

The Effect of Government Support on the Purchase Intention of Electric Vehicles

Diah Wulandari, Albert Sugianto, Rani Rahputri, Julbintor Kembaren, Iman Permana

Bina Nusantara University, Indonesia

Email: diah.wulandari@binus.ac.id, albert.sugianto@binus.ac.id, rani.rahputri@binus.ac.id,
julbintor.kembaren001@binus.ac.id, iman.permana@binus.ac.id

Abstract. This study examines the influence of psychological factors and government support on consumers' purchase intention toward electric vehicles (EVs) in the Greater Jakarta (Jabodetabek) area by employing an extended Theory of Planned Behavior (TPB) framework. The model investigates the effects of emotional value, attitude toward EVs, subjective norm, perceived behavioral control (PBC), and the moderating role of government support. A quantitative survey method was applied to 291 potential EV consumers aged 18 years and above residing in Jabodetabek. Data were collected through an online Likert-scale questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The findings indicate that emotional value has a significant positive effect on attitude toward EVs, and both attitude and subjective norm significantly enhance purchase intention. Attitude is also found to significantly mediate the relationship between emotional value and purchase intention. Conversely, PBC does not exhibit a significant effect on purchase intention. Moreover, government support does not moderate the relationships between attitude or subjective norm and purchase intention and only shows a weak, negative moderating effect on the relationship between PBC and purchase intention. Overall, the results suggest that EV purchase intention in Jabodetabek is driven more strongly by emotional and normative factors than by perceived behavioral control or perceived government support.

Keywords: electric vehicle, purchase intention, Theory of Planned Behavior, emotional value, government support, Jabodetabek.

INTRODUCTION

The energy transition and decarbonization of the transportation sector have made electric vehicles (EVs) one of the key public policy instruments in various countries to reduce carbon footprints, greenhouse effects, congestion, and fossil fuel dependence in urban areas (Pontes et al., 2024; Eccarius & Chen, 2024). At the global level, many countries are adopting various forms of government support, ranging from price subsidies, tax reductions, and import duty exemptions to stricter emission regulations and the construction of large-scale charging infrastructure, that are theoretically expected to lower initial cost barriers, reduce risk perceptions, and strengthen the social legitimacy of EV use, thereby increasing *purchase intention* for EVs (Pratiwi & Haryanto, 2023). However, cross-border evidence suggests that the effectiveness of such policies and incentives is highly dependent on institutional context, policy stability, automotive market structure, and fiscal capacity, so their impact on EV *purchase intention* is not always consistent and still leaves open the question of the extent to which government support is truly internalized in individual decision-making processes (Cabeza-Ramírez et al., 2025).

In the context of developing countries such as Indonesia, the government is taking a similar path through Presidential Regulation No. 55 of 2019 and various fiscal policies, including VAT incentives, PPnBM, and subsidies for EV purchases, to reduce emissions and encourage transportation electrification (Anggraeni & Mudiarti, 2022; Sukmayanti & Satory, 2025). Recent studies show that such policies can increase EV sales or *purchase intentions*, but limited charging infrastructure, relatively high purchase prices, and concerns about technology reliability remain the main obstacles (Pratiwi & Haryanto, 2023; Ramadhan et al., 2025; Xu & Jokhu, 2024). This condition confirms that government support has not automatically translated

into strong buying intentions without the support of adequate psychological factors and social values at the individual and community levels (Wang et al., 2022).

In terms of consumer behavior, the Theory of Planned Behavior (TPB) explains that *purchase intention* is formed from three main components: *attitude toward* the behavior, *subjective norm*, and *perceived behavioral control* (Ajzen, 1991). A number of studies in Indonesia found that these three constructs are relevant in explaining the intention to buy an EV, although the influence of each variable does not always align with theoretical predictions (Kurniawan et al., 2025; Rachmawati & Rahardi, 2023; Ray & Harito, 2023). Beyond cognitive factors, emotional values such as pride, a more modern self-image, or moral satisfaction for contributing to the environment have also been shown to play an important role in green consumption behaviors (Maharani & Purnamarini, 2022; Y. Wang et al., 2024). However, cross-study findings show variations in the strength of the influence of emotional value and *perceived behavioral control* on EV *purchase intention*, thus raising the need to retest the relationship between these variables in different contexts (Ramadhan et al., 2025; Z. X. Wang et al., 2024).

