Increasing Purchase Intention of Electric Vehicles and Its Influencing Factors

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Abstract. The transportation sector is undergoing a significant transition from fossil fuels to electric energy, driven by its substantial contribution to greenhouse gas emissions. Globally, the adoption of electric vehicles (EVs) is advancing rapidly, with progress closely tied to national policies, including those implemented by Indonesia. As part of its ambition to establish itself as a hub for the global EV industry, Indonesia faces various challenges that must be addressed. The government plays a pivotal role in encouraging both the industry and the public to transition from traditional fossil-fueled vehicles to electric alternatives. Initially, the adoption of electric vehicles in Indonesia was relatively slow. However, the market is expected to grow over time, with brighter prospects for the EV sector. Achieving substantial market penetration requires strong government support while also recognizing the critical role of consumer purchase intentions. This research focuses on identifying the factors influencing consumer decisions to buy electric vehicles. Additionally, it aims to provide recommendations to the government, manufacturers, and sellers, enabling them to design strategies that effectively attract and meet consumer needs in the EV market.

Keywords: Electric Vehicle, Purchase Intention, Perceived Behavior.

1 Introduction

Reducing carbon emissions worldwide poses complex challenges, especially in the transportation sector. A report by the International Energy Agency (IEA) shows that the transportation sector contributes about a quarter of total gas emissions worldwide, which is predicted to increase from 23 to 50% by 2030 [1]. Efforts need to be made to improve the energy efficiency of vehicles and exploit energy-efficient transportation innovations to address increasingly serious environmental problems. One type of innovation in transportation is Electric Vehicles (EVs). Electric vehicles (EVs) are equipped with both a traditional internal combustion engine and an electric motor, allowing them to alternate between these two propulsion systems [2]. It should be noted that EVs have lower carbon emissions by an average of 30-50% and can achieve a 40-60% improvement in fuel efficiency [3].

In Indonesia, the initial adoption rate of electric vehicles is relatively modest. Nevertheless, it is expected that the market will expand over time, and the future outlook for EVs will become more promising [4]. However, EV market penetration certainly requires government support,

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but it should be noted that consumer intention to buy is also a very important factor. The data is presented in the following figure:

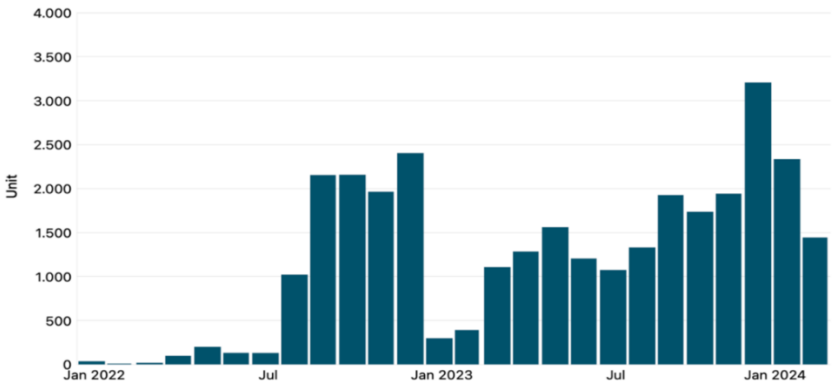

Fig. 1. Electric Vehicle Sales Data in Indonesia

Source: Databoks, 2024

Based on the figure above, it can be seen that per year the overall sales of EVs have increased although in February 2024 it decreased from January 2024 by 38.2%. In light of this sales issue, it is important to look at what influences consumers' purchase intentions for electric vehicles in Indonesia. The purpose of this study is to investigate consumers' intention in deciding to adopt EVs, and moreover to provide input for the government and vehicle sellers to promote EVs according to the factors that influence consumers' purchase intention.

2 Literatur Review

2.1 State of The Art

This research delves into the extended theory of planned behavior by incorporating additional variables such as personal moral norms, environmental awareness, consumer knowledge, and government policies to enhance its predictive accuracy. It focuses primarily on purchase intention to identify the key factors influencing the decision to purchase electric vehicles.

