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From Personal Values to Economic Support: A Mediation Model of Attitude Toward a Low-Carbon Tourism Economy

I Gusti Ayu Agung Pradnya Dewi [1*], Budi Shantika [2], Caren Angellina Mimaki [3]

[1*] Accounting Study Program, Faculty of Economics and Business, Universitas Pendidikan Nasional, Denpasar City, Bali Province, Indonesia

[2] Convention and Event Management Study Program, Faculty of Tourism, Universitas Pendidikan Nasional, Denpasar City, Bali Province, Indonesia

[3] Management Study Program, Faculty of Economics and Business, Universitas Pendidikan Nasional, Denpasar City, Bali Province, Indonesia

Email: agungpradnya@undiknas.ac.id [1*], budishantika@undiknas.ac.id [2], carenmimaki@undiknas.ac.id [3]

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Abstract

This study aims to examine the impact of individual values and perceived economic benefits on tourists' intention to support Low-Carbon Tourism Economy (LCTE) by combining the Value-Belief-Norm Theory (VBN) and Theory of Planned Behavior (TPB). This research used a quantitative method by distributing survey data to 159 respondents of Generation Z who had traveled in the past year. The data were evaluated by testing the measurement model and the structural model using Structural Equation Modeling (SEM) using SmartPLS. The results reveal that biospheric and altruistic values have a significant impact on tourists' perspective towards a low-carbon tourism sector, meanwhile egoistic values have no significant impact. Furthermore, perceived economic benefits had a direct positive and significant impact towards attitudes to support LCTE. Attitude toward LCTE was also found to strongly influence the behavioral intention and mediate correlations between biospheric and altruistic values and intention to support LCTE. However, attitude failed to mediate the relationship between egoistic ideals and intention to support. The results show that the support for the transition to low-carbon tourism is mostly driven by moral ideals and collective concern, rather than personal self-interest. Therefore, governments and tourist industry stakeholders should establish communication strategies to emphasise the ecological, social and economic benefits of transitioning towards low-carbon tourism in order to attract public support, especially among Generation Z.

Keywords:
Low-Carbon Tourism Economy; Value-Belief-Norm Theory; Personal values; Perceived economic benefits.

1. INTRODUCTION

Indonesia is one of developing countries that is prone to the negative impact of climate change due to the combination of geographic, social, and political factors (World Bank Group, 2021). According to ND-GAIN country index 2021, Indonesia ranked 97nd out of 181 countries based on its vulnerability to the impact of climate change and its readiness to mitigate the impact (Notre Dame Research, 2025). One of the biggest contributors to the acceleration of climate change in Indonesia is the tourism sector, mainly due to transportation activities and energy-intensive hospitality operations (Aplugi & Kusumawardani, 2025; Julianti & Jaelani, 2024). However, this sector is also a key driver of Indonesia's economy, especially during the post-pandemic recovery, with revenues increasing by up to 18% in 2024 (Cabinet Secretary for State Documents and Translation, 2025). Therefore, to maximize economic growth while simultaneously protecting the environment, the transition toward sustainable tourism has become a strategic imperative. The Ministry of Tourism aims to strengthen the tourism sector's readiness for a low-carbon and adaptive future (OECD, 2022).

The transition toward a low-carbon economy in the tourism sector requires not only policy innovations but also strong public support. Among various societal groups, young generations, especially Generation Z (Gen Z) stands out as a pivotal demographic whose behaviors, values, and digital competencies position them as essential actors in accelerating this transition. First, they represent the current and future workforce that will shape how tourism businesses adopt sustainable practices, green skills, and low-carbon innovations (Anward et al., 2024). Second, they are also the future consumers whose preferences for eco-friendly products, low-carbon travel choices, and sustainable lifestyle patterns will significantly influence market demand and industry transformation (Nguyen et al., 2025). Moreover, their high level of digital further strengthens their role in the low-carbon transition by promoting sustainable tourism narratives to shape public perceptions and behaviors toward low-carbon tourism (Saltik et al., 2025). Finally, Gen Z is widely recognized for its strong sustainability awareness by showing stronger sustainability awareness and concern for climate change issue, making them critical agents of change in the shift toward a low-carbon tourism economy (Wood, 2022).

