase intention.

INTRODUCTION

Motor vehicles are one of the tools used to support daily human life and have become an inseparable part of human existence. According to data from the National Central Statistics Agency (BPS), the number of vehicles increases every year across all types of motor vehicles, with an annual growth rate from 2017 to 2021 of 4.53 percent. Motor vehicles are one of the sources that produce carbon emissions. The increase in the number of motor vehicles, accompanied by rising energy and fuel demand, will result in an increase in emissions. The energy consumption pattern, which is largely dependent on fossil fuels, may lead to an energy crisis in Indonesia in the future.

Indonesia has committed to controlling global warming below 2°C through the signing of the Paris Agreement to the United Nations Framework Convention on Climate Change on April 22, 2016, in New York. The Paris Agreement is a global accord to address global climate issues. Indonesia's contribution to reducing global warming was ratified in Law Number 16 of 2016 concerning the Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change. Through Law Number 16 of 2016, the Indonesian government has set a target to reduce emission intensity by 29% by 2030.

Indonesia's commitment to the Paris Agreement is reflected in, among other things, its electric vehicle development program. The transition from fossil fuel-powered vehicles to electric vehicles, such as electric cars, can serve as an alternative solution to reduce the transportation sector's dependence on fossil fuels. The implementation of environmentally friendly technology can significantly reduce carbon emission levels (Yin et al., 2015). Electric cars are vehicles that use electric motors as their propulsion system, thus eliminating the need for fossil fuels. In addition, electric cars are energy-efficient and environmentally friendly as they do not produce emissions (Subekti et al., 2014).

Between 2020 and 2023, electric car sales in Indonesia continued to increase. In 2022, electric car sales in Indonesia reached 15,437 units, an increase of 383.62% compared to 3,192 units in 2021 (Ardiyanti et al., 2023). The growing sales of electric cars in Indonesia year by year indicate the increasing interest of Indonesians in environmentally friendly vehicles. Although electric car sales in Indonesia show a positive trend each year, the sales coverage is still relatively low compared to ICE (Internal Combustion Engine) vehicles. In 2023, electric car sales in Indonesia totaled 69,705 units, while ICE car sales reached 936,076 units (GAIKINDO, 2023). Moreover, last year's electric car sales still fell short of the target set by the government. The Indonesian government has targeted annual domestic electric car sales of 200,000 units (CNBC, 2024).

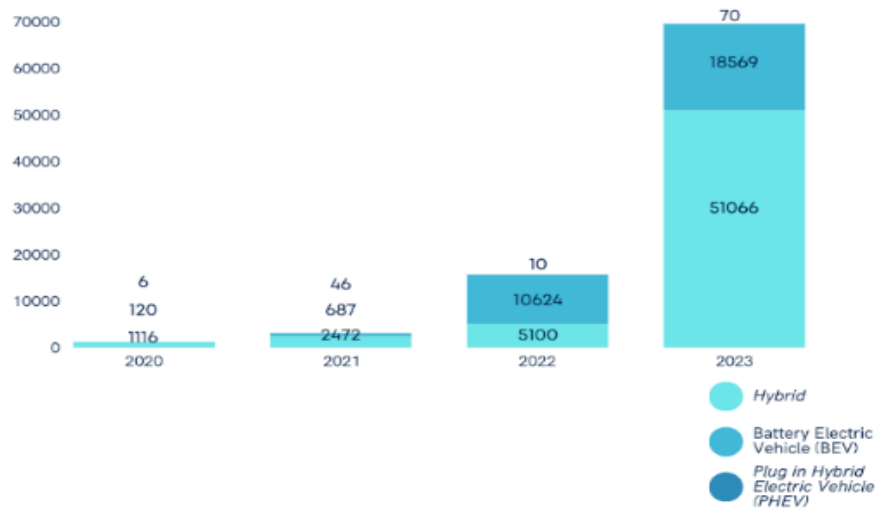


Figure 1. Electric Car Sales in Indonesia from 2020 to 2023
Source: GAIKINDO

Currently, the public is becoming increasingly aware of the importance of protecting the environment and showing concern for environmental issues (Wella & Chairy, 2020). Individual awareness regarding the environment and sustainability is essential, as pollution and environmental degradation have become difficult to avoid. Furthermore, public awareness of environmental preservation can be seen through movements such as bike to work, the use of reusable water bottles, waste recycling, public transportation use, and the use of fabric shopping bags. Increased individual environmental concern makes individuals more selective in choosing the products they use (Sugandini et al., 2020). Environmentally conscious consumers tend to be more willing to pay extra for using renewable energy (Bang et al., 2000). Additionally, such consumers view environmental protection as the right attitude (Praminingsih et al., 2021).

Consumer attitudes influence purchase intentions toward a product. Moreover, consumer attitudes are closely related to trust and behavior (Sumarwan, 2020). Consumers are more likely to trust eco-friendly products when they perceive environmental (green) values and low risks from those products. Consumers who already trust the seller will show greater interest in purchasing (Sugandini et al., 2020). Consumer trust in eco-friendly products, or green trust, refers to their willingness to rely on such products based on confidence in their performance. Trust in the performance of eco-friendly products can drive purchase intentions (Suprpto & Efendi, 2017).

