Jurnal Impresi Indonesia (JII)
p-ISSN: 2828-1284 e-ISSN: 2810-062x
Vol. 5. No. 6. June 2026

The Effect of Green Hotel Implementation on Environmental Conservation at the Meru Sanur

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Keywords:
The Meru Sanur Green Hotel; Environmental Conservation; Waste Reduction; Employee Participation; The Meru Sanur

Abstract

This study aims to analyze the influence of green hotel implementation on environmental conservation in The Meru Sanur through waste reduction and employee participation. The study uses an explanatory quantitative approach with a survey method of operational employees in the housekeeping, food & beverage, front office, and engineering departments. The data were analyzed using multiple linear regression. The results of the study show that the implementation of green hotels has a positive but not significant influence on environmental conservation. The waste reduction variable also showed a positive but not significant influence. Meanwhile, employee participation had the strongest relationship with environmental conservation, with a correlation value of 0.410 and a significance of 0.025 (<0.05). These findings show that the success of green hotel programs is more influenced by active employee involvement than by technical and environmental policy aspects alone. Therefore, increased awareness, training, and employee engagement are important factors in supporting environmental sustainability in the hospitality industry.

INTRODUCTION

The hospitality industry is one of the tourism sectors that has a significant impact on environmental sustainability due to its intensive use of natural resources such as water, energy, and raw materials, as well as the high volume of waste generated from daily operations. Globally, the hotel industry is estimated to consume around 15–20% more energy per square meter compared to other commercial buildings, with water consumption reaching up to 300–500 liters per guest per day depending on the hotel category. In Indonesia, particularly in major tourism destinations, hotels contribute significantly to local environmental pressures, including groundwater depletion and increased solid waste generation. In tourism destinations like Bali, where environmental quality is a key factor in destination attractiveness, the pressure on hotels to operate responsibly has increased alongside the growth of environmentally conscious travelers. Data from the Bali Tourism Office show that tourist arrivals have steadily increased over the years, reaching millions annually, which directly correlates with increased hotel occupancy rates and consequently higher resource consumption and waste production. Furthermore, Bali produces more than 4,000 tons of waste per day, with a considerable portion originating from the tourism sector, including hotels and restaurants (Isnaniawardhani et al., 2026; Sadyasmara et al., 2025; Shantika et al., 2025; Widyarsana et al., 2022; Yusoff et al., 2022).

In response to these challenges, the concept of the green hotel has emerged as a strategic approach that integrates environmental management practices into hotel operations (Gashi et al., 2025; Khalil et al., 2024; Kuo et al., 2022; López-Gamero et al., 2023; Prakash et al., 2023; Rehman et al., 2023; Rinomhota et al., 2025; Tanveer et al., 2024). Green hotels emphasize energy efficiency, water conservation, waste reduction, and the use of environmentally friendly products, while maintaining service quality and guest comfort (Mensah, 2006; Bohdanowicz & Martinac, 2007). Examples of such practices include the installation of energy-efficient lighting systems, the use of renewable energy sources such as solar panels, the implementation of towel and linen reuse programs, and the reduction of single-use plastics. According to the United Nations Environment Programme (UNEP), adopting green practices in hotels can reduce energy consumption by up to 30% and water usage by 20–50%. Previous studies have shown that the implementation of green hotel practices can contribute to environmental protection, operational efficiency, and a positive corporate image (Chan & Wong, 2006). In addition, environmentally responsible hotels tend to attract a growing segment of eco-conscious travelers, with surveys indicating that more than 70% of global tourists prefer accommodations that implement sustainable practices. This trend further strengthens the business case for adopting green hotel strategies (Alsheref et al., 2024; Gashi et al., 2025).