Although Gen Z plays a strategic role in supporting the low-carbon transition in the tourism sector, their support for the low-carbon transition in the tourism sector does not emerge uniformly across individuals. Based on the Value–Belief–Norm (VBN) theory, support for pro-environmental actions, such as low-carbon initiatives, varies significantly depending on one's personal value orientations (Han et al., 2018). Personal values shape support for a low-carbon tourism economy in significant ways since they influence how people interpret, evaluate, and emotionally respond to sustainability actions (Dong et al., 2023). At the most fundamental level, serve as internal standards that guide what people see as important or worth pursuing. These values shape intention not only by influencing attitudes, but also by affecting whether individuals view low-carbon actions as meaningful, socially responsible, or aligned with their core identity (Zhang et al., 2025).

Furthermore, perceived economic benefit plays a crucial role in shaping public acceptance of low-carbon initiatives. When individuals believe that low-carbon tourism development can generate economic opportunities, they are more likely to support such transitions (Obradović et al., 2021). Understanding their motivations and sustainability values is therefore essential for designing effective policies, communication strategies, and interventions that foster transition toward a low-carbon tourism economy. However, despite growing interest in sustainable tourism and pro-environmental behavior, very few studies have examined how value orientations and perceived economic benefit shaping support for low-carbon tourism transitions. Existing research on values and pro-environmental intention has largely focused on general populations (Bouman et al., 2018), recycling behavior (Babazadeh et al., 2023), or sustainable consumption (Saputri et al., 2024). Therefore, to address this gap in the literature, this study examines the relationship between personal value orientation, perceived economic benefit, and intention to support the low-carbon tourism economy transition, with attitude toward the behavior as a mediating variable.

According to VBN theory, variations in pro-environmental support are shaped by three core value orientations, such as egoistic, altruistic, and biospheric. Research on pro-environmental behavior often combines Value Belief Norm (VBN) theory with the Theory of Planned Behavior (TPB) to build hierarchical models (values, beliefs, attitudes, behavior) (Hidalgo-Crespo et al., 2023). This study utilizes a hierarchical behavior model based on the VBN and Theory of Planned Behavior frameworks, where personal values serve as foundational psychological drivers shaping evaluative responses to sustainable initiatives (Pan & Zhou, 2024).