Consumer acceptance of sustainable technology is vital to achieving an environmentally friendly transportation system (Ozaki & Sevastyanova, 2011). Moreover, the implementation of sustainable transportation will be more effective if public enthusiasm grows in support of green transportation policies, reducing private vehicle use, increasing public transport use, and promoting environmentally friendly fuels (Primastuti & Puspitasari, 2021). High enthusiasm motivates individuals to seek further information through various media about green transportation programs. Consumer knowledge of products helps them better understand the product, its functions, and related information, such as government policies regarding electric vehicles.

The government has issued policies to support the acceleration of electric vehicles in Indonesia. These efforts are reflected in several government regulations. The acceleration initiative is outlined in Presidential Regulation (Perpres) No. 22 of 2017 on the National Energy Plan, which includes the development of hybrid-powered and electric vehicles, targeting 2,200 four-wheeled electric vehicles and 2.1 million two-wheeled vehicles by 2025, and gradually increasing electric vehicle numbers. Moreover, the government supports acceleration through fiscal and non-fiscal incentives. The government's electric vehicle policy is regulated under Presidential Regulation No. 79 of 2023, which amends Presidential Regulation No. 55 of 2019 concerning the Acceleration of Battery Electric Vehicle Programs, along with other related regulations.

Additionally, the government continues to improve electric vehicle infrastructure in Indonesia to support the transition. Infrastructure provision is governed by the Regulation of the Minister of Energy and Mineral Resources of the Republic of Indonesia No. 1 of 2023 concerning Infrastructure for Charging Battery Electric Vehicles. The infrastructure includes charging stations and battery swapping facilities. Electric vehicle charging can be conducted via private installations and public charging stations (SPKLU).

Transportation technology continues to evolve alongside advances in science and technology to improve its effectiveness and efficiency to meet human needs. Transportation technology development also drives globalization and economic growth (Istianto et al., 2019). As economic growth and population increase, so does the demand for transportation. Technological advancements have made various aspects of life easier. Today, electric car purchases are not only made offline via authorized dealers but also online through e-commerce platforms and PLN Mobile. Additionally, electric vehicle sales via e-commerce have shown a positive trend. Several regions in Indonesia such as Medan (North Sumatra), Pekanbaru (Riau), Bogor (West Java), Sleman (Yogyakarta), and Badung (Bali) have recorded the highest increases in electric vehicle purchases on Tokopedia during the first quarter of 2023 (Tokopedia, 2023).

Previous studies have employed constructs from the Theory of Planned Behavior (TPB), environmental concern ((Mohamed et al., 2018; Egbue & Long, 2012; Salsabila & Salehudin, 2023)), government policy (Sukma et al., 2023), the Norm Activation Model (NAM) ((Salsabila & Salehudin, 2023; Handarujati, 2024)), and green trust (Yeğın & Ikram, 2022) to examine consumer purchase intentions toward electric vehicles. This study utilizes the variables of environmental concern, government policy, green trust, and purchase intention. Furthermore, this research is conducted to develop prior studies and to gain deeper insight into the factors influencing prospective consumers' interest in purchasing electric vehicles. To guide this research, several hypotheses were developed to examine the relationships between key variables. First, it is hypothesized that environmental concern influences the intention to purchase electric vehicles (H1). Second, environmental concern is expected to affect green trust (H2), which refers to consumer confidence in environmentally friendly products. Third, green trust is proposed to have an impact on the intention to purchase electric vehicles (H3). Lastly, knowledge of government policy is assumed to influence the intention to purchase electric vehicles (H4).

This study adopts the Norm Activation Model (NAM). NAM describes altruistic behavior as arising from individual awareness of the consequences of not engaging in certain behaviors (Sugandini et al., 2020). This research is important because environmental degradation has become unavoidable and must be a shared concern. Human activities significantly impact the environment, including pollution, natural resource depletion, and potential contributions to climate change (Effendi et al., 2020). Public indifference to the environment will only exacerbate environmental damage. Moreover, the shift from fossil-fuel-powered vehicles to environmentally friendly vehicles, along with the rising public awareness of environmental issues, presents a compelling area for further investigation. This study aims to: 1) describe the levels of environmental concern, knowledge of government policies related to electric vehicles, green trust, and consumers' purchase intention of electric vehicles; 2) analyse the influence of environmental concern, knowledge of government policies related to electric vehicles, and green trust on consumers' intention to purchase electric vehicles.

METHODS

Research Design

This study uses a quantitative approach, which involves collecting measurable data for statistical analysis. No specific geographic location was set, as the research was conducted online.

Population, Sample, and Sampling Technique

The target population includes consumers across Indonesia. Referring to Hair et al. (2010), the recommended minimum sample size is the number of indicators multiplied by 5–10. With 23 indicators, the minimum required sample is 115 respondents. A non-probability voluntary sampling method was used, where participation was based on respondent willingness. The sample criteria included Indonesian citizens with their own income. A total of 162 responses were collected online, but 17 were excluded for not meeting the criteria, leaving 145 valid responses, which exceeds the minimum sample requirement.

Type and Data Collection Method

This research used primary data, including variables such as individual characteristics, environmental concern, green trust, government policy, and purchase intention. Data was collected online through Google Forms, distributed via WhatsApp and Instagram. Respondents completed the questionnaire independently (self-report).

Measurement Variables

This study consists of a dependent variable, namely purchase intention (PI) of electric vehicles, and independent variables, including environmental concern (EC), green trust (GT), and knowledge of government policy (KGP).