This study analyzes the factors that influence the purchase intention of electric vehicles in Indonesia based on the Theory of Planned Behavior model. The literature review conducted refers to and adopts the TPB (Theory of Planned Behavior) theory. Theory of Planned Behavior is designed to predict and reveal human behavior in a particular context [5]. TPB is built on the assumptions of human behavior in the Theory of Reasoned Action (TRA) [6] [7]. Both theories operate on the assumption that individuals make rational and deliberate choices about their actions by analyzing the information available to them. However, the Theory of Planned Behavior (TPB) emerged from recognizing that human behavior is not always entirely voluntary or within direct control. To address this limitation, perceived behavioral control was integrated into the Theory of Reasoned Action (TRA), transforming it into the TPB. In this framework, an individual’s actions or behaviors are influenced by their behavioral intentions, which are shaped by personal attitudes, perceived control over the behavior, and societal subjective norms. These attitudes, subjective norms, and perceived

behavioral control—rooted in underlying beliefs—can either positively or negatively affect an individual's behavioral intentions and subsequent actions.

2.2 Purchase Intention

Green purchase intention refers to the concept in which consumers choose to buy environmentally friendly products, prioritizing them over conventional options [8]. It can be described as an individual's willingness to opt for green products during the decision-making process [9]. This behavior reflects a preference for products that pose less harm to the environment. Green consumerism, which involves the use and promotion of eco-friendly products, is considered one of the most significant forms of environmental awareness [10]. Buying intentions on environmentally friendly products have many benefits for protecting the world and the environment because environmentally friendly products can be recycled. Green buying can be defined as buying environmentally friendly products or commonly called green products [11].

Purchase intention is a key concept in marketing literature, widely utilized by companies as a predictor for the sales of new products and the repurchase of existing ones [12]. It plays a significant role in influencing the purchase of eco-friendly products, with green purchase intention serving as a predictor of environmentally conscious purchasing behavior. Furthermore, green purchase intention is analyzed as an indicator of future behavior related to green product adoption [13].

2.3 Attitude

Attitude is what a person uses in evaluating things that he judges favorable or unfavorable [14]. According to Kai & Haokai, individual attitude is a person's perception of positive or negative feelings when doing something [15]. In his research, Ajzen found that attitudes are proven to significantly influence the intention to do something [5]. It is also known that increasing attitudes will also have an impact on increasing intentions. Basically, the things that shape a person's attitude are direct feelings, experiences, something expected from others. Research by Narteh et al. in 2012 for example, which found that someone will buy a car brand based on their liking for a particular car brand [16].

People in general will form their beliefs about something based on certain properties or features of an object, namely positive or negative views of objects, actions or features on these objects. In research conducted by Wang et al. in 2016 also concluded that attitudes substantially predict intentions in the field of electric vehicles [17]. This shows that a person's attitude generally affects the intention to buy accordingly, in this case an electric vehicle. This is a concern that producers and the government must be able to encourage positive experiences because positive experiences will lead to positive attitudes and vice versa. Based on these studies, we as researchers formulate the following hypothesis:

Hypothesis 1: Attitude has a positive influence on the purchase intention of electric vehicles in Indonesia.

2.4 Perceived Behavioral Control

Perceived Behavioral Control refers to an individual's perception of the ease or difficulty of performing a particular behavior. Ajzen suggests that this perception may be influenced by past experiences and expectations of situational factors that could hinder the behavior [5]. For

instance, factors such as vehicle fuel costs and the expenses associated with electric vehicles have been shown to impact consumer decisions [18]. Maintenance costs, including expenses for replacing oil filters, fuel filters, and air filters, also significantly influence consumer intentions. In a survey of 1,000 participants, respondents prioritized low operational costs over environmental benefits, with those focused on reduced usage costs showing a higher likelihood of purchasing electric vehicles [19]. Additionally, consumers express concern about the availability of charging stations at convenient distances [20]. Since electric vehicles rely on electricity, a stable and reliable power supply is essential. However, there are concerns about the adequacy of the current distribution and transmission infrastructure to meet these needs [21]. Jesvita and Edwin discovered that perceived behavioral control partially influences purchase intention at SOGO Department Store, Tunjungan Plaza, Surabaya [22]. On the other hand, some studies found no positive effect of perceived behavioral control on purchase intention in the context of Grab online transportation services [23]. Based on these findings, the researchers propose the following hypothesis:

Hypothesis 2: Perceived behavioral control has a positive influence on the purchase intention of electric vehicles in Indonesia.