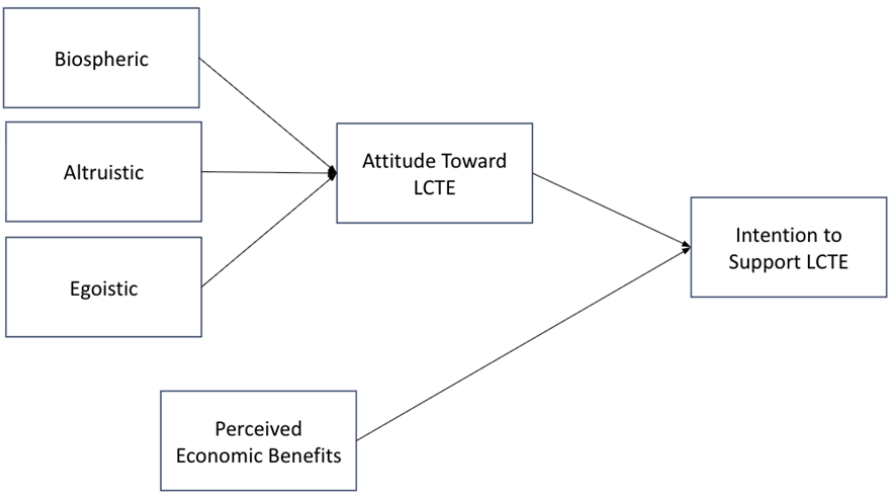

Figure 1. Research Framework

1.1. The Influence of Personal Values on Attitude toward LCTE

Personal values provide the internal standards for assessing whether a sustainable economic model aligns with ethics and environmental welfare, on the other side, biospheric values, which prioritize the protection of nature and wildlife are core predictors of pro-environmental attitudes (Z. Wang et al., 2023). People with this value judge behaviors based on how they affect the environment and their long-term ecological impact. Low-carbon tourism is also presented as reducing environmental damage and protecting destinations, which fits well with this perspective. In addition, research shows that biospheric values strongly increase environmental concern, ecological worldviews, and pro-environmental attitudes (Bouman et al., 2018). Altruistic values focused on the well-being of others and future generations foster a sense of moral obligation to strengthen positive evaluations of low carbon initiatives. Altruistic values reflect a person's concern for the well-being of others, society, and future generations (Roslin et al., 2025). People who strongly hold these values are more aware of the social and shared benefits of sustainable tourism, such as lowering climate risks for local communities and protecting destinations for the long term (Doran et al., 2017). While egoistic values are centered on personal utility, this contributes positively to attitudes when tourists perceive that a low-carbon economy enhances their own quality of life or health (Doran et al., 2017). Therefore, we hypothesize:

a. H1a: Biospheric values have a positive and significant influence on attitudes toward a low-carbon tourism economy (LCTE).
b. H1b: Altruistic values have a positive and significant influence on attitudes toward a low-carbon tourism economy (LCTE).
c. H1c: Egoistic values have a positive and significant influence on attitudes toward a low-carbon tourism economy (LCTE).

1.2. The Role of Perceived Economic Benefits

Research on low-carbon tourism links economic expectations (competitiveness, income, jobs, value for money) with tourist support, intentions and loyalty. Economic perceptions act as rational motivators where tourists evaluate the tangible gains of a low-carbon transition. When travelers believe that such an economy promotes local prosperity, destination competitiveness, and job creation, their psychological commitment to supporting that model increases directly (Zhan et al., 2025). This leads to the second hypothesis:

H2: Perceived economic benefits have a positive and significant influence on intentions to support a low-carbon tourism economy.

1.3. The Relationship Between Attitude and Intentions

Low-carbon tourism and awareness can promote local economic development, employment, and village prosperity, as higher low-carbon awareness, attitudes, and behaviors increase destination attractiveness and visitor spending (Lin et al., 2022). According to the Theory of Planned Behavior, the most proximal determinant of behavior is the intention to perform it, which is primarily driven by a positive attitude (He et al., 2024). Tourism and low carbon behavior, commonly treated as the key cognitive link between upstream drivers (values, perceptions, economic beliefs) and downstream intentions or behaviors. Thus, leads to:

H3: Attitude toward a low-carbon tourism economy has a positive and significant influence on intentions to support that economy.

1.4. The Mediation Effect of Attitude

The model posits that attitude serves as a cognitive bridge that translates abstract values and rational economic beliefs into concrete travel intentions. Rather than values directly changing spending, they first shape a specific attitude that then directs the intention to act (Zhang et al., 2025). This mediation explains why tourists with strong moral orientations or positive economic expectations are willing to make economic sacrifices for the environment. This results in the following hypotheses:

a. H4a: Attitude toward a low-carbon tourism economy positively and significantly mediates the relationship between biospheric values and the intention to support the economy.
b. H4b: Attitude toward a low-carbon tourism economy positively and significantly mediates the relationship between altruistic values and the intention to support the economy.
c. H4c: Attitude toward a low-carbon tourism economy positively and significantly mediates the relationship between egoistic values and the intention to support the economy.

2. RESEARCH METHOD

This study employs a quantitative research design to investigate the influence of personal values (altruistic, egoistic, and biospheric) and perceived economic benefits on tourists' attitudes and their intention to support a low-carbon tourism economy. The study is situated in Bali, Indonesia, considering that the region's economy is predominantly driven by the tourism sector, which simultaneously constitutes a major contributor to carbon emissions. As a region heavily dependent on tourism, Bali provides a relevant context

for examining public support for low-carbon initiatives, especially as the island experiences rising visitor numbers, environmental degradation, and growing policy attention to sustainable tourism development. At the same time, Generation Z was selected as the respondent group because they represent the future workforce, future consumers, and a demographic with high digital adoption and strong sustainability awareness, making them an influential group in shaping the future direction of low-carbon tourism.