However, the effectiveness of green hotel implementation is not solely determined by technology or policy, but also by human factors, particularly employee participation. Employee involvement through Employee Green Behavior (EGB) plays a crucial role in ensuring that environmental policies are consistently applied in daily operations (El Baroudi et al., 2023). EGB includes behaviors such as turning off unused electrical equipment, properly sorting waste, minimizing food waste during preparation and service, and actively participating in environmental programs initiated by the hotel. Research indicates that organizations with strong employee engagement in sustainability initiatives achieve significantly better environmental performance compared to those that rely solely on formal policies. Without active participation from employees, green hotel initiatives risk becoming symbolic rather than impactful. This phenomenon is often observed in hotels where sustainability policies exist only as formal documentation or marketing tools, without being effectively translated into operational practices due to a lack of awareness, training, or motivation among employees.

In the Balinese context, the implementation of green hotel practices is closely linked to the local philosophy of Tri Hita Karana, which emphasizes harmony between humans and God (Parahyangan), humans and other humans (Pawongan), and humans and the natural environment (Palemahan). This philosophy provides a culturally relevant framework for sustainable hotel management in Bali (Wiguna et al., 2023). Many hotels in Bali have adopted this philosophy as part of their operational values, integrating cultural and spiritual elements into sustainability practices, such as maintaining sacred spaces, supporting local communities, and preserving natural surroundings. The Tri Hita Karana Awards, for instance, are given to hotels that successfully implement this philosophy, highlighting its importance in promoting environmentally and socially responsible tourism in Bali.

Several previous studies have discussed the implementation of green hotel practices and their relationship with environmental sustainability in the hospitality industry. Research conducted by Mensah found that environmental management practices in hotels significantly contribute to reducing resource consumption and improving operational sustainability, particularly through efficient waste and energy management. Furthermore, a study by Chan & Wong explained that hotels implementing environmental management systems such as ISO

14001 tend to achieve better environmental performance and stronger corporate competitiveness. Similarly, Jalilvand (2017) revealed that environmentally friendly hotel practices positively influence customer satisfaction and loyalty, indicating that sustainability initiatives also provide long-term business benefits for hotels.

In the Indonesian and Balinese context, research by Wiguna emphasized that the implementation of the Tri Hita Karana philosophy strengthens sustainable hotel management by integrating environmental, social, and cultural values into operational activities. In addition, research conducted by El Baroudi demonstrated that employee participation through Employee Green Behavior (EGB) has a significant role in supporting environmental sustainability programs in hotels. Employees who actively participate in environmental initiatives are able to improve the effectiveness of green hotel implementation and encourage better environmental outcomes. However, despite these findings, studies specifically examining the combined influence of green hotel implementation, waste reduction, and employee participation on environmental conservation in Bali's hospitality sector remain limited. Therefore, this study attempts to fill the existing research gap by focusing on The Meru Sanur as a sustainability-oriented hotel in Bali.

The Meru Sanur, as a sustainability-oriented hotel located in the Sanur tourism area, has adopted various green hotel practices, including waste reduction programs, food waste management, and employee involvement in environmental activities. Sanur itself is known as one of Bali's key tourism zones, where environmental preservation is crucial due to its coastal ecosystem and dependence on marine tourism. Hotels in this area face increasing pressure to manage waste effectively, particularly plastic waste and food waste, which contribute significantly to environmental degradation if not properly handled. Nevertheless, empirical studies that systematically examine the impact of green hotel implementation on environmental preservation—particularly through waste reduction and employee participation—remain limited. Most existing studies focus on general sustainability practices without specifically measuring their direct impact on environmental outcomes at the hotel level, especially in the Indonesian context. This research therefore seeks to fill this gap by analyzing the influence of green hotel implementation on environmental preservation at The Meru Sanur.

METHOD

The study was conducted at The Meru Sanur, Bali, with the data collection period spanning from January 2026 to April 2026. This research employed an explanatory quantitative approach. Primary data were collected through the distribution of questionnaires using a five-point Likert scale (1–5) to operational employees in the Housekeeping, Food & Beverage, Front Office, and Engineering departments. Data analysis was performed using multiple linear regression analysis to examine the relationship between the independent variable (X), namely Green Hotel implementation, and the dependent variable (Y), Environmental Conservation, with waste reduction (Z1) and employee participation (Z2) as additional variables.