2.5 Subjective Norm

The second factor that is thought to influence purchase intention is one of the social factors called subjective norm. Subjective norm is the social pressure a person feels to do or not do a certain behavior. Subjective norms focus more on whether a person is influenced by those around him to behave in a certain way or not [7]. This can encourage someone to do something, for example by driving an electric vehicle, it will give a certain impression such as increased status, differentiation from others, and so on [24]. Subjective norms are vital to know their impact on the electric vehicle adoption process because the purchase intention that arises has a link to the social status and image of a person in society. This is linear with Acheampong's research that the acceptance of the community and the closest people also influences the respondent's intention to do something which in this study is cycling [25]. Similar research from Afroz et al., also found that consumers in Malaysia to buy electric vehicles are also influenced by their relatives and friends [26]. Jesvita and Edwin also found that subjective norms partially affect purchase intention at SOGO department store Tunjungan Plaza Surabaya [22]. However, Romadhoni and Ahmad found the opposite that there was no positive influence between subjective norm variables on the purchase intention of Grab online transportation services [23]. Therefore, the researcher formulates the following hypothesis:

Hypothesis 3: Subjective norms have a positive influence on the purchase intention of electric vehicles in Indonesia.

2.6 Personal moral

Personal moral norms are individual attitudes related to the extent to which they feel morally obligated to take certain actions [27]. Basically, the higher a person's personal moral norms will certainly be able to increase the intention to perform a behavior, especially those that have an impact on the environment. But, in other research known if personal moral norms do not increase intention as expected if it is found that people's subjective norms in China influence intention more than personal moral norms [28]. Generally, countries with high collectivist traits have higher levels of social influence, but this is moderated by people's income [29].

People with higher incomes tend to have individualistic traits regardless of the cultural orientation of the nation [29]. Therefore, the researcher formulates the following hypothesis:

Hypothesis 4: Personal moral norms have a positive influence on the purchase intention of electric vehicles in Indonesia.

2.7 Concern for environmental sustainability

Environmental sustainability concern is a crucial factor in understanding its influence on an individual's intention to purchase an electric vehicle. Recognizing the significance of addressing environmental issues plays a vital role in the acceptance and adoption of electric vehicles. As stated by Rezvani et al., the use of electric vehicles is considered an essential step toward environmental protection [30]. This aligns with the findings of Turcksin et al., who demonstrated a strong relationship between environmental concerns and attitudes toward purchasing alternative fuel vehicles. Their research indicates that greater environmental awareness among consumers leads to more positive attitudes toward such vehicles [31]. Similarly, studies have confirmed that individuals who are highly concerned about the environment are more inclined to purchase electric vehicles [32]. Moreover, research by Shnayder et al. highlights that the primary factors influencing vehicle choice are the initial purchase price and emissions produced by the vehicle [33]. Based on these insights, the researchers propose the following hypothesis:

Hypothesis 5: Environmental concerns have a positive influence on consumer attitudes towards electric vehicles.

2.8 Consumer knowledge

Consumer knowledge can be interpreted as appreciation, understanding, or familiarity with facts, information, descriptions, or skills obtained through experience or education about something [34]. Consumer knowledge about a product will help predict behavior in the adoption process of a product [35]. The main key to acceptance of the use of hydrogen fuel, for example, turns out to be determined to be awareness and knowledge in advance in order to be accepted by consumers.