Based on the minimum sample size calculation, at least 100 respondents were required for the analysis. The study adopted a non-probability sampling approach, specifically purposive sampling, to ensure the selection of respondents who met the research criteria. The inclusion criteria were as follows: (1) individuals belonging to Generation Z (born between 1997 and 2012); (2) tourists who had visited Bali at least once within the past year; and (3) respondents who were willing to complete the questionnaire in its entirety.

The conceptual framework incorporates four independent variables. Three variables represent the dimensions of personal values, namely altruistic values, egoistic values, and biospheric values, while the fourth independent variable is perceived economic benefits. Attitude functions as the mediating variable, whereas intention to support a low-carbon tourism economy serves as the dependent variable. All measurement items were adapted from previously validated scales reported in prior studies to ensure construct validity and measurement consistency. Primary data were collected through an online self-administered questionnaire using a seven-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"). Data analysis was conducted using Structural Equation Modeling with SmartPLS through a two-stage approach. The first stage involved evaluating the measurement model to ensure data validity and reliability. This included assessing convergent validity through outer loading values above 0.60 and Average Variance Extracted above 0.50, as well as discriminant validity via the Heterotrait-Monotrait ratio below 0.90 (Hair et al., 2024). Reliability was further verified by evaluating rho_A and composite reliability values above 0.60. The second stage involved structural model testing to investigate the significance of relationships between variables using t-statistics above 1.65, p-values below 0.05, and the coefficient of determination R^2 (Hair et al., 2022).

3. RESULTS AND DISCUSSION

Current study aims to examine the influence of personal values, including egoistic values, altruistic values, and biospheric values, as well as perceived economic benefits, on tourists' attitudes and their intention to support a low-carbon tourism economy. A total of 159 respondents participated as respondents in this study. As presented in Table 1, the majority of respondents were Generation Z tourists aged 18–29 years (94.3%), female (62.9%), had a high school educational background (80.5%), were students (96.9%), and preferred a mid-range travel style (55.3%).

Table 1. Respondents' Demographic Profile

	Category	n	Percentage (%)
Age	< 18 years	9	5.7%
	18 - 29 years	150	94.3%
Gender	Male	59	37.1%
	Female	100	62.9%
Education	High School	128	80.5%
	Undergraduate	28	17.6%
	Diploma	2	1.3%
	Postgraduate	1	0.6%
Occupation	Students	154	96.9%
	Employee	2	1.3%
	Freelancer	1	0.6%
	Entrepreneur	2	1.3%
Prefered Travel Style	Budget travel	61	38.4%
	Mid-range travel	88	55.3%
	Luxury travel	10	6.3%
	Total	159	100%

This study employed a two-stage analytical procedure. The first stage focused on evaluating the measurement model (outer model) by assessing convergent validity and construct reliability. Convergent validity was examined using outer loading and Average Variance Extracted (AVE) values, whereas construct reliability was evaluated through composite reliability and rho_A coefficients. The initial assessment, as reported in Table 2, revealed that several indicators did not satisfy the recommended validity criteria. Three indicators including ALT5, BIO1, and BIO4 exhibited outer loading values below the acceptable threshold of 0.60, with values of 0.465, 0.352, and 0.559, respectively. Furthermore, the biospheric construct produced an AVE value below the minimum recommended level of 0.50, indicating inadequate convergent validity. These

findings suggest that the construct was unable to sufficiently explain the variance of its indicators, thereby necessitating further model refinement.