The environmental concern variable is measured using instruments adapted and modified from Lee et al. (2021) and Buhmann et al. (2024), consisting of 6 indicators. Green trust is measured using items adapted from Yadav et al. (2018), with 4 indicators. Knowledge of government policy is measured using instruments based on Zhang et al. (2013), adjusted to reflect Indonesian policies, and consists of 6 indicators. Purchase intention is measured using instruments adapted from Gunawan et al. (2022) and Mohamed et al. (2018), consisting of 4 indicators. A four-point rating system is used for each indicator: 1) strongly disagree, 2) disagree, 3) agree, and 4) strongly agree.

Data Analysis

The research data were processed using Microsoft Excel, SPSS 25.0, and SmartPLS 3.0 through the stages of cleaning, coding, scoring, analysis, and interpretation. Descriptive analysis was employed to identify individual characteristics, environmental concern, green trust, government policy knowledge, and purchase intention, using the top two boxes and bottom two boxes technique, with score transformation into a 0–100 index. The influence of environmental concern, green trust, and government policy knowledge on the intention to purchase electric vehicles was analyzed using Structural Equation Modeling (SEM-PLS) through the evaluation of the outer model and inner model, involving tests of validity, reliability, R-square values, and path coefficients.

RESULT

Respondent Profile

This study consists of 145 individuals residing in Indonesia, aged between 20 and 59 years. The demographic characteristics include gender, age, educational background, occupation, and income. The detailed distribution of respondents' demographics is presented in Table 1. The majority of respondents in this study were female (51%), slightly higher than male respondents (49%). Respondents were aged between 20 and 59, with the largest age group being 28–43 years old (49%), categorized as Generation Y. In terms of education, respondents varied from elementary school graduates to doctoral degree holders, with most having a bachelor's degree (44.1%) and high school diploma (38.6%). Respondents' occupations were diverse, with the largest groups working in the private sector (37.2%) and as entrepreneurs or traders (21.4%). Monthly income levels ranged across six categories, with most respondents earning less than Rp5,000,000 (35.2%), followed by those earning Rp5,000,001–Rp10,000,000 (27.6%) and Rp10,000,001–Rp15,000,000 (17.9%).

Table 1. Distribution of frequency and percentage based on individual characteristics

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	71	49.0
	Female	75	51.0
Age	20–27 years	37	25.5
	28–43 years	71	49.0
	44–59 years	37	25.5

Education	Elementary/Junior High School	1	0.7
	High School	56	38.6
	Diploma	9	6.2
	Bachelor's Degree (S1)	64	44.1
	Master's Degree (S2)	12	8.3
	Doctoral Degree (S3)	3	2.1
Occupation	Student	17	11.7
	Trader/Entrepreneur	31	21.4
	State-Owned Enterprise Employee	7	4.8
	Civil Servant (PNS/ASN)	24	16.6
	Doctor/Health Worker	7	4.8
	Private Sector Employee	54	37.2
	Teacher/Lecturer	2	1.4
	Freelancer	3	2.1
	< Rp5,000,000	51	35.2
Monthly Income	Rp5,000,000 – Rp10,000,000	40	27.6
	Rp10,000,001 – Rp15,000,000	26	17.9
	Rp15,000,001 – Rp20,000,000	10	6.9
	Rp20,000,001 – Rp25,000,000	11	7.6
	> Rp25,000,000	7	4.8

Environmental Concern, Green Trust, Knowledge of Government Policy, and Purchase Intention of Electric Vehicles

Table 2 shows that the majority of respondents (more than 70 percent) have a high level of environmental concern. Only 2% of respondents have a low level of concern for the environment. There are still respondents who do not consider the environmental impact when purchasing products. Some respondents also feel no responsibility to switch to environmentally friendly transportation.

Nearly half of the respondents have a moderate level of green trust. Less than 30% fall into the high category, while more than one-fifth still have a low level of green trust. In contrast to environmental concern and green trust, the largest proportion of respondents have a low level of knowledge about government policies related to electric vehicles. Nevertheless, nearly one-fourth of respondents possess a high level of knowledge in this area.

The average index of intention to purchase an electric vehicle falls into the moderate-to-low category (61.7). Less than one-fourth of respondents have a high intention to purchase an electric vehicle, while nearly half are classified as having a low level of intention.

Tabel 2. Respondent distribution by category and descriptive statistics for each variable

Variable/category	Frequency (n)	Percentage (%)
Environmental Concern		
Low (index < 60)	3	2.1
Moderate (60 ≥ index <80)	38	26.2
High (indeks ≥80)	104	71.7
Everage ± SD (index)	85.9 ± 11.3	
Min – Max (index)	16.67 – 95.83	
Green Trust		
Low (index < 60)	32	22.1
Moderate (60 ≥ index <80)	70	48.3
High (indeks ≥80)	43	29.7
Everage ± SD (index)	69.4 ± 18.4	
Min – Max (index)	8.33 – 91.67	
Knowledge of Government Policies		
Low (index < 60)	60	41.4
Moderate (60 ≥ index <80)	50	34.5
High (indeks ≥80)	35	24.1
Everage ± SD (index)	62.1 ± 22.1	

Min – Max (index)	11.11 – 94.4	
Purchase Intention		
Low (index < 60)	69	47.6
Moderate (60 ≥ index < 80)	41	28.3
High (indeks ≥ 80)	35	24.1
Everage ± SD (index)	61.7 ± 20.2	
Min – Max (index)	16.67 – 91.67	

Outer Model

The evaluation in this study consists of outer model and inner model assessments. The results of the outer model evaluation (measurement model) show that all indicators have loading factor values of ≥0.5, indicating that the indicators are valid (Table 3).