Consumers with a strong understanding of environmental issues are more likely to purchase alternative fuel vehicles, regardless of the vehicle's environmental impact. However, this view is challenged by Simsekoglu and Nayum, who argue that the relationship between consumer awareness and purchase intention is relatively weak [24]. Additionally, uncertainty about the performance and safety of electric vehicles arises from a lack of consumer knowledge about their history and characteristics compared to conventional vehicles [24]. Based on these findings, the researchers propose the following hypothesis:

Hypothesis 6: Consumer knowledge has a positive influence on consumer attitudes towards electric vehicles

2.9 Government Policy

In the initial penetration of electric vehicles the government is an important element as a driving force [36]. The government is able to provide interventions to encourage the use of electric vehicles through policies such as monetary incentives and non-monetary incentives [36]. It is known that the government has also begun to provide such incentives in the form of

subsidies for those who buy or incentives in the form of tax reductions that have an impact on reducing the price of electric vehicles, providing tax holidays for those who build charging infrastructure and reducing the cost of electricity. Gallagher and Muehlegger in their research found that tax subsidies are much more likely to encourage consumer purchases than other supporting incentives [37]. Therefore, the researcher formulates the following hypothesis:

Hypothesis 7: Indonesian government policies have a positive influence on perceived behavioral control.

3 Methods

3.1 Research Procedure

This study adopts a quantitative research design to examine the influence of subjective norms, perceived behavioral control, personal moral norms, environmental concerns, consumer awareness, and government policies on consumer purchase intentions for electric vehicles in Indonesia. The research model is tested through a systematic procedure comprising multiple stages, starting with a literature review to ensure accurate and relevant measurements of consumer behavior, and concluding with the preparation of reports and publication articles. Below is a detailed explanation of each research stage, accompanied by a flowchart of the research procedure.

3.1.1 Literature Study

The literature review serves as the foundation for this research, providing critical insights for developing measurement instruments. This stage is essential to ensure the constructed model accurately represents empirical conditions and can be generalized. By reviewing previous studies, the research gains a theoretical basis and aligns its methodology with established practices.

3.1.2 The Preparation of Instrument (Indicator)

Instrument preparation is based on findings from the literature review and previous research tools that have passed validity and reliability tests. The measurement instruments focus on the Theory of Planned Behavior (TPB) model, addressing factors influencing consumer reluctance to purchase electric vehicles. Instruments are deemed valid if they meet a construct validity test factor loading threshold above 0.50 [38], and reliable if the Cronbach's Alpha exceeds 0.70 [38].

Indicators used for measurement adhere to validity and reliability requirements established in prior studies, such as those by [39], [40], [41], [42], and [43].

3.1.3 Data Collection

This study employs both primary and secondary data collection methods. Primary data is gathered through online and offline questionnaires, supplemented with interviews when detailed information is needed. Secondary data, such as eco-tourism visitor statistics in Lampung, serves as supporting documentation for model validation. The data collection period is planned for a maximum of four weeks, with the target sample size set at 200

respondents, as suggested by [38]. The sampling technique employs non-probability sampling, specifically purposive sampling, targeting individuals who understand factors influencing electric vehicle purchase intentions in Indonesia. The sample includes respondents from nearly all Indonesian provinces, ensuring diverse representation.

3.1.4 Data Tabulation and Editing

Data from completed questionnaires are tabulated in the Excel database, and responses are reviewed for completeness. Blank or incomplete responses are addressed by redistributing questionnaires to the same or alternate respondents when feasible. This step ensures the dataset's reliability and accuracy.

3.1.5 Data Analysis

Quantitative analysis is conducted to investigate the relationships between research variables. The study aims to assess how subjective norms, perceived behavioral control, personal moral norms, environmental concerns, consumer awareness, and government policies affect consumer purchase intentions for electric vehicles in Indonesia. The population includes all Indonesians who either own or intend to purchase electric vehicles. Using purposive sampling, the study targets a sample size between 165 and 330 respondents, calculated as 5–10 times the number of research indicators (33 indicators in total) (Hair et al., 2018). The representative sample size for Structural Equation Modeling (SEM) analysis typically ranges from 100 to 500 respondents [38]. Validity and reliability tests are conducted for each variable and indicator. Responses are measured on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Data is analyzed using the Partial Least Square (PLS) program to evaluate the model and hypotheses.