The population in this study consisted of all operational employees at The Meru Sanur who were directly involved in hotel operational activities and environmental management practices. The sample was determined using purposive sampling techniques with specific criteria, namely employees who understood and participated in the implementation of green hotel practices. A total of 30 respondents were selected from four operational departments: Housekeeping, Food & Beverage, Front Office, and Engineering. These departments were

chosen because they have direct involvement in sustainability practices such as waste management, energy efficiency, water conservation, and environmental operational procedures.

This study involves an independent variable, namely the implementation of green hotels (X); a dependent variable in the form of environmental conservation (Y); and two mediating variables, namely waste reduction (Z1) and employee participation (Z2). The green hotel implementation variable is measured through indicators of energy efficiency, water conservation, use of environmentally friendly products, and green building design. The waste reduction variable includes plastic minimization practices, waste sorting, organic waste treatment, and material reuse. Meanwhile, the employee participation variable is measured through environmental awareness, self-initiative, involvement in environmental programs, and compliance with green SOPs. The environmental conservation variable includes natural balance, environmental quality, biodiversity, and long-term sustainability. The data that have been obtained are then analyzed using multiple linear regression analysis to determine the influence among research variables both partially and simultaneously. Before hypothesis testing, the data are first tested through validity tests, reliability tests, and normality tests to ensure that the research instruments are suitable for use and the data meet the assumptions of statistical analysis. Through this analysis stage, this study is expected to be able to provide a clear picture of the green hotel implementation strategy in supporting environmental conservation, as well as to show that the success of sustainability programs is not only influenced by policies and technology, but also by the active involvement of human resources in daily hotel operations.

RESULTS AND DISCUSSION

A. Test Validity

Table 1. Item Validity Test Results for Variable X

Variabel	*x1*	*x2*	*x3*	*x4*	*xtot*
x1	*1*	*0,264*	*-0,053*	*0,152*	*0,668***
Sig.	*-*	*0,159*	*0,781*	*0,422*	*<0,001*
x2	*0,264*	*1*	*-0,115*	*-0,069*	*0,503***
Sig.	*0,159*	*-*	*0,544*	*0,715*	*0,005*
x3	*-0,053*	*-0,115*	*1*	*0,000*	*0,397**
Sig.	*0,781*	*0,544*	*-*	*1,000*	*0,030*
x4	*0,152*	*-0,069*	*0,000*	*1*	*0,519***
Sig.	*0,422*	*0,715*	*1,000*	*-*	*0,003*
xtot	*0,668***	*0,503***	*0,397**	*0,519***	*1*
Sig.	*<0,001*	*0,005*	*0,030*	*0,003*	*-*

Source: Research Data Processed Using SPSS (2026)

Based on the validity test results for the Green Hotel Implementation variable (X), all indicators showed a positive and significant relationship with the total score (xtot). The Pearson correlation value for x1 (energy efficiency) was 0.668, x2 (water conservation) was 0.503, x3 (environmentally friendly product policy) was 0.397, and x4 (building design) was 0.519. All significance values were below 0.05 (some even below 0.01), indicating that each indicator had a meaningful relationship with the variable construct. Therefore, it can be concluded that all questionnaire items accurately measured the concept of green hotel implementation.

Furthermore, no invalid indicators were found, as all item-total correlation values were above the minimum threshold (generally > 0.30). Indicator x1 had the strongest contribution in representing the variable, followed by x4 and x2. While x3, although the lowest, remained in the valid category. This shows that the aspects of energy efficiency, water conservation, use of environmentally friendly products, and building design together form the construct of green hotel implementation according to the ASEAN Green Hotel Standard and Han et al. (2011) references, so this research instrument is suitable for further analysis.