In the framework of this research, government support occupies a crucial and complex position. On the one hand, government support is seen as an external factor that lowers financial and structural barriers, with the potential to strengthen *PBC*, positive attitudes, and social legitimacy toward EVs (Sukmayanti & Satory, 2025; Cabeza-Ramírez et al., 2025). Other research shows that government support is not always able to change EV *purchase intentions*, especially when consumers still perceive practical inconveniences, infrastructure limitations, or doubts about economic benefits (Anggraeni & Mudiarti, 2022; Ramadhan et al., 2025). This condition indicates that government support is not a direct predictor of EV *purchase intention* but rather a contextual variable that has the potential to moderate the relationship between TPB constructs and EV *purchase intention*.

This knowledge gap becomes increasingly relevant when viewed in the context of regions that are locomotives for the adoption of new technologies. Greater Jakarta, as the largest metropolitan agglomeration and center of national economic activity, has a very dense population and transportation cluster. Data from the Central Statistics Agency (BPS) shows that the population of DKI Jakarta Province in 2023 was around 11.34 million people, while West Java Province reached around 49.86 million and Banten Province around 12.31 million. In aggregate, the three provinces that comprise the Greater Jakarta area accommodate more than 73 million people (Jakarta, 2024; West Java, 2025; Banten, 2025). At the same time, data on the number of motor vehicles by province and type in 2023 shows around 22.91 million in DKI Jakarta, 18.05 million in West Java, and 3.71 million in Banten, for a total of around 44.67 million units (Central Statistics Agency, 2024). The combination of a very large population base, high urbanization rate, and motor vehicle ownership makes Greater Jakarta a strategic area to test how government support, TPB psychological factors, and emotional value work together in driving EV *purchase intention* in dense, high-emission urban environments.

Starting from this background, the research problem raised in this study concerns the inconsistency of empirical evidence on the role of government support and expanded TPB constructs in explaining EV *purchase intention* in developing countries, especially in metropolitan areas. The inconsistency of findings related to the significance of *PBC*, the strength of government support (both as a direct predictor and moderator), and the stability of the emotional value, *attitude toward*, and *purchase intention* paths indicates room for retesting the expanded TPB model within Indonesia's EV policy framework (Ramadhan et al., 2025; Kurniawan & Sidi, 2024; Gupta et al., 2025). Thus, the main issue to be answered is how the configuration of emotional value, *attitude toward*, *subjective norms*, *perceived behavioral control*, and government support forms EV *purchase intention* in Greater Jakarta.

In line with these problems, this research has three main objectives. First, to analyze the influence of emotional value on *attitude toward* in the context of *EV purchase intention* in Greater Jakarta. Second, to test the mediating role of *attitude toward* in the relationship between emotional value and *EV purchase intention* based on the TPB framework. Third, to evaluate the moderating role of government support on the influence of *attitude toward*, *subjective norms*, and *perceived behavioral control* on *EV purchase intention*. Through these objectives, this study is expected to provide a more comprehensive understanding of the psychological mechanisms behind *EV purchase intention* in Indonesia, as well as an empirical basis for formulating more effective policies and marketing strategies to maximize the impact of government support in the early stages of EV adoption in metropolitan areas such as Greater Jakarta.

RESEARCH METHOD

This study used a quantitative survey approach to analyze the factors affecting purchase intention for electric vehicles (EVs) based on the expanded Theory of Planned Behavior (TPB) framework, with emotional value as an antecedent to attitude toward EVs and government support as a moderator in the relationships between attitude toward, subjective norm, perceived behavioral control (PBC), and purchase intention. Primary data were collected through a structured online questionnaire distributed to potential EV consumers in the Jakarta, Bogor, Depok, Tangerang, and Bekasi (Jabodetabek) areas.

Respondents were selected using purposive sampling based on the criteria of being over 18 years old, domiciled in Greater Jakarta, aware of EVs, and expressing hypothetical interest or ability to purchase an EV. The Greater Jakarta area was chosen because, first, it is one of the largest and most populous metropolitan areas in Indonesia, with a high concentration of urban population and economic activity; second, it has high motor vehicle ownership and congestion, placing significant pressure on the transportation system and environment; third, it includes areas with relatively advanced initial EV-supporting infrastructure and policy initiatives compared to many other regions; and fourth, it methodologically facilitated access to a large target population in the productive age group. A total of 291 valid responses were analyzed, satisfying the 10-times rule for Partial Least Squares Structural Equation Modeling (PLS-SEM).