Table 3. Loading factor values of each variable's indicators

Code	Indicator	Loading Factor
Environmental Concern		
EC1	Concerned about environmental pollution	0.676
EC2	Environmental issues have become a serious problem in recent years	0.575
EC3	Responsibility to shift to environmentally friendly transportation	0.771
EC4	Preserving the environment	0.693
EC5	Responsibility to protect the environment	0.731
EC6	Cares about the environment	0.694
EC7	Considers environmental impact when choosing a vehicle	0.726
EC8	Living in harmony with the environment to achieve sustainable development	0.715
Green Trust		
GT1	Electric vehicle companies are committed to environmental protection	0.874
GT2	The performance of electric vehicles is generally reliable	0.912
GT3	Claims that electric vehicles are environmentally friendly	0.853
GT4	The environmental commitment of electric vehicles meets my expectations	0.927
Knowledge of Government Policy		
PKP1	Aware of government policies regarding electric vehicles	0.858
PKP2	Aware of electric vehicle policies through various sources including mass media	0.820
PKP3	Aware of policies regarding the reduction of Value Added Tax (VAT) on electric vehicles	0.851
PKP4	Aware of government policy on parking fee incentives for electric vehicles	0.830
PKP5	Aware of government policy on exemption of Motor Vehicle Tax (PKB) for electric vehicles	0.821
PKP6	Aware of government policy on exemption of Vehicle Title Transfer Fee (BBNKB) for electric vehicles	0.858
Purchase Intention		
PI1	Considering the purchase of an electric vehicle	0.853
PI2	Looking forward to the availability of various electric vehicle brands	0.868
PI3	Willingness to spend more money for an electric vehicle	0.807
PI4	Willingness to recommend the use of electric vehicles to others	0.840

Reliability testing was conducted by examining the composite reliability (CR) and Cronbach's alpha (CA) values, as presented in Table 4. The results show that all indicators are considered reliable, with composite reliability values above 0.7 and Cronbach's alpha values above 0.6 (Haryono, 2016).

Table 4. Composite reliability, average variance extracted, and cronbach's alpha

Variable	CR	AVE	CA
Environmental Concern	0.940	0.490	0.858
Green Trust	0.884	0.796	0.914
Knowledge of Government Policy	0.935	0.705	0.917
Purchase Intention	0.907	0.710	0.864

Note: CA = Cronbach's Alpha; AVE = Average Variance Extracted; CR = Composite Reliability

Following the measurement model evaluation, the inner model (structural model) evaluation was conducted. This step includes analyzing the coefficient of determination (R^2) and path coefficients. The R^2 values for green trust and purchase intention were 0.156 and 0.572, respectively. These values indicate that green trust falls into the weak category, while purchase intention is in the moderate category.

The adjusted R^2 for green trust was 0.150 indicating that green trust is explained by environmental concern by 15.0%. The adjusted R^2 for purchase intention was 0.563 meaning that environmental concern, green trust, and knowledge of government policy explain 56.3% of the variance in purchase intention. The remaining variation is explained by other factors not examined in this study.

Hypothesis Testing

The bootstrapping stage was conducted to test the influence of environmental concern, green trust, and knowledge of government policy on the purchase intention of electric vehicles. A relationship is considered significant if the t-value > 1.96 and p-value < 0.05. The bootstrapping results are summarized below (Figure 2).

Environmental concern has a significant positive effect on green trust ($t = 4.988$; $p = 0.000$), indicating that higher environmental awareness increases individuals' trust in electric vehicles. In turn, green trust significantly influences purchase intention ($t = 7.388$; $p = 0.000$), meaning that the more people trust electric vehicles, the more likely they are to purchase them. However, environmental concern does not have a direct effect on purchase intention ($t = 1.323$; $p = 0.201$). This suggests that while individuals may be environmentally conscious, it does not directly translate into buying behavior unless mediated by other factors like trust. Meanwhile, knowledge of government policy has a significant positive effect on purchase intention ($t = 4.265$; $p = 0.000$), showing that better awareness of EV-related policies increases the likelihood of purchase. Additionally, an indirect effect was found: environmental concern influences purchase intention through green trust ($t = 3.838$), indicating a mediating role of green trust in this relationship.