Table 2. Item Validity Test Results for Variable Z1

		z1.1	z1.2	z1.3	z1.4	z1tot
z1.1	Pearson Correlation	1	.219	.323	.303	.753**
	Sig. (2-tailed)		.245	.082	.104	<.001
	N	30	30	30	30	30
z1.2	Pearson Correlation	.219	1	.056	-.055	.534**
	Sig. (2-tailed)	.245		.771	.774	.002
	N	30	30	30	30	30
z1.3	Pearson Correlation	.323	.056	1	.062	.599**
	Sig. (2-tailed)	.082	.771		.746	<.001
	N	30	30	30	30	30
z1.4	Pearson Correlation	.303	-.055	.062	1	.523**
	Sig. (2-tailed)	.104	.774	.746		.003
	N	30	30	30	30	30
z1tot	Pearson Correlation	.753**	.534**	.599**	.523**	1
	Sig. (2-tailed)	<.001	.002	<.001	.003	
	N	30	30	30	30	30

Source: Research Data Processed Using SPSS (2026)

Based on the validity test results for the Waste Reduction variable (Z1) as a mediating variable, all indicators showed a positive and significant correlation with the total score (z1tot). The Pearson Correlation value for z1.1 (plastic minimization) was 0.753, z1.2 (organic waste processing) was 0.534, z1.3 (waste sorting) was 0.599, and z1.4 (reuse) was 0.523. All significance values were below 0.05, with most being below 0.01, indicating that each item had a strong and meaningful relationship with the waste reduction construct. This demonstrates that the instrument used was able to consistently measure the concept of waste reduction in accordance with the 3R approach (Reduce, Reuse, Recycle) and references from the InJourney Hospitality report.

Furthermore, all indicators met the validity criteria as the item-total correlation values were above the commonly used minimum threshold (r > 0.30). Indicator z1.1 has the most dominant contribution in representing the variable, followed by z1.3, z1.2, and z1.4. Although there are variations in the strength of the correlation between indicators, all remain in the valid and suitable category for use. Thus, the four indicators plastic minimization, organic waste processing, waste sorting, and material reuse together are able to describe the waste reduction variable well, so they can be used for further analysis in the research.

Table 3. Item Validity Test Results for Variable Z2

		z2.1	z2.2	z2.3	z2.4	z2tot
z2.1	Pearson Correlation	1	.357	-.232	.279	.639**
	Sig. (2-tailed)		.053	.218	.135	<.001
	N	30	30	30	30	30
z2.2	Pearson Correlation	.357	1	-.227	.472**	.671**
	Sig. (2-tailed)	.053		.227	.008	<.001
	N	30	30	30	30	30
z2.3	Pearson Correlation	-.232	-.227	1	-.089	.240
	Sig. (2-tailed)	.218	.227		.639	.201
	N	30	30	30	30	30

Source: Research Data Processed Using SPSS (2026)

Based on the validity test results for the Employee Participation (Z2) variable as a mediating variable, most indicators showed a positive and significant relationship with the total score (z2tot). The Pearson correlation value for z2.1 (environmental awareness) was 0.639, z2.2 (independent initiative) was 0.671, and z2.4 (green SOP compliance) was 0.708, with significance values <0.001 for each. This indicates that these three indicators have a strong and meaningful relationship in measuring the construct of employee participation, in accordance with the Employee Green Behavior (EGB) concept and the reference of El Baroudi et al. (2023).

However, indicator z2.3 (program involvement) had a correlation value of 0.240 with a significance value of 0.201, meaning it did not meet the validity criteria ($r < 0.30$ and $p > 0.05$). This indicates that this indicator is less able to represent the employee participation variable in the context of this study. Thus, it can be concluded that variable Z2 is generally quite valid because it is supported by three strong indicators, but indicator z2.3 should be considered for revision or elimination so that the research instrument becomes more accurate and consistent in measuring employee participation.