All constructs were measured using reflective indicators on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), adapted from prior research on EVs and green products. The constructs included emotional value, attitude toward EVs, subjective norms, PBC, government support, and purchase intention, capturing dimensions of emotional benefits, evaluation of EVs as a good decision, social pressure/support, perceived ability and convenience, perceptions of government incentives and policies, and sincerity of intent to buy EVs.

Data analysis was conducted using PLS-SEM in SmartPLS 4 through two main stages. First, the measurement model (outer model) was evaluated by testing indicator reliability (outer loadings), internal reliability (Cronbach's alpha and composite reliability), convergent validity (average variance extracted [AVE]), and discriminant validity (HTMT). Second, the structural model (inner model) was assessed by examining path coefficients, R^2 values, predictive relevance (Q^2), and the significance of direct, mediation, and moderation effects via bootstrapping. This analytical process provided a systematic basis for assessing the roles of emotional value, attitude toward EVs, subjective norms, PBC, and government support in forming EV purchase intention in the Greater Jakarta metropolitan area.

RESULTS AND DISCUSSION

Demographic Characteristics of Respondents

This study involved 291 respondents, consisting of 140 males (48.1%) and 151 females (51.9%). Based on domicile, the number of respondents mostly came from Tangerang with 136 respondents, then Jakarta with 26 respondents, Bogor with 16 respondents, Depok with 8 respondents and Bekasi with 5 respondents. In terms of income, respondents were dominated by the Rp 6-10 million group as many as 96 respondents (33%), then less than Rp 5 million as many as 68 respondents (23.4%) and more than Rp 20 million as many as 61 respondents (21%), indicating that the majority were in the productive middle class. Employment status was dominated by 170 private workers (58.4%), while the rest consisted of civil servants/state-owned enterprises (33 respondents), entrepreneurs 31 respondents, housewives 31 respondents, students 12 respondents, and other categories 14 respondents. Overall, these characteristics reflect an adequate and informative group of urban people, which is a potential segment for EV adoption.

Table 1. Summarizing Demographic Characteristics

Category	Sub-Category	Number of Respondents
Gender	Man	140
	Woman	151
Domicile	Jakarta	26
	Bogor	16
Earnings per Month	Depok	8
	Tangerang	136
Bekasi		5
Earnings per Month	Under 5 million	68
	6 million - 10 million	96
	11 million - 15 million	47
	16 million - 20 million	19
	Over 20 million	61
Employment Status	Private Workers	170
	Civil Servants/ SOEs	33
	Entrepreneurial	31
	Housewives	31
	Students/ Students	12
	Other	14

Estimation of measurement models

Table 2. Hypothetical Model, Consisting of Six Variables (AT, SBN, PBC, PI, EMV, GS)

Variable	Indicators	Scale	Source: Conference
<i>Purchase Intention EV</i>	I feel like buying an EV. I have plans to buy an EV. I feel confident to buy an EV. I feel confident in considering buying an EV.	Likert 1-5	(Z. X. Wang et al., 2024)
<i>Emotional Value</i>	I feel excited to try driving an EV. I feel like I enjoy the ride when driving an EV. I will feel calm and comfortable when driving an EV. I feel that driving an EV provides a pleasant experience.	Likert 1-5	(Z. X. Wang et al., 2024)
<i>Subjective Norm</i>	I feel like the people around me, want me to buy an EV.	Likert 1-5	(Darmaningrum et al., 2023)

Variable	Indicators	Scale	Source: Conference
	I feel like the people around me are supportive of me to buy an EV. I feel like most people have already bought an EV. I feel like the people I respect are also buying EVs.		
Attitude Toward	I feel like buying an EV is a good thing. I find buying an EV to be fun. I feel like buying an EV is the right decision. I feel like buying an EV brings a lot of benefits.	Likert 1-5	(Carfora et al., 2021)
Perceived Behavior Control	I feel like I have enough money to buy an EV. I feel like I have the opportunity to buy an EV. I feel like I know how to choose and buy an EV. I feel that buying an EV can help protect the environment.	Likert 1-5	(Carfora et al., 2021)
Government Support	I feel that the tax incentive program from the government can encourage my intention to buy an EV. I feel that the government's direct subsidies (in the form of EV price rebates) encourage me to intend to own an EV. I feel that the special electricity tariff for home charging encourages me to intend to buy an EV. I feel that the PPnBM (Sales Tax on Luxury Goods) and VAT (Value Added Tax) relief on EVs, encouraged my intention to buy an EV.	Likert 1-5	(Anggraeni & Mudiarti, 2022)