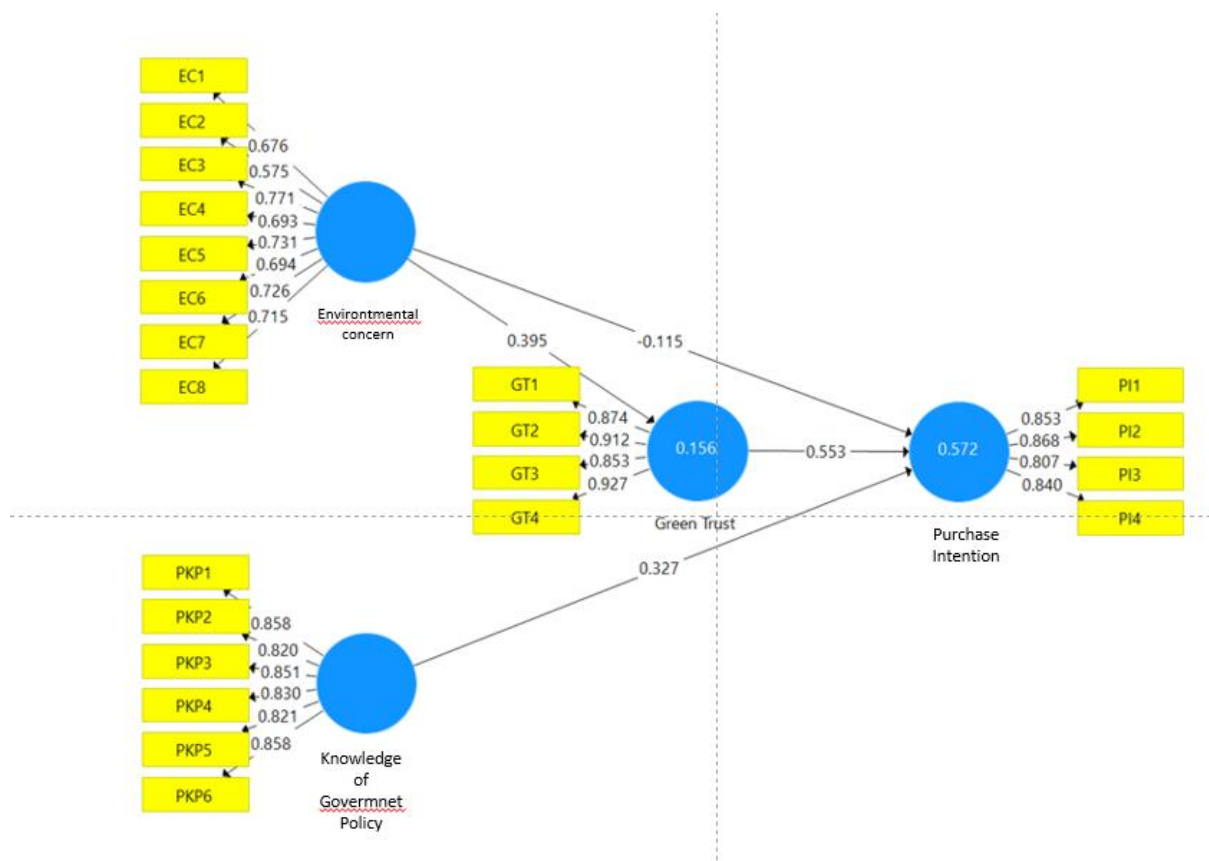


Figure 2. SEM model results from bootstrapping

The findings emphasise the pivotal role of green trust in shaping consumers' intention to purchase electric vehicles. As shown in Figure 2, green trust emerged as the most influential variable, suggesting that when consumers perceive electric vehicles as credible and beneficial for the environment, their willingness to adopt them increases substantially. This highlights the importance of building consumer confidence in the environmental claims and performance of electric vehicles through transparent communication and reliable product information.

Knowledge of government policy also significantly influenced purchase intention, indicating that awareness of supportive regulations, such as tax incentives and subsidies, can enhance consumers' readiness to transition to electric mobility. These findings align with prior studies that underline the role of institutional support in facilitating behavioural change toward sustainable consumption.

Interestingly, while environmental concern contributes to developing green trust, it does not directly influence purchase intention. This suggests that mere awareness or concern about environmental issues is not sufficient to drive action. Consumers may need concrete incentives or trust-based reassurance in the product before translating concern into behaviour. This finding points to the importance of integrating emotional drivers, such as concern, with cognitive evaluations, such as trust and policy awareness, to effectively influence purchasing intention.

Tables 5 and 6 present the results of hypothesis testing, highlighting the direct and indirect effects of environmental concern, knowledge of government policy, and green trust on purchase intention.

Table 5. Path coefficients summary

Relationship	Path Coefficient	t-value	p-value	Note
Green Trust → Purchase Intention	0.553*	7.388	0.000	Accepted
Environmental Concern → Green Trust	0.395*	4.988	0.000	Accepted
Environmental Concern → Purchase Intention	-0.115	1.323	0.201	Rejected

Knowledge of Government Policy → Purchase Intention	0.327*	4.265	0.000	Accepted
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Table 6. Direct, indirect, and total effects

Relationship	Direct Effect	Indirect Effect	Total Effect
Green Trust → Purchase Intention	0.553*	-	0.553
Environmental Concern → Green Trust	0.395*	-	0.395
Environmental Concern → Purchase Intention	-0.115	0.218*	0.104
Knowledge of Government Policy → Purchase Intention	0.327*	-	0.327

*Note: *Significant at $p < 0.05$ and $t > 1.96$

DISCUSSION

The Influence of Environmental Concern on Purchase Intention (H1).

The results indicate that environmental concern does not significantly influence the intention to purchase electric vehicles, leading to the rejection of Hypothesis H1. This finding is consistent with previous research by Firmansyah (2020), who showed that individuals' awareness of environmental issues does not necessarily affect their purchase intentions. One possible explanation is that, although people are aware of environmental problems, the relatively high price of electric vehicles remains a major barrier (Purwanto & Prima Rini, 2022). This suggests that environmental awareness alone is insufficient to encourage adoption unless supported by economic feasibility. In addition, Adelia and Tunjungsari (2023) noted that while consumers may express a preference for environmentally friendly products, their purchasing decisions are often influenced more by practicality and cost considerations.