Table 2. Initial Measurement Model Test Result

Constructs	Items	Convergent Validity		Construct Reliability		Discriminant Validity
		Outer Loading	AVE	Composite Reliability (rho_A)	Composite Reliability (rho_C)	HTMT (≤ 0.90)
Altruistic	ALT1	0.852	0.583	0.847	0.871	v
	ALT2	0.832				
	ALT3	0.733				
	ALT4	0.863				
	ALT5	0.465*				
Attitude	ATT1	0.920	0.827	0.938	0.950	v
	ATT2	0.934				
	ATT3	0.909				
	ATT4	0.873				
Biospheric	BIO1	0.352*	0.410*	0.607	0.720	v
	BIO2	0.809				
	BIO3	0.741				
	BIO4	0.559*				
Egoistic	EGO1	0.823	0.563	0.763	0.836	v
	EGO2	0.837				
	EGO3	0.602				
	EGO4	0.717				
Low Carbon Intention	INT1	0.906	0.786	0.914	0.936	v
	INT2	0.884				
	INT3	0.868				
	INT4	0.887				
Perceived Economic Benefit	PEB1	0.761	0.677	0.923	0.936	v
	PEB2	0.825				
	PEB3	0.805				
	PEB4	0.874				
	PEB5	0.863				
	PEB6	0.811				
	PEB7	0.814				

Sources: Data Processed, 2026

Considering the presence of several indicators that failed to meet the validity requirements in the initial assessment, a subsequent re-evaluation of the measurement model was performed by excluding the three problematic indicators. As reported in Table 3, the refined model demonstrated substantial improvement, whereby all remaining indicators achieved outer loading values above the recommended threshold of 0.60 and AVE values exceeding 0.50, thereby confirming adequate convergent validity across all constructs. In addition, the reliability analysis further established the robustness and internal consistency of the measurement model. Both composite reliability and rho_A values for all constructs surpassed the minimum acceptable criterion of 0.60, indicating that the constructs consistently measured their respective latent variables. To further ensure the adequacy of the measurement model, discriminant validity was assessed using the Heterotrait–Monotrait ratio (HTMT). The findings revealed that all HTMT values were below the recommended threshold of 0.90, confirming that each construct was empirically distinct and that no significant inter-construct correlation issues were present within the model (Hair et al., 2024).

Table 3. Final Measurement Model Test Result

Constructs	Items	Convergent Validity		Construct Reliability		Discriminant Validity
		Outer Loading	AVE	Composite Reliability (rho_A)	Composite Reliability (rho_C)	HTMT (≤ 0.90)
Altruistic	ALT1	0.851	0.686	0.850	0.897	v
	ALT2	0.821				
	ALT3	0.770				
	ALT4	0.869				
Attitude	ATT1	0.920	0.827	0.938	0.950	v
	ATT2	0.934				
	ATT3	0.909				
	ATT4	0.873				
Biospheric	BIO2	0.906	0.715	0.674	0.833	v
	BIO3	0.781				
Egoistic	EGO1	0.823	0.564	0.763	0.836	v
	EGO2	0.837				
	EGO3	0.602				
	EGO4	0.717				
Low Carbon Intention	INT1	0.906	0.786	0.914	0.936	v
	INT2	0.884				
	INT3	0.868				
	INT4	0.887				
Perceived Economic Benefit	PEB1	0.761	0.677	0.923	0.936	v
	PEB2	0.825				
	PEB3	0.805				
	PEB4	0.874				
	PEB5	0.863				
	PEB6	0.811				
	PEB7	0.814				

Sources: Data Processed, 2026

The subsequent stage involved the evaluation of the structural model (inner model), which comprised several assessments, including collinearity analysis, coefficient of determination (R^2), predictive relevance (Q^2), and hypothesis testing through the examination of path coefficients, t-statistics, and p-values. The collinearity assessment, based on the inner Variance Inflation Factor (VIF) values presented in Table 4, indicated that all constructs achieved VIF values below the recommended threshold of 3.0, suggesting the absence of multicollinearity issues within the structural model.