Table 3. Convergent Reliability & Validity (Loadings, Alpha, CR, AVE)

Construct	Indicators	Loading	Cronbach's <i>α</i>	CR (<i>ρ</i> c)	AVE	Note
Attitude (AT)	AT1	0.86	0.897	0.928	0.763	
	AT2	0.888				
	AT3	0.872				
	AT4	0.868				
Emotional Value (EMV)	EMV1	0.793	0.861	0.906	0.706	
	EMV2	0.892				
	EMV3	0.841				
	EMV4	0.832				
Government Support (GS)	GS1	0.861	0.9	0.93	0.769	
	GS2	0.901				
	GS3	0.879				
	GS4	0.867				
Perceived Behavioral Control (PBC)	PBC1	0.822	0.841	0.894	0.68	PBC4 is relatively low but ≥ 0.70
	PBC2	0.876				
	PBC3	0.869				
	PBC4	0.722				
Purchase Intention (PI)	PI1	0.895	0.926	0.947	0.818	
	PI2	0.911				
	PI3	0.919				
	PI4	0.892				
Subjective Norm (SBN)	SBN1	0.865	0.852	0.9	0.694	SBN3 is relatively low but ≥ 0.70
	SBN2	0.897				

SBN3	0.716
SBN4	0.845

Table 4. Discriminant Validity (HTMT)

	Original sample (O)	Sample mean (M)	Bias	5.0%	95.0%
EMV <-> AT	0.810	0.810	0.001	0.750	0.860
GS <-> AT	0.747	0.748	0.001	0.673	0.813
GS <-> EMV	0.667	0.669	0.001	0.578	0.740
PBC <-> AT	0.759	0.760	0.001	0.680	0.826
PBC <-> EMV	0.698	0.700	0.002	0.600	0.773
PBC <-> GS	0.708	0.708	0.000	0.619	0.783
PI <-> AT	0.857	0.858	0.001	0.791	0.908
PI <-> EMV	0.785	0.786	0.001	0.715	0.841
PI <-> GS	0.736	0.736	0.000	0.659	0.804
PI <-> PBC	0.689	0.690	0.001	0.592	0.771
SBN <-> AT	0.760	0.761	0.001	0.687	0.822
SBN <-> EMV	0.670	0.670	0.000	0.591	0.740
SBN <-> GS	0.703	0.703	0.000	0.626	0.768
SBN <-> PBC	0.611	0.612	0.001	0.507	0.698
SBN <-> PI	0.752	0.752	0.000	0.680	0.812

Structural Model

Table 5. Collinearity & Explanatory Power (VIF; R²; Q²)

Predictor Variable	VIVID	Endogenous	R ²	Q ²
AND	2.679	PI	0.683	N/a
GS	2.741	PI		
PBC	2.028	PI		
SBN	2.033	PI		
GS×AT	2.897	PI		
GS×PBC	2.626	PI		
GS×SBN	2.107	PI		
EMV	-	AND	0.51	N/a

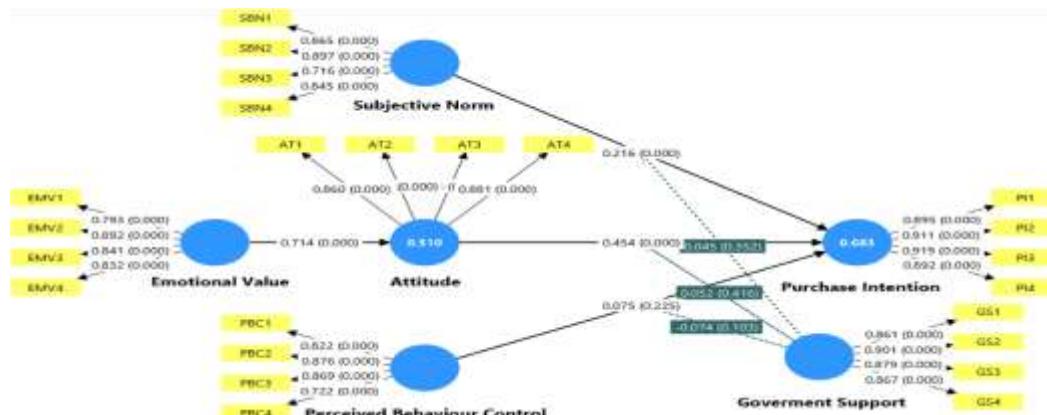


Figure 1. Modeling of the structural equation of the partial least square.