The Influence of Environmental Concern on Green Trust (H2).

Environmental concern was found to have a positive and significant effect on green trust, confirming Hypothesis H2. This supports the findings of Adelia and Tunjungsari (2023), who argue that consumers with high environmental concern tend to place greater trust in green products. Similarly, Lestari et al. (2020) emphasize that environmental concern contributes to building consumer preference and trust toward sustainable products. Consumers who are aware of environmental issues are more likely to believe in the credibility and benefits of eco-friendly alternatives.

The Influence of Green Trust on Purchase Intention of Electric Vehicles (H3)

The results show that green trust significantly influences purchase intention, supporting Hypothesis H3. This is in line with studies by Lestari et al. (2020) and Pramesti et al. (2022), which found that trust in green products encourages consumers to proceed with actual purchases. Nurhalisa et al. (2023) also observed that consumers tend to choose products aligned with their environmental values. Similarly, Yeğın and Ikram (2022) confirmed that green trust positively impacts purchase intention for electric vehicles, as trust enhances the perceived benefits of environmentally friendly products.

The Influence of Knowledge of Government Policy on Purchase Intention of Electric Vehicles (H4)

Knowledge of government policy was shown to have a positive and significant effect on purchase intention, thereby supporting Hypothesis H4. This finding is consistent with Sukma et al. (2023), who emphasize the important role of government policy in encouraging electric vehicle adoption. Consumers who are aware of incentives—such as tax exemptions or subsidies—are more likely to consider purchasing electric vehicles. Gunawan and Suprapti (2015) further explain that consumer knowledge of both the product and related policies enhances their willingness to buy.

Research Implications

Based on the research findings, respondents showed a high level of environmental concern, but low levels of green trust, knowledge of government policy, and purchase intention. The analysis revealed that environmental concern does not significantly affect purchase intention, while green trust and knowledge of government policy do.

The low level of policy knowledge among respondents suggests a need to improve public awareness about government support for electric vehicles. Since most respondents belong to tech-savvy generations, social media can be an effective channel for disseminating information. Encouraging consumers to actively seek out policy information through various platforms is essential.

Efforts to boost purchase intention should involve multiple stakeholders. This includes building public understanding and trust through education, both online and offline, such as automotive exhibitions. Collaborating with influencers can also help reach broader audiences and guide consumer decisions.

Businesses can support this effort by promoting electric vehicles in engaging and easy-to-understand ways. Meanwhile, the government plays a key role as the regulator, issuing supportive policies and improving infrastructure. Adequate charging facilities, location accessibility, and affordable pricing remain crucial to accelerating electric vehicle adoption across all consumer segments.

CONCLUSION AND RECOMMENDATION

Conclusion

The findings of this study indicate a disparity between respondents' high environmental concern and their relatively low intention to purchase electric vehicles. This low purchase intention appears to be associated with limited knowledge of government policies and a moderate level of green trust.

Based on the SEM analysis, green trust and knowledge of government policy influence purchase intention for electric vehicles. First, environmental concern has a significant positive effect on green trust, the more individuals care about environmental issues, the greater their trust in eco-friendly products. Second, green trust positively affects purchase intention, meaning higher trust in electric vehicles leads to a stronger desire to purchase. Third, knowledge of government policy positively influences purchase intention; individuals with better knowledge of electric vehicle policies are more likely to buy. However, the findings also show that environmental concern does not directly affect purchase intention, indicating that increased awareness alone does not significantly drive the desire to purchase electric vehicles.

Recommendation

Based on the research findings, efforts are needed to improve public knowledge and understanding of government policies related to electric vehicles. One effective approach is using social media, which offers broad outreach. At the same time, efforts should also focus on increasing public purchase intention, which can be done by enhancing marketing strategies and product knowledge.

Building consumer trust in electric vehicles is equally important and can be achieved through collaboration with public figures and educational campaigns about the product. On the consumer side, increasing purchase intention can be supported by improving awareness of relevant policies and trust in eco-friendly products.

Businesses can play a role by educating consumers about the benefits of electric vehicles, launching promotional campaigns across various platforms, and offering test drive opportunities to enhance the consumer experience. Meanwhile, the government as a regulator is responsible for designing appropriate subsidy policies, pricing regulations, and expanding electric vehicle infrastructure to ensure accessibility for all consumers.

Future research is encouraged to expand the study area for broader insights. Further studies could also explore other variables such as price, green advertising, purchase decisions, and product knowledge. To address current study limitations, future research may consider using comparison groups and specifying the type of electric vehicle studied. For example, a generational comparison could be conducted to explore differences in purchase intention across age groups. Additionally, sample criteria could include both individuals who own and do not own an electric vehicle to gain a deeper understanding.