Table 4. Collinearity Assessment Result

	Attitude	Low Carbon Intention
Altruistic	2.382	
Attitude		2.854
Biospheric	1.477	
Egoistic	2.243	
Low Carbon Intention		
Perceived Economic Benefit		2.854

Furthermore, as reported in Table 5, the R^2 value for the attitude construct was 0.259, indicating that 25.9% of the variance in tourists' attitudes could be explained by altruistic, egoistic, and biospheric values. Meanwhile, the intention to support a low-carbon tourism economy construct obtained an R^2 value of 0.555, demonstrating that 55.5% of its variance was explained by personal values, perceived economic benefits, and attitude. These findings indicate a moderate explanatory power of the proposed structural model.

Table 5. R^2 Test Result

	R-square	R-square adjusted
Attitude	0.259	0.244
Low Carbon Intention	0.555	0.550

Sources: Data Processed, 2026

The predictive relevance of the structural model was evaluated using the Q²predict values. As presented in Table 6, the attitude construct obtained a Q²predict value of 0.216, while the low-carbon intention construct achieved a value of 0.414. Since both values are greater than zero, the results indicate that the model possesses satisfactory predictive relevance for both endogenous constructs. More specifically, the Q² predict value of 0.216 indicates that the model demonstrates moderate predictive capability in explaining tourists' attitudes. Meanwhile, the higher Q² predict value of 0.414 for the low-carbon intention construct suggests a stronger predictive relevance, indicating that the model has substantial capability in predicting tourists' intention to support a low-carbon tourism economy. Overall, these findings demonstrate that the proposed structural model exhibits satisfactory predictive performance.

Table 6. Q^2 Test Result

	Q² predict
Attitude	0.216
Low Carbon Intention	0.414

The hypothesis testing results revealed that, out of the eight proposed hypotheses, six were supported while two were rejected. As presented in Table 7, among the three dimensions of personal values, only biospheric values (β = 0.183) and altruistic values (β = 0.356) demonstrated a positive and statistically significant effect on tourists' attitudes ($p < 0.05$). In contrast, egoistic values were found to have no significant influence on attitude (β = 0.038, $p > 0.05$). Regarding the determinants of tourists' intention to support a low-carbon tourism economy (LCTE), the findings indicated that perceived economic benefits exerted a stronger influence than attitude. Specifically, perceived economic benefits had a positive and significant effect on intention to support LCTE (β = 0.403), followed by attitude (β = 0.381), with both relationships being statistically significant ($p < 0.05$).

Interestingly, the study also confirmed the mediating role of attitude in the relationships between biospheric values and intention to support LCTE, as well as between altruistic values and intention to support LCTE, as evidenced by significant indirect effects ($p < 0.05$). Conversely, attitude was not found to mediate the relationship between egoistic values and intention to support LCTE ($p > 0.05$). This finding is understandable given that egoistic values did not significantly influence attitude in the first place, thereby limiting the formation of an indirect effect through the mediating construct.

Table 7. Hypotheses Test Result

	Hypotheses Path	Coef.	T statistics	P values
H1a (+)	Biospheric → Attitude	0.183	1.945	0.026
H1b (+)	Altruistic → Attitude	0.356	3.326	0.000
H1c (+)	Egoistic → Attitude	0.038	0.369	0.356
H2 (+)	Perceived Economic Benefit → Low Carbon Intention	0.403	3.372	0.000
H3 (+)	Attitude → Low Carbon Intention	0.381	3.071	0.001
H4a (+)	Biospheric → Attitude → Low Carbon Intention	0.070	1.787	0.037
H4b (+)	Altruistic → Attitude → Low Carbon Intention	0.136	2.191	0.014
H4c (+)	Egoistic → Attitude → Low Carbon Intention	0.014	0.340	0.367

As shown in Table 4, this study found that biospheric values are positively associated with attitudes toward supporting a low-carbon tourism economy (p-value = 0.026). This result aligns with the Value–Belief–Norm perspective, showing that biospheric values uniquely predict environmental beliefs and intentions (Snelgar, 2006). Individuals with this value evaluate actions by their ecological consequences and long-term impacts, and low-carbon tourism economy options are framed explicitly in terms of reduced ecological harm and conservation of destinations. Furthermore, several studies demonstrate that biospheric values significantly enhance environmental concern, ecological worldview, and pro-environmental attitudes (Bouman et al., 2018). These findings support the expectation that biospheric value orientations positively and significantly influence attitudes toward low-carbon tourism (Doran et al., 2017), as such tourism practices aim to minimize carbon emissions and preserve natural resources. Therefore, hypothesis 1a is accepted.