Hypothesis Test Results (Direct, Moderation, Indirect)

Table 6. Path Coefficients (PLS-SEM)

Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
AT -> PI	0.454	0.450	0.079	5.758
EMV -> AT	0.714	0.715	0.031	23.129
GS x AT -> PI	0.052	0.051	0.064	0.814
GS x PBC -> PI	-0.074	-0.073	0.045	1.630
GS x SBN -> PI	0.045	0.045	0.048	0.932
PBC -> PI	0.075	0.077	0.062	1.212
SBN -> PI	0.216	0.216	0.059	3.666

Table 7. Hypothetical Results

Hypothesis/Path	β	t	p	Meaning.	CI 95%	f^2
AT → PI	0.454	5.758	0,000	Yes	N/a	N/a
SBN → PI	0.216	3.666	0,000	Yes	N/a	N/a
PBC → PI	0.075	1.212	0,113	Not	N/a	N/a
GSxAT → PI	0.052	0.814	0,208	Not	N/a	N/a
GSxSBN → PI	0.045	0.932	0,176	Not	N/a	N/a
GSxPBC → PI	-0.074	1.630	0,052	Yes	N/a	N/a
EMV → AT → PI (Indirect)	0.324	5.376	0,000	Yes	N/a	N/a

Discussion

In general, the results of structural model estimation show that the formation of attitude toward and subjective norms is the main driver of EV purchase intention in Greater Jakarta, while perceived behavioral control and government support do not always function as assumed in the classic TPB. These findings provide an idea that consumers' decisions to purchase EV purchase intentions are more determined by how they evaluate EVs emotionally and socially, rather than solely by perceptions of convenience or structural policy support.

The results of the H1 test showed that emotional value had a positive effect on attitude toward EV, so this hypothesis is empirically supported. This means that when consumers feel

pride, a more modern self-image, and psychological comfort because they feel they contribute to the environment through the use of electric vehicles, they tend to form a more positive attitude toward EVs toward EVs. This finding is in line with Maharani and Purnamarini (2022) who emphasized that emotional value is an important driver in forming attitudes toward EVs and purchase intentions towards environmentally friendly products. However, the results of this study are different from Wang et al. (2024) who found that emotional value does not have a significant effect on attitude toward EV, because attitude toward in this context is more formed by cognitive-rational considerations such as knowledge, risk, and economic benefits. This difference indicates that the contribution of emotional value is contextual in metropolitan areas such as Greater Jakarta, EVs are not only seen as an energy efficiency solution, but also as a symbol of lifestyle and environmental commitment, so that their emotional content becomes more prominent. Thus, the H1 findings enrich the development of TPB-based models by showing that the integration of emotional value as an antecedent attitude toward is highly relevant in the context of the energy transition and the EV market in Indonesia (Maharani & Purnamarini, 2022; Wang et al., 2024).

The results of the H2 test show that subjective norms have a positive effect on EV purchase intention, so this hypothesis is empirically supported. These findings indicate that the support, approval, and expectations of significant people (family, friends, colleagues, community) play an important role in encouraging consumers to form an intention to buy an electric vehicle. Empirically, these results are in line with various studies in the context of EVs in Indonesia, such as Gunawan et al. (2022), Kurniawan et al. (2025), Rahmawati et al. (2023), Murtingrum et al. (2022), Ray and Harito (2023), and Ruslim et al. (2023) which consistently show that subjective norms, along with attitude toward and PBC, being the main determinant of EV adoption intention. Within the framework of the SDGs, the body of evidence confirms that the decision to buy an EV is not just a rational individual decision, but also a response to what is considered appropriate and has social legitimacy in the environment.

However, the strong role of subjective norms in this study is not entirely in line with the findings of Eccarius and Chen (2024) in the context of EV sharing, which suggests that trust in services and platforms is a key factor, while classical TPB constructs include subjective norms does not always appear as the main determinant. This difference underscores the contextual nature of the influence of subjective norms in the context of personal EV ownership and purchase, social pressure and support seem to work directly to strengthen purchase intent while in the context of sharing based service use, intention is more determined by the aspect of trust and service quality. Thus, H2's findings confirm the relevance of the normative dimension in explaining EV purchase intentions in Indonesia, while reminding that the level of subjective norms can change depending on the form of service and design of the EV ecosystem developed.