Table 4. Item Validity Test Results for Variable Y

		y1	y2	y3	y4	ytot
y1	Pearson Correlation	1	.093	-.029	-.163	.447*
	Sig. (2-tailed)		.624	.878	.390	.013
	N	30	30	30	30	30
y2	Pearson Correlation	.093	1	-.219	-.010	.449*
	Sig. (2-tailed)	.624		.245	.956	.013
	N	30	30	30	30	30
y3	Pearson Correlation	-.029	-.219	1	-.046	.408*

Source: Research Data Processed Using SPSS (2026)

Based on the validity test results for the Environmental Conservation (Y) variable, all indicators showed a positive correlation with the total score (ytot) and had a significance value below 0.05. The Pearson correlation value for y1 (natural balance/Palemahan) was 0.447 ($p = 0.013$), y2 (environmental quality) was 0.449 ($p = 0.013$), y3 (biodiversity) was 0.408 ($p =$

0.025), and y4 (long-term sustainability) was 0.494 (p = 0.006). This indicates that the four indicators have a sufficient and significant relationship in measuring the environmental conservation construct based on the Tri Hita Karana (Palemahan) philosophy and the concept of environmental conservation.

Furthermore, all item-total correlation values were above the minimum threshold (r > 0.30), thus all indicators were declared valid and suitable for use in this research. Indicator y4 has the strongest contribution in representing the variable, followed by y2, y1, and y3. Although the correlation level is in the moderate category, all indicators remain consistent in describing aspects of environmental conservation, ranging from natural balance, environmental quality, biodiversity, to long-term sustainability. Therefore, the instruments for this dependent variable can be used for further analysis.

B. Reliability

Table 5. Reliability Test Results of Research Variables

Cronbach's Alpha	N of Items
.116 (X)	4
.406 (Z1)	4
.245 (Z2)	4
-.318 (Y)	4

Source: Research Data Processed Using SPSS (2026)

The reliability test was conducted to assess the internal consistency of the research instrument used to measure the variables Green Hotel Practices (X), Waste Reduction (Z1), Employee Participation (Z2), and Environmental Conservation (Y). Based on the reliability test results, the Cronbach's Alpha values obtained were 0.116 for Green Hotel Practices (X), 0.406 for Waste Reduction (Z1), 0.245 for Employee Participation (Z2), and -0.318 for Environmental Conservation (Y), with each variable consisting of four indicators.

The results indicate that all Cronbach's Alpha values are below the minimum acceptable threshold of 0.60–0.70, suggesting that the research instrument has not yet achieved an adequate level of reliability. In particular, the negative Cronbach's Alpha value for Environmental Conservation (Y) indicates the presence of negative average covariance among items, which violates the assumptions of the reliability model and may suggest problems related to item coding or inconsistency among indicators.

Conceptually, the indicators used in this study were developed based on established theories and standards, including the ASEAN Green Hotel Standard, Employee Green Behavior (EGB) theory, the 3R concept (Reduce, Reuse, Recycle), and environmental conservation principles. However, the empirical results reveal that the indicators were not sufficiently consistent in measuring their respective constructs. This condition may be caused by unclear wording of questionnaire items, differences in respondents' understanding of green hotel practices and environmental issues, limited interrelationships among indicators, or inconsistencies in the implementation of environmental programs across respondents.

Therefore, the research instrument requires further improvement through revision of questionnaire items, clarification of statement wording, addition of more representative indicators, and re-validation testing before being applied in broader studies. Although

subsequent analyses such as regression may still be conducted to obtain preliminary findings, the results should be interpreted with caution due to the limitations in instrument reliability. Future studies are recommended to refine the measurement instrument to achieve a satisfactory level of reliability and improve the accuracy of the research findings.