The next hypothesis concerns the relationship between altruistic value and attitudes toward supporting a low-carbon tourism economy. The findings show that altruistic value has a positive association with attitude toward supporting a low-carbon tourism economy (p-value = 0.000). Altruistic value emphasizes concern for the welfare of other people, society, and future generations (Roslin et al., 2025). Individuals with strong altruistic orientations are more sensitive to the social and collective benefits of sustainable tourism (Doran et al., 2017), such as reducing climate impacts on local communities and ensuring long-term destination sustainability. Prior studies show that altruistic values significantly predict environmental responsibility, moral obligation, and pro-environmental attitudes. Since a low-carbon tourism economy is an initiative to reduce environmental harm and protect destinations for future generations, altruistic individuals naturally develop more positive attitudes toward such practices; hence, hypothesis 1b is accepted.

On the contrary, egoistic value did not significantly affect attitudes toward the low-carbon tourism economy (p-value: 0.356). This result implies that self-interested considerations do not significantly drive positive attitudes toward the low-carbon tourism economy, thereby rejecting hypothesis 1c. While egoistic values can sometimes align with pro-environmental behaviour when personal benefits are salient (Eskandari & Fatemi, 2025), sustainable tourism behaviours are typically framed around collective and environmental benefits rather than individual gains. Empirical studies in sustainable consumption and tourism contexts consistently report that egoistic values have weak or insignificant effects on pro-environmental attitudes compared to altruistic and biospheric values (Saputri et al., 2024).

Aside from personal values, this study also examines the relationship between perceived economic benefit and intention to support the low-carbon tourism economy. It is found that perceived economic benefit showed a direct and positive relationship with intention to support a low-carbon tourism economy, with a p-value of 0.000. This result supports hypothesis 2, which indicates that when individuals recognise tangible financial or livelihood advantages, they are more likely to commit to supportive actions. Perceived economic benefit encompasses expectations of cost savings, increased local employment, enhanced destination competitiveness, and longer-term economic resilience (Martín et al., 2018; Obradović et al., 2021). These practical, personally meaningful benefits make low-carbon actions feel more relevant and immediate. They turn broad environmental goals into direct gains for individuals or communities, which increases people's intention to support low-carbon tourism even without relying on their attitudes (Zhan et al., 2025).

Furthermore, this study also examines the relationship between the attitude toward supporting a low-carbon tourism economy and the intention to support a low-carbon tourism economy. The findings reveal a significant positive relationship between attitudes toward a low-carbon tourism economy and behavioral intention to support it (p-value = 0.001), so the third hypothesis is accepted. In the context of low-carbon tourism, attitude reflects an individual's evaluation of sustainable practices in this sector, such as choosing eco-friendly transportation or staying in green hotels (Song et al., 2024). When people recognize that low-carbon initiatives are beneficial and necessary, they form a positive psychological attachment to the concept. This favorable attitude acts as a powerful cognitive driver, translating directly into a behavioral intention to support or spend money on low-carbon tourism options (Jebarajakirthy et al., 2024).

As regards the indirect effect between personal values and intention to support the low-carbon tourism economy through attitude towards supporting the low-carbon tourism economy, this study found that only biospheric and altruistic values are indirectly related to intention to support the low-carbon tourism economy, which supports H4a and H4b. Meanwhile, attitude towards supporting a low-carbon tourism economy cannot mediate the relationship between egoistic and intention to support a low-carbon tourism economy, so H4c is rejected. These results imply that biospheric and altruistic values appear to shape people's evaluative orientation toward low-carbon tourism, which forms stronger and more favourable attitudes and translates into higher behavioural intentions to support a low-carbon tourism economy. Biospheric and altruistic traits prioritize the intrinsic worth of ecosystems and the broader welfare of human society, respectively (C.-P. Wang et al., 2023). Individuals holding these values readily perceive the collective environmental and social benefits of low-carbon initiatives (Dong et al., 2023). This alignment naturally develops a positive, pro-environmental attitude, which can mediate personal values to concrete behavioral intentions.