REFERENCES

- Adelia, & Tunjungsari, H. K. (2023). Pengaruh kepedulian lingkungan dan kesadaran kesehatan terhadap minat beli konsumen pada produk ramah lingkungan. *Jurnal Manajemen Bisnis dan Kewirausahaan*, 7(1), 151–163. <https://doi.org/10.24912/jmbk.v7i1.22478>
- Ardiyanti, D., Kurniawan, F., Raokter, U., & Wikansari, R. (2023). Analisis penjualan mobil listrik di Indonesia dalam rentang waktu 2020–2023. *ECOMA: Journal of Economics and Management*, 1(3), 114–122. <https://doi.org/10.55681/ecoma.v1i3.26>

- Bang, H. K., Ellinger, A. E., Hadjimarcou, J., & Traichal, P. A. (2000). Consumer concern, knowledge, belief, and attitude toward renewable energy: An application of the reasoned action theory. *Psychology & Marketing*, 17(6), 449–468. [https://doi.org/10.1002/\(SICI\)1520-6793\(200006\)17:6<449::AID-MAR2>3.0.CO;2-8](https://doi.org/10.1002/(SICI)1520-6793(200006)17:6<449::AID-MAR2>3.0.CO;2-8)
- Buhmann, K. M., Rialp-Criado, J., & Rialp-Criado, A. (2024). Predicting consumer intention to adopt battery electric vehicles: Extending the Theory of Planned Behavior. *Sustainability*, 16(3), 2–21. <https://doi.org/10.3390/su16031284>
- Badan Pusat Statistik Nasional. (2021). *Statistik transportasi darat*.
- CNBC. (2024, February 13). Pemerintah jor-joran kasih subsidi mobil listrik, ternyata demi ini. CNBC Indonesia. <https://www.cnbcindonesia.com/news/20240213172457-4-513921/pemerintah-jor-joran-kasih-subsidi-mobil-listrik-ternyata-demi-ini>
- Effendi, M. I., Sugandini, D., Sukarno, A., Kundarto, M., Arundati, R., & Berliana, N. (2020). *Perilaku pro-lingkungan pada mahasiswa* (1st ed.). Zahir Publishing.
- Egbue, O., & Long, S. (2012). Barriers to widespread adoption of electric vehicles: An analysis of consumer attitudes and perceptions. *Energy Policy*, 48, 717–729. <https://doi.org/10.1016/j.enpol.2012.06.009>
- Firmansyah, F. (2020). Pengaruh environmental concern dan perceived value terhadap purchase intention produk upcycled geometric creation. *Performa: Jurnal Manajemen dan Start-up Bisnis*, 4(6), 852–861. <https://doi.org/10.37715/jp.v4i6.1709>
- GAIKINDO. (2017). *Tahun 2040 Indonesia stop mobil berbahan bakar minyak*. <https://www.gaikindo.or.id/tahun-2040-indonesia-stop-mobil-berbahan-bakar-minyak>
- Gunawan, I., Redi, A. A. N. P., Santosa, A. A., Maghfiroh, M. F. N., Pandiyaswargo, A. H., & Kurniawan, A. C. (2022). Determinants of customer intentions to use electric vehicle in Indonesia: An integrated model analysis. *Sustainability*, 14, 1–22. <https://doi.org/10.3390/su14041972>
- Gunawan, K. Y. I., & Suprapti, N. W. S. (2015). Peran pendapatan dalam memoderasi pengaruh sikap pada kesediaan membayar produk ramah lingkungan. *Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan*, 9(1), 74–82. <https://ojs.unud.ac.id/index.php/jmbk/article/view/14402>
- Handarujati, E. (2024). Analysis of factors driving purchase intention of electric cars: Perspective of Theory of Planned Behavior, Norm Activation Model, and Technology Acceptance Model. *Jurnal Ekonomi dan Bisnis UBS*, 13, 108–129. <file:///C:/Users/Nurazizah%20Aprilia/Downloads/1279-Article%20Text-5599-1-10-20240202.pdf>
- Haryono, S. 2016. *Metode SEM untuk Penelitian Manajemen AMOS LISREL PLS*. Pertama. Jakarta: PT. Intermedia Personalia Utama.
- Istianto, B. (2019). *Transportasi jalan di Indonesia: Sejarah dan perkembangannya*. Melvana Publishing.
- Lee, J., Baig, F., Talpur, M. A. H., & Shaikh, S. (2021). Public intentions to purchase electric vehicles in Pakistan. *Sustainability*, 13(10), 1–18. <https://doi.org/10.3390/su13105523>
- Lestari, E. R., Putri, H. K., Anindita, C., & Laksmiari, M. B. (2020). Pengaruh green product (minuman ramah lingkungan), green advertising, dan kepedulian lingkungan terhadap green trust dan implikasi terhadap minat beli. *Jurnal Teknologi Pertanian*, 21(1), 1–10. <https://doi.org/10.21776/ub.jtp.2020.021.01.1>
- Mohamed, M., Higgins, C. D., Ferguson, M., & Réquia, W. J. (2018). The influence of vehicle body type in shaping behavioural intention to acquire electric vehicles: A multi-group structural equation approach. *Transportation Research Part A: Policy and Practice*, 116, 54–72. <https://doi.org/10.1016/j.tra.2018.05.011>
- Nurhalisa, S., Wahyuningsih, T., Liestyana, Y., Utami, Y., & Tugiyono. (2023). Analysis of green product, green advertising, green perceived value, green trust, and green purchase intention of Aqua product in Special Region of Yogyakarta. *Journal of International Conference Proceedings*, 6(6), 29–41. <https://doi.org/10.32535/jicp.v6i6.2653>
- Pramesti, P., Cahyaningrum, Y. A. D., & Rahayu, F. (2022). Konsekuensi dari green lifestyle, product knowledge, dan community. *Jurnal Ekonomi Trisakti*, 2(2), 555–566. <https://doi.org/10.25105/jet.v2i2.14303>
- Praminingsih, I., Putrawan, I. M., & Suryanda, A. (2021). Pengaruh kepedulian lingkungan (environmental concern) dan paradigma lingkungan baru (new environmental paradigm) terhadap intensi perilaku pro lingkungan (behavioral intention) siswa. *Indonesian Journal of Environmental Education and Management (IJEEM)*, 6(1), 1–15. <https://doi.org/10.21009/ijeem.061.01>
- Peraturan Presiden Republik Indonesia Nomor 79 Tahun 2023 tentang Perubahan atas Peraturan Presiden Nomor 55 Tahun 2019 tentang Percepatan Program Kendaraan Bermotor Listrik Berbasis Baterai (Battery Electric Vehicle). <https://peraturan.bpk.go.id/Details/273447/perpres-no-79-tahun-2023>