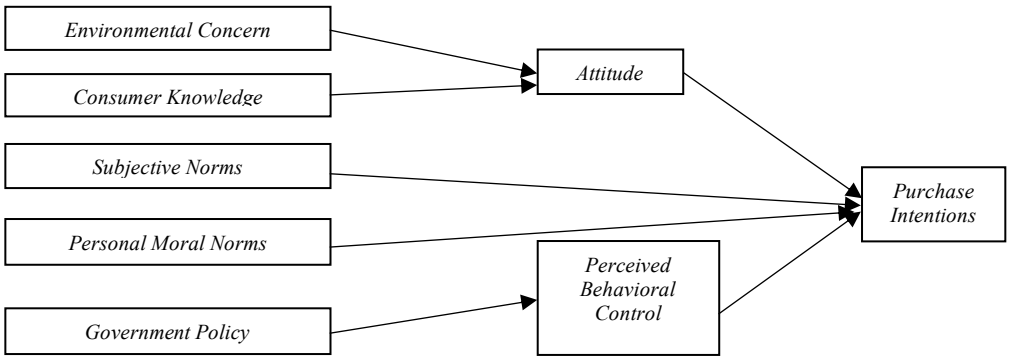

Fig. 2. Proposed Research Model
Increasing Intention to Purchase Electric Vehicles and its Influencing Factors, 2023

3.1.6. Preparation of Reports and Publication Articles

The results of this preparation form the Research Report and are continued with the preparation of articles ready for publication in reputable International Journals at least in the Sinta 2 National Journal or Scopus / WOS Indexed International Journal. Based on the

research procedure, the process in this research can be outlined in a fishbone flow that can be seen in Figure 3.2.

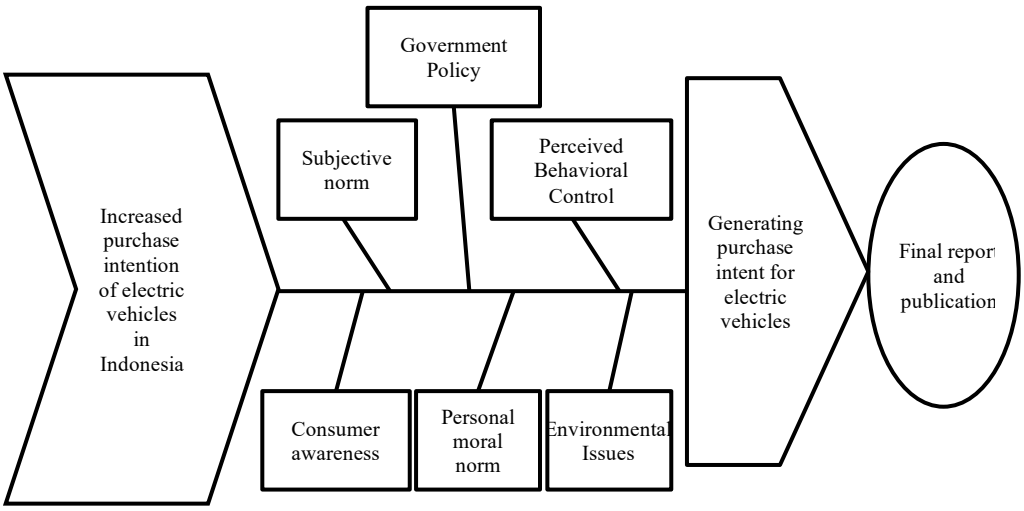

Fig. 3. Fishbone Diagram of Research Procedur

3.2 Research Location

This research focuses on electric vehicle consumers in Indonesia, because this research is an extension of research and recommendations from research results. [39], and [40] which specifically measures consumer purchase intention on electric vehicles.