H3 is empirically supported, which shows that attitude toward EV is a significant mediator in the relationship between emotional value and purchase intention. Significant indirect effects indicate that the emotional value felt by consumers towards EVs is first processed into positive attitude evaluations, before then translating into purchase intention. Thus, emotional value does not work directly to drive decisions, but changes the consumer's perception that EVs are a good, worthwhile, and worthwhile option, which in turn triggers purchase intent. This pattern is in line with various previous findings that place attitude as a channeling mechanism between value, trust, or knowledge with the intention to buy sustainable products (Carfora et al., 2021; Ramadhan et al., 2025). Research by Ramadhan et al., 2025 shows that attitude toward mediates the influence of environmental knowledge and attention on EV purchase intention. Conceptually, these results reinforce the application of expanded TPB in the context of EVs, where attitudes act as psychological intermediaries that transform emotional stimuli into behavioral readiness.

H4 is not empirically supported, which suggests that perceived behavioral control did not have a significant direct effect on the purchase intention of electric vehicles in this study sample. Although theoretically perceived behavioral control reflects perceptions of financial ability, access to charging infrastructure, and ease of use of EVs, these findings indicate that affordability alone is not enough to drive purchase intent. Respondents' decisions on EV purchase intent are more determined by how positively they interpret EVs and how strong social support they feel, rather than simply their belief that they can afford to buy and operate an EV.

Empirically, these results contrast with the findings of several previous studies that show a positive and significant influence of perceived behavioral control on EV purchase intent and green product purchase intent (Kurniawan et al., 2025; Rachmawati & Rahardi, 2023; Eccarius & Chen, 2024). However, the findings of this study are in line with Solekah et al. (2023) who reported that perceived behavioral control had no significant effect on EV purchase intention, thus strengthening the argument that in certain contexts the perception of ability is not the main driver of purchase intention. The difference in results between studies can be explained by variations in the market context, the level of infrastructure maturity, and the cost structure faced by respondents. In the context of Greater Jakarta, perceived behavioral control seems to function more as a minimum prerequisite that is relatively evenly distributed among respondents, so it does not appear as the main distinguishing factor in forming EV purchase intention.

H5 is not empirically supported, which suggests that government support does not significantly moderate the relationship between subjective norms and EV purchase intentions. This means that the influence of subjective norms on EV purchase intention remains strong and relatively stable, regardless of the high and low government support felt by respondents. These findings indicate that when social support from the immediate environment and community is established, these factors work relatively independently and are not much reinforced by variations in perceptions of government incentives, regulations, and promotional programs. Conceptually, these results differ from the expectations of some of the literature that highlights the potential for public policy to strengthen the influence of psychological and normative determinants on EV purchase intention (Gupta et al., 2025; Cabeza-Ramírez et al., 2025). However, these studies show that the moderation effect of government support is highly dependent on incentive design, regulatory consistency, and the level of public trust in the government. In the context of this study, government support seems to be more appropriately viewed as a background structural condition, rather than as a direct reinforcement of social-psychological relationships on the subjective norm path to purchase intention.

H6 is not empirically supported, so it can be concluded that government support does not significantly moderate the relationship between attitude toward EV and EV purchase intention. Substantively, these results indicate that positive attitudes towards EVs have become a strong and relatively independent determinant in driving purchase intentions, without relying much on the high and low levels of government support felt. Consumers' cognitive and affective assessments that EVs are beneficial, convenient, modern, and environmentally valuable appear to have formed a stable purchase intent commitment, so additional government support such as fiscal incentives or charging facilities do not significantly change attitudes toward influencing EV purchase intent. These findings are in line with the SDG framework that places attitude toward as the main predictor of behavioral intent (Ajzen, 1991) and is supported by various studies that show the consistency of the role of positive attitude toward green products and EVs in forming purchase intention (Wang et al., 2024; Darsono et al., 2023; Solekah et al., 2023; Pontes et al., 2024).

H7 received relatively weak support, with a moderating effect of government support on the relationship between perceived behavioral control and EV purchase intention which

was negative and was around the significance boundary. Substantively, this pattern shows that when government support strengthens, for example through price subsidies, tax relief, and special electricity tariffs for EV users, the difference in purchase intention between consumers with perceived high and low behavioral control tends to narrow. Individuals who originally had perceived low behavioral control, such as feeling financially inadequate or worried about operational costs and limited supporting infrastructure, were encouraged to increase purchase intention when government policies effectively reduced their perceived barriers. In this framework, government support functions not as a reinforcement of perceived behavioral control, but as a compensation mechanism that covers the limitations of individual perceived behavioral control, so that the interaction coefficient appears to be in a negative direction. The stronger the government support, the less dependence on the variation in the level of perceived behavioral control among consumers.