- Peraturan Menteri Energi dan Sumber Daya Mineral Republik Indonesia Nomor 1 Tahun 2023 tentang Penyediaan Infrastruktur Pengisian Listrik untuk Kendaraan Bermotor Listrik Berbasis Baterai. <https://peraturan.bpk.go.id/Details/252409/permen-esdm-no-1-tahun-2023>
- Primastuti, N. A., & Puspitasari, A. Y. (2021). Studi literature: Penerapan green transportation untuk mewujudkan kota hijau dan berkelanjutan. *Jurnal Kajian Ruang*, 1(1), 62. <https://doi.org/10.30659/jkr.v1i1.19980>
- Purwanto, S., & Prima Rini, H. (2022). Analysis of green self-identity and environment concern on adopt electric vehicle intention with perception of EV and subjective norm as mediation variables. *International Journal of Social Service and Research*, 2(10), 964–976. <https://doi.org/10.46799/ijssr.v2i10.168>
- Salsabila, H., & Salehudin, I. (2023). Plugged in and charging: Environmentalism factors does affect behavioral intention to purchase electric cars in Indonesia, but non-environmental factors are important too. *Smart City*, 3(2), 1–20. <https://doi.org/10.56940/sc.v3.i2.1>
- Subekti, R. A., Sudibyo, H., Susanti, V., Saputra, H. M., & Hartanto, A. (2014). *Peluang dan tantangan pengembangan mobil listrik nasional*. LIPI Press.
- Sugandini, D., Sukarno, A., Effendi, M. I., Kundarto, M., Rahmawati, E. D., & Arundati, R. (2020). *Perilaku konsumen pro-lingkungan*. Zahir Publishing. https://www.academia.edu/7193279/Perilaku_Konsumen
- Sukma, A., Suroso, A. I., & Hermadi, I. (2023). The effect of environmental concerns and government policies on the intention to buy electric car. *Business Review and Case Studies*, 4(1), 52–61. <https://doi.org/10.17358/brcs.4.1.52>
- Suprpto, D. Y., & Efendi. (2017). Analisis mediasi green trust pada purchase intention produk green. *Jurnal Sains Pemasaran Indonesia*, 16(3), 182–194. <https://doi.org/10.14710/jspi.v16i3.182-194>
- Tokopedia. (n.d.). *Penjualan mobil dan motor listrik naik 2 kali lipat di Tokopedia, catat 5 kelebihan pakai kendaraan listrik*. https://www.tokopedia.com/blog/penjualan-mobil-dan-motor-listrik-naik-2-kali-lipat-di-tokopedia-catat-5-kelebihan-pakai-kendaraan-listrik-rls/?utm_source=google&utm_medium=organic
- Undang-Undang Republik Indonesia Nomor 16 Tahun 2016 tentang Pengesahan Paris Agreement to the United Nations Framework Convention on Climate Change. (n.d.). <https://peraturan.bpk.go.id/Details/37573>
- Wella, S. F., & Chairy. (2020). Implementasi sustainability sebagai alat pemasaran pada era pandemi Covid-19. *Jurnal Muara Ilmu Ekonomi dan Bisnis*, 4(2), 343–353. <https://doi.org/10.24912/jmieb.v4i2.8284>
- Yadav, R., Balaji, M. S., & Jebarajakirthy, C. (2018). How psychological and contextual factors contribute to travelers' propensity to choose green hotels? *International Journal of Hospitality Management*, 77, 385–395. <https://doi.org/10.1016/j.ijhm.2018.08.002>
- Yeğin, T., & Ikram, M. (2022). Analysis of consumers' electric vehicle purchase intentions: An expansion of the Theory of Planned Behavior. *Sustainability*, 14, 2–27. <https://doi.org/10.3390/su141912091>
- Yin, J., Zheng, M., & Chen, J. (2015). The effects of environmental regulation and technical progress on CO₂ Kuznets curve: An evidence from China. *Energy Policy*, 77, 97–108. <https://doi.org/10.1016/j.enpol.2014.11.008>
- Zhang, X., Wang, K., Hao, Y., Fan, J. L., & Wei, Y. M. (2013). The impact of government policy on preference for NEVs: The evidence from China. *Energy Policy*, 61, 382–393. <https://doi.org/10.1016/j.enpol.2013.06.114>