4 Result and Discussions

4.1 Respondent Profile Data

Table 1. Profile of Respondents by age

No	Status	Frequency	Percentage
1.	19 - 25 years	171	53.4%
2.	26 – 35 years	89	27.8%
3.	36 - 45 years	35	10,9%
4.	46 - 55 years	25	7.8%
5.	56 > years	0	0%
Total		**320**	**100%**

Source: Data Processed, 2024

Based on the survey results, the data shows that the most age is 19-25 years old, which is generation Z, this shows that those interested in electric vehicles are more in the younger generation who are faster in adapting the latest technology and information about the latest products and especially electric vehicles.

Table 2. Profile of Respondents by status

No	Status	Frequency	Percentage
1.	Married	124	38.7%
2.	Single	196	61.3%
	Total	**320**	**100%**

Source: Data Processed, 2024

The survey results show that those interested in purchasing an electric vehicle are more likely to be young and unmarried because the current electric vehicle is not a vehicle that can accommodate many passengers or family size and has a limited mileage.

Table 3. Respondent Profile based on monthly income

No	Monthly Income	Frequency	Percentage
1.	Rp 500.000 - 2.000.000	172	53.8%
2.	Rp 2.000.001 - 50.000.000	60	18.8%
3.	Rp 5.000.001-10.000.000	50	15.6%
4.	Rp 10.000.001-25.000.000	25	7,8%
5.	Rp > 25.000.000	13	4%
	Total	**320**	**100%**

Source: Data Processed, 2024

The survey results show that those who intend to purchase an electric vehicle range from IDR 500,000 - IDR 2,000,000, which is still a low income compared to the price of an electric vehicle. This suggests that in the future the intention to purchase an electric vehicle will increase based on the assumption that this younger generation will have a larger income in the next few years.

Table 4. Respondent Profile based on monthly education

No	Education	Frequency	Percentage
1.	SMP (Junior High School)	0	0%
2.	SMA/Equivalent (Senior High School)	147	45.9%
3.	S1 (Bachelor)	110	34.4%
4.	S2 (Master)	54	16.9%
5.	S3 (Doctoral)	9	2.8%
	Total	**320**	**100%**

Source: Data Processed, 2024

The survey results show that those who intend to purchase electric vehicles are students and graduates. This shows that they are educated people who understand the benefits of using electric vehicles.

Table 5. Profile of Respondents by work

No	Status	Frequency	Percentage

1.	Civil Servant / Military / Police	57	17.8%
2.	Entrepreneur	47	14.7%
3.	Private Employee	56	17.5%
4.	Student	160	50%
Total		**320**	**100%**

Source: Data Processed, 2024

The survey results show that those who intend to purchase electric vehicles are students and graduates. This shows that they are educated people who understand the benefits of using electric vehicles.

Table 6. Profile of Respondents by gender

No	Status	Frequency	Percentage
1.	Female	202	63.1%
2.	Male	118	36.9%
Total		**320**	**100%**

Source: Data Processed, 2024

The survey results show that those who intend to purchase electric vehicles are more women. This shows that women are currently more interested in buying electric vehicles because the design of many electric vehicles is small and has an attractive design for women and women use vehicles only for transportation in the city compared to men.

Table 7. Profile of Respondents by residence

No	Place of Residence	Frequency	Percentage
1.	Sumatra Island	245	75%
2.	Java Island	48	15%
3.	Bali, Lombok, and Nusa Tenggara Islands	7	2,2%
4.	Kalimantan Island	12	3,75%
5.	Sulawesi Island	8	2,5%
Total		**320**	**100%**

Source: Data Processed, 2024

The survey results in this study show that most respondents come from the island of Sumatra, this is a limitation of our research which still has not obtained national data that can represent each region in Indonesia more evenly.