The findings enrich the literature related to SDGs and EV adoption. A number of previous studies have confirmed that PBC is an important determinant of EV purchase intention and adoption, especially through the perception of financial ability, infrastructure availability, and ease of use (Gunawan et al., 2022; Ray & Harito, 2023; Rachmawati & Rahardi, 2023; Solekah et al., 2023; Wang et al., 2024). On the other hand, studies on government policies and incentives show that government support is able to reduce structural and economic barriers that hinder EV adoption (Anggraeni & Mudiarti, 2022; Spencer & Scott, 2024; Sukmayanti & Satory, 2025; Ramadhan et al., 2025; Gupta et al., 2025; Cabeza-Ramírez et al., 2025). The results of this study connect the two findings by showing that strong government support tends to reduce the sensitivity of government support to PBC differences.

When subsidies and incentives are effective, consumers with relatively low PBC become more facilitated so that the gap between government support and high PBC consumers narrows. In terms of policy, this emphasizes the importance of government support design that explicitly directs interventions to segments with low PBC so that the transition process to EVs is more inclusive and not only focused on financially and structurally established consumer groups.

CONCLUSION

This study examined EV purchase intention in Greater Jakarta using an expanded TPB framework, revealing that it is primarily driven by emotional value, attitude toward EVs, and subjective norms, with attitude significantly mediating the link between emotional value and purchase intention—positioning EVs as symbols of modern lifestyle, environmental care, and technological orientation. Conversely, perceived behavioral control (PBC) showed no significant effect, and government support failed to consistently moderate relationships between attitude, subjective norms, PBC, and purchase intention, with interactions either insignificant or weakly negative, indicating that current policies have not effectively reduced perceived risks or barriers. Overall, the gap between Indonesia's energy transition ambitions and low EV adoption stems more from psychological and social dimensions than structural factors alone, necessitating integrated strategies that bolster incentives, infrastructure, positive attitudes, emotional value, and supportive social norms. For future research, longitudinal studies could track how evolving government policies and infrastructure developments influence these psychological pathways over time, particularly in other Indonesian regions.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)

Anggraeni, D., & Mudiarti, H. (2022). The effect of VAT and PPnBM regulations and income on the interest in buying four-wheeled motor vehicles (cars) in Indonesia. *Journal of Integrative Accounting*, 8(1).

Central Statistics Agency. (2024). Number of motor vehicles by province and vehicle type, 2023. Jakarta: Central Statistics Agency.

Cabeza-Ramírez, L. J., Rosales-Tristancho, A., Sánchez-Cañizares, S. M., & Palacios-Florenco, B. (2025). Rational and normative determinants in electric vehicle adoption: Willingness to pay and moderating variables. *Technology in Society*, 81, 102842. <https://doi.org/10.1016/j.techsoc.2025.102842>

Carfora, V., Cavallo, C., Catellani, P., Del Giudice, T., & Cicia, G. (2021). Why do consumers intend to purchase natural food? Integrating theory of planned behavior, value-belief-norm theory, and trust. *Nutrients*, 13(6), 1904. <https://doi.org/10.3390/nu13061904>

Darsono, D., Darmaningrum, K., Rumaningsih, M., Alhusin, S., Handoko, T., & Kurniawati, S. B. (2023). The application of the theory of planned behaviour in consumers' decisions to buy organic food. *Journal of Mirai Management*, 8(3), 261–272. <https://doi.org/10.37531/mirai.v8i3.6167>

Eccarius, T., & Chen, C. F. (2024). Examining trust as a critical factor for the adoption of electric vehicle sharing via necessary condition analysis. *Technological Forecasting and Social Change*, 208, 123681. <https://doi.org/10.1016/j.techfore.2024.123681>

Gunawan, I., Redi, A. A. N. P., Santosa, A. A., Maghfiroh, M. F. N., Pandyaswargo, A. H., & Kurniawan, A. C. (2022). Determinants of customer intentions to use electric vehicle in Indonesia: An integrated model analysis. *Sustainability*, 14(4), 1972. <https://doi.org/10.3390/su14041972>