In contrast, the mediation effect of attitude between egoistic values and intention was found to be non-significant. Individuals driven by this personal value evaluate situations heavily based on immediate personal costs and benefits (C.-P. Wang et al., 2023). Actively supporting a low-carbon tourism economy often demands personal sacrifices, such as paying a premium for green accommodations or accepting the inconveniences of public transport. Consequently, self-enhancement values fail to consistently generate a favorable attitude toward the initiative. Without a strong positive attitude acting as a psychological catalyst, the indirect pathway from egoistic values to behavioral intention breaks down (Liang et al., 2022).

Based on the results, several practical implications emerge for tourism stakeholders. First, communication strategies should be tailored to activate these value orientations. For instance, emphasizing environmental protection for youth with strong biospheric values, highlighting community and intergenerational benefits for those with altruistic tendencies, and showcasing clear economic advantages for individuals motivated by practical outcomes. Beyond communication, tourism providers can design value-aligned tourism products, such as eco-certified tours, carbon-neutral travel packages, and community-based experiences that visibly reflect environmental and social responsibility. Policymakers can reinforce these values by offering incentives and regulatory support, including subsidies for low-carbon tourism businesses, transparent carbon-labeling systems, and recognition programs for sustainable operators.

4. CONCLUSION

The purpose of this study was to examine whether the three value orientations of the Value-Belief-Norm theory, biospheric, altruistic, and egoistic along with perceived economic benefits and attitude, can meaningfully explain Generation Z tourists' intention to support a Low-Carbon Tourism Economy in Bali. Based on survey data from 159 respondents, predominantly aged 18–29 years, female, and favoring mid-

range travel, the structural model confirmed the majority of the proposed hypotheses and provided clear empirical evidence that moral values, environmental concern, and communal welfare, rather than personal self-interest, are the main psychological drivers of support for the shift to low-carbon tourism. Biospheric and altruistic values both exerted significant positive effects on attitude toward a Low-Carbon Tourism Economy, whereas egoistic values showed no significant influence, confirming that self-centered considerations fail to generate a supportive evaluative stance. Attitude in turn translated these moral commitments into intention and successfully mediated the biospheric–intention and altruistic–intention pathways, but did not mediate the egoistic–intention relationship. Perceived economic benefits emerged as the single strongest direct determinant of intention, reinforcing the practical complementary role of tangible economic expectations alongside ethical motivations, and the model demonstrated moderate explanatory power for attitude and substantially stronger explanatory power for intention. Despite these contributions, several limitations should be considered when interpreting the findings. The relatively modest sample size, the near-exclusive representation of Generation Z, the use of non-probability purposive sampling, and the single-site focus on Bali together constrain the statistical robustness and limit the generalizability of the results to older generational cohorts and other cultural or geographic tourism contexts. In addition, because intention was measured using self-reported items rather than observed behavior, social desirability bias cannot be fully ruled out, and the modest variance explained in attitude indicates that important antecedents remain unaccounted for.

Accordingly, further research is critically important to deepen understanding of the factors influencing tourists' behavior in support of low-carbon tourism. Future studies should expand the respondent base to include Millennials, Generation X, and Baby Boomers across diverse destinations beyond Bali. Furthermore, additional variables such as social norms, perceived behavioral control, green trust, and environmental consciousness, along with other emerging constructs could be incorporated to build a more comprehensive behavioral model that more fully explains both the attitudinal formation and the actual sustainable travel choices of tourists in the transition toward a low-carbon tourism economy. In addition, combining with qualitative methods will help to gain deeper insights into Generation Z's attitudes and values regarding low-carbon tourism.

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