4.2 Validity and Reliability

Table 8. Validity Test Results

	Attitude	Consumer Knowledge	Environt-mental Concern	Gover-ment Policy	Perceived Behavioral Control	Personal Moral Norms	Purchase Intentions	Subjective Norms

	Attitude	Consumer Knowledge	Environt-mental Concern	Gover-ment Policy	Perceived Behavioral Control	Personal Moral Norms	Purchase Intentions	Subjective Norms
A(M)1	0,913							
A(M)2	0,902							
A(M)3	0,898							
A(M)4	0,900							
A(M)5	0,894							
CK(X)1		0,886						
CK(X)2		0,824						
CK(X)3		0,782						
EC(X)1			0,825					
EC(X)2			0,851					
EC(X)3			0,730					
EC(X)4			0,836					
GP(X)1				0,867				
GP(X)2				0,732				
GP(X)3				0,812				
PBC(M)1					0,742			
PBC(M)2					0,859			
PBC(M)3					0,800			
PBC(M)4					0,866			
PBC(M)5					0,888			
PBC(M)6					0,762			
PI(Y)1							0,951	
PI(Y)2							0,966	
PI(Y)3							0,952	
PNM(X)1						0,749		
PNM(X)2						0,872		
PNM(X)3						0,881		
PNM(X)4						0,845		
SN(X)1								0,892
SN(X)2								0,889
SN(X)3								0,904
SN(X)4								0,898
SN(X)5								0,747

Source: Data Processed, 2024

The validity test results were carried out using the smartpls application and the results showed that the loading factor value was greater than 0.05 so that each indicator was considered valid and reliable for measuring the variables studied.

Table 9. Reliability Test Results

	Cronbach's Alpha	**rho_A**	**Composite Reliability**	**Average Variance Extracted (AVE)**
Attitude	0,942	0,942	0,956	0,812
Consumer Knowledge	0,780	0,812	0,870	0,692
Environtmental Concern	0,827	0,838	0,885	0,659
Goverment Policy	0,731	0,757	0,847	0,649
Perceived Behavioral Control	0,903	0,913	0,925	0,675
Personal Moral	0,857	0,860	0,904	0,703

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Norms				
Purchase Intentions	0,953	0,954	0,970	0,915
Subjective Norms	0,917	0,922	0,938	0,754

Source: Data Processed, 2024

The results of data processing to test reliability show that the indicators on the latent variables in this study have all been proven reliable and consistent in measuring latent variables based on the Cronbach's Alpha value which is above 0.7 and the AVE value above 0.6.

Fig 4. Outer Loading

4.3 Hypothesis Test

Table 10. Hypothesis Test Results Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Attitude -> Purchase Intentions	0,260	0,260	0,079	3,304	0,001
Consumer Knowledge -> Attitude	0,232	0,236	0,059	3,913	0,000
Environtmental Concern -> Attitude	0,306	0,307	0,050	6,180	0,000
Goverment Policy -> Perceived Behavioral Control	0,496	0,497	0,056	8,827	0,000
Perceived Behavioral Control -> Purchase Intentions	0,386	0,389	0,069	5,605	0,000
Personal Moral Norms -> Purchase Intentions	0,057	0,055	0,052	1,103	0,270
Subjective Norms -> Purchase Intentions	0,164	0,164	0,069	2,382	0,018

Source: Data Processed, 2024

Based on table 10, it can be seen that the results of testing the direct effect on hypotheses 1-2 and 5-7 proposed are supported or accepted, while hypothesis 6 is not supported.

Table 11. Indirect Effect Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Consumer Knowledge -> Attitude -> Purchase Intentions	0,060	0,062	0,025	2,375	0,018
Environtmental Concern -> Attitude -> Purchase Intentions	0,080	0,080	0,029	2,763	0,006
Goverment Policy -> Perceived Behavioral Control -> Purchase Intentions	0,192	0,193	0,040	4,746	0,000

Source: Data Processed, 2024

Hypothesis testing of indirect effects is intended to test whether there is an indirect effect of independent variables on the dependent variable through the mediating variable. The test criteria state that if the t-value is greater than the t-table (1.96), it is stated that there is a significant effect of the independent variable indirectly on the dependent variable through the mediating variable. Based on table 4.11 above, it can be informed that testing of indirect effects or hypotheses 3 and 4 and hypothesis 8 is supported.