Gupta, A. K., Dash, A., & Sharma, K. (2025). Promoting sustainable mobility: A multi-theoretical exploration of attitude-behavior dynamics and consumption value in electric vehicle adoption in India. *Energy Strategy Reviews*, 61, 101839. <https://doi.org/10.1016/j.esr.2025.101839>

Kurniawan, H. H., & Sidi, A. P. (2024). The role of environmental awareness, innovation, and price in encouraging interest in buying electric vehicles. *Journal of Economic Appraisal*, 12(3), 568–575. <https://doi.org/10.31846/jae.v12i3.825>

Kurniawan, I., Hutaikur, L., Wahyu Putra, Y., & Atas Sari, S. (2025). The future of electric cars in Indonesia: Exploring factors influencing the purchase intention through the modified theory of planned behavior. *Journal of Universal Studies*, 5(2). <http://eduvest.greenvest.co.id>

Maharani, B. D., & Purnamarini, I. (2022). Application of the theory of consumption value to the intention of purchasing environmentally friendly products.

Pontes, S., Naranjo-Zolotov, M., & Painho, M. (2024). From intention to action: How environmental setback perception mediates green purchase behaviour. *Journal of Cleaner Production*, 470, 143285. <https://doi.org/10.1016/j.jclepro.2024.143285>

Pratiwi, T. N., & Haryanto, B. (2023). Behavioural theory research in electric vehicle: A literature review in Indonesian context.

Rachmawati, I., & Rahardi, R. A. M. (2023). Analysis of electric vehicle purchase intentions in Indonesia using the extension C-TAM-TPB model. *International Journal of Current Science Research and Review*, 6(12), 8711–8721. <https://doi.org/10.47191/ijcsrr/V6-i12-61>

Ramadhan, N., Nurdyadi, & Alfiandri. (2025). Environmental knowledge, awareness, attitude toward purchase intervention intervened by infrastructure readiness and price affordability of electric vehicle (EV): Case in Indonesia. *Nusantara Journal of Business Management Applications*, 10(1), 303–316. <https://doi.org/10.29407/nusamba.v10i1.19778>

Ray, D. R. M., & Harito, C. (2023). Influential factors affecting the adoption intention of electric vehicles in Indonesia: An extension of the theory of planned behavior. *Engineering, Mathematics and Computer Science Journal (EMACS)*, 5(3), 117–128. <https://doi.org/10.21512/emacsjournal.v5i3.10525>

Ruslim, T. S., Setiawan, K., Hapsari, C. G., & Herwindiati, D. E. (2023). Factors that increase purchase intention of electric cars in Jakarta. *International Journal of Application on Economics and Business*, 1(3), 968–977. <https://doi.org/10.24912/ijaeb.v1.i3.968-977>

Sharma, A., Kumar, K., & Dwesar, R. (2025). "Keenly aware of environmental issues, yet wavering in conviction": Understanding the factors influencing consumers' willingness to pay for green energy. *Sustainable Futures*, 9, 100427. <https://doi.org/10.1016/j.sfr.2024.100427>

Solekah, N. A., Ratnasari, K., & Hirmawan, A. P. (2023). Prediction of green purchase intention for electric vehicles: A theory of planned behavior approach. *Journal of Minds: Idea Management and Inspiration*, 10(2), 297–320. <https://doi.org/10.24252/minds.v10i2.40772>

Sukmayanti, A. W., & Satory, A. (2025). The Influence of Government Regulations on Electric Vehicle Sales in Indonesia: An Analysis of Tax Incentives and Odd-Even Free Policies (Jakarta Case Study). *Journal of Social and Science (SOSAINS)*, 5(4).

Wang, Z. X., Chee, W. M., Jantan, A. H. B., Xia, Y. H., Xue, H., Ye, M. J., Zhang, Q., Wong, P. P. W., Gong, Y., & Wang, L. (2024). Impact of perceived value in virtual brand communities on purchase intention of domestic electric vehicles. *Acta psychologica*, 248, 104371. <https://doi.org/10.1016/j.actpsy.2024.104371>

Wang, C., Yao, X., Sinha, P. N., Su, H., & Lee, Y.-K. (2022). Why do government policy and environmental awareness matter in predicting NEVs purchase intention? Moderating role of education level. *Cities*, 131, 103904.

Xu, L., & Jokhu, J. R. (2024). Analysis of marketing performance using purchase intention and purchase decision (case of electric vehicles in China). *Journal of Business Studies*, 2(2).



© 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).