C. Multiple Linear Regression

Table 6. Results of Multiple Linear Regression Analysis

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	8.012	3.564		2.248	.033
	z1tot	.047	.138	.063	.341	.736
	z2tot	.336	.167	.370	2.016	.054
	xtot	.148	.153	.172	.966	.343

Source: Research Data Processed Using SPSS (2026)

Based on the results of multiple linear regression, the equation obtained is: Y = 8.012 + 0.047Z1 + 0.336Z2 + 0.148X. Partially, the Waste Reduction variable (Z1) has a positive coefficient (0.047) but is not significant (Sig. 0.736 > 0.05), meaning that the implementation of the 3R concept such as plastic minimization, waste processing, and reuse has not had a significant impact on Environmental Conservation (Y) in hotels. Meanwhile, Employee Participation (Z2) shows the greatest positive influence (B = 0.336) and is close to significant (Sig. 0.054), which means that the higher the awareness, initiative, involvement, and compliance of employees with green SOPs, the greater their contribution to environmental conservation, although statistically it is still slightly above the significant limit of 0.05. The main variable of Green Hotel Implementation (X) which includes energy efficiency, water conservation, use of environmentally friendly products, and building design also has a positive effect (B = 0.148), but is not significant (Sig. 0.343). This indicates that the implementation of standards such as the ASEAN Green Hotel Standard and green design practices have not directly had a strong impact on environmental conservation without being supported by other factors. Overall, these results indicate that the role of humans (employees) is more dominant than the technical operational aspects in encouraging environmental conservation. In other words, the success of a green hotel program is highly dependent on the level of active participation of employees as the main mediator rather than just the implementation of environmental systems or policies alone.

Furthermore, the positive coefficients obtained for all independent variables indicate that improvements in Green Hotel Implementation, Waste Reduction, and Employee Participation tend to be associated with better Environmental Conservation outcomes. However, the absence of statistically significant effects suggests that these relationships may not yet be strong enough to produce measurable impacts within the current sample. This condition may be influenced by differences in the implementation of environmental programs among hotels, variations in employee commitment, or other external factors that were not included in the regression model. Therefore, future studies are recommended to incorporate additional variables and larger samples to provide a more comprehensive explanation of environmental conservation practices in the hospitality sector.

D. Test F

Table 7. Results of the Simultaneous Significance Test (F-Test)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.967	3	3.989	2.207	.111[b]
	Residual	47.000	26	1.808		
	Total	58.967	29			

Source: Research Data Processed Using SPSS (2026)

Based on the F test (simultaneous), the regression model that examines the effect of Green Hotel Implementation (X), Waste Reduction (Z1), and Employee Participation (Z2) on Environmental Conservation (Y) shows that together the independent variables are able to explain variations in the dependent variable. This means that the combination of the implementation of energy efficiency, water conservation, the use of environmentally friendly products, building design, 3R practices (reduce, reuse, recycle), and employee green behavior such as awareness, initiative, and SOP compliance have a collective role in supporting environmental conservation in hotels. Based on the F test results, the regression model obtained an F-count value of 2.207 with a significance value greater than 0.05. Therefore, it indicates that the independent variables simultaneously do not have a significant effect on Environmental Conservation (Y).

Although the simultaneous effect was found to be statistically insignificant, the regression model still provides useful information regarding the collective contribution of the independent variables. The results imply that environmental conservation is a multidimensional concept that may be influenced not only by green hotel practices, waste reduction activities, and employee participation, but also by other organizational and environmental factors. Consequently, hotel management should continue strengthening environmental programs while integrating broader sustainability strategies to achieve more substantial conservation outcomes.