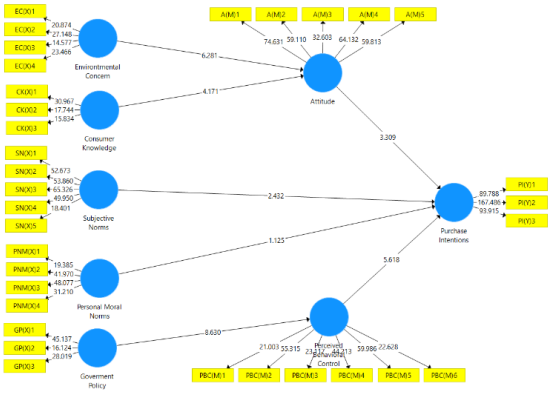

Fig 5. Inner Model

4.4 Discussion

The results of statistical analysis that have been carried out in this study indicate that the higher a person's concern for the environment can lead to a positive consumer attitude towards electric vehicles and can increase a person's intention to purchase an electric vehicle. High consumer knowledge of the technology and facilities of electric vehicles can also increase a person's positive attitude towards electric vehicles and will have a tendency for someone to purchase an electric vehicle. This is in accordance with research from [16] and [17], which states that the more positive a person's attitude is, the greater a person's tendency to behave, where this positive attitude is influenced by knowledge of electric vehicles and consumer concern for the environment so that high knowledge of consumers about electric vehicles and high consumer concern for the environment has an indirect influence or can indirectly increase consumer intention to buy electric vehicles.

Government policies that support the electric fuel vehicle industry can also increase the perception of consumer behavioural control and can increase consumer intention to purchase electric fuel vehicles. This shows that the role of the government is very important for increasing sales of electric vehicles. The government is expected to provide facilities and incentives as well as more intensive socialisation so that the public better understands government programs that support the electric fuel vehicle industry.

Subjective norms, namely the social pressure that a person feels to do or not do a certain behaviour, have a direct influence on consumer intention to buy an electric fuel vehicle. The opinions of others and the views of others will greatly determine whether someone will buy an electric fuel vehicle or not, for this reason it is necessary for the government and companies in the electric vehicle industry to build a positive image of electric fuel vehicles.

In research, personal norms have no influence on consumer purchase intentions in purchasing electric vehicles, this could be because personal moral norms do not increase the intention to purchase electric fuelled vehicles where it is found that the subjective norms of people in China influence intentions more than personal moral norms. Generally, countries with high collectivist traits have higher levels of social influence, but this is moderated by people's income. In the case of the respondents in this study, most of them are students who have no income and come from families with a collectivist culture, which is the culture of the people in Indonesia.

5 Conclusions and Suggestions

5.1 Summary

This study shows that hypotheses 1, 2, 3, 5, 6, 7 are supported while hypothesis 4 is not supported. Hypothesis 1 which suspects that attitudes can increase consumer purchase intentions is significantly proven. Hypothesis 2 which suspects that perceived behavioral control over electric vehicles increases consumer intentions on electric vehicles is proven to have a significant effect. Hypothesis 3 which suspects that subjective norms have an influence on consumer purchase intentions on electric fuel vehicles is proven to have a significant effect. Hypothesis 4 which suspects that personal norms can influence consumer purchase intentions on electric vehicles is proven to be unsupported. Hypothesis 5 which suspects that concern for the environment can improve consumer attitudes is proven to be significant. Hypothesis 6 that consumer knowledge of electric vehicles affects consumer attitudes towards electric vehicles proved to have a significant effect. Hypothesis 7 suspects that government policies are proven to influence perceived behavioral control and increase consumer purchase intentions on electric vehicles.

5.2 Suggestions

The suggestion that can be given based on the results of this study is that the important role of the government is very important in increasing consumer purchase intention on electric vehicles because it can increase the perception of consumer behavior control where consumers will have a positive perception of electric vehicles if there is support from the government, especially in providing facilities and infrastructure for electric vehicle needs and also incentives such as low taxes for electric vehicle owners. Company owners and the government

also need to build a good image for electric vehicle users because the opinion of the public or other people towards positive electric vehicle users can affect consumer intention to buy electric vehicles and intensive campaigns and information also need to be done to educate the public about the importance of using electric vehicles in our next lives.

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