E. Test T

Table 8. Results of the Partial Significance Test (t-Test)

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	8.012	3.564		2.248	.033
	z1tot	.047	.138	.063	.341	.736
	z2tot	.336	.167	.370	2.016	.054

Source: Research Data Processed Using SPSS (2026)

Based on the results of the t-test (partial), it shows that Waste Reduction (Z1) has a significance value of 0.736 (>0.05) with a positive coefficient (B = 0.047), so that partially it does not have a significant effect on Environmental Conservation (Y), which means that 3R practices such as plastic minimization, organic waste processing, waste sorting, and reuse have not had a real impact. Employee Participation (Z2) has a significance value of 0.054 which is close to 0.05 with the largest coefficient (B = 0.336), so it can be said to have a positive effect

but is not statistically significant, indicating that employee awareness, initiative, involvement, and compliance with green SOPs tend to increase environmental conservation. Meanwhile, Green Hotel Implementation (X) has a significance value of 0.343 (>0.05) with a positive coefficient (B = 0.148), so it also does not have a significant effect, which means that the application of energy efficiency, water conservation, environmentally friendly products, and building design has not directly had a strong impact on environmental conservation. Thus, partially all independent variables have not shown a significant influence, even though the direction of the influence is positive, with the employee participation variable being the most dominant.

The findings also suggest that Employee Participation (Z2) is the variable with the strongest contribution among the predictors included in the model. Although its effect did not reach the conventional significance level, the relatively higher coefficient indicates that employee involvement may play a critical role in translating environmental policies into practical actions. This highlights the importance of increasing environmental awareness, providing regular training, and encouraging employee engagement in sustainability initiatives. Strengthening these aspects may enhance the effectiveness of green hotel programs and contribute more substantially to environmental conservation efforts in the future.

F. Correlation Coefficients

Table 9. Pearson Correlation Coefficients

		xtot	z1tot	z2tot	ytot
xtot	Pearson Correlation	1	.154	.124	.228
	Sig. (2-tailed)		.417	.512	.227
	N	30	30	30	30
z1tot	Pearson Correlation	.154	1	.289	.196

Source: Research Data Processed Using SPSS (2026)

Based on the Pearson correlation coefficient, the relationship between Green Hotel Implementation (X) and Environmental Conservation (Y) is 0.228 with a significance level of 0.227 (>0.05), indicating a positive but weak and insignificant relationship. This indicates that the implementation of energy efficiency, water conservation, the use of environmentally friendly products, and building design do not yet have a strong direct relationship to improving environmental quality, natural balance, biodiversity, and sustainability. Similarly, the relationship between Waste Reduction (Z1) and Environmental Conservation (Y) is 0.196 with a significance level of 0.299 (>0.05), also indicating a weak and insignificant positive relationship. Therefore, 3R practices such as plastic minimization, organic waste processing, sorting, and reuse are not strongly correlated with environmental conservation.

Conversely, Employee Participation (Z2) has the strongest relationship with Environmental Conservation (Y), with a correlation level of 0.410 with a significance level of 0.025 (<0.05), indicating a moderate and significant positive relationship. This indicates that the higher environmental awareness, independent initiative, involvement in programs, and compliance with green SOPs, the higher environmental preservation in hotels. Furthermore, the relationships between independent variables such as X with Z1 (0.154), X with Z2 (0.124), and Z1 with Z2 (0.289) are all classified as weak and insignificant. Therefore, it can be

concluded that the most influential factor in supporting environmental preservation is active employee participation, compared to technical implementation and waste management aspects.

CONCLUSIONS

In conclusion, this study demonstrates that the implementation of green hotel practices at The Meru Sanur has a positive but not yet statistically significant direct impact on environmental conservation, indicating that technical and policy-based approaches alone are insufficient to produce optimal environmental outcomes. While waste reduction initiatives such as the application of the 3R concept show a positive direction, their influence remains weak and insignificant, suggesting that these practices have not been fully effective or consistently implemented in daily operations. In contrast, employee participation emerges as the most influential factor, with a moderate and significant relationship to environmental conservation, highlighting the critical role of Employee Green Behavior (EGB) in translating sustainability policies into real actions. These findings imply that the success of green hotel initiatives is highly dependent on human factors, particularly the awareness, initiative, and compliance of employees, rather than solely on environmental systems or standards. Therefore, strengthening employee engagement, improving training programs, and enhancing the reliability of measurement instruments are essential steps to ensure that green hotel implementation can effectively contribute to sustainable environmental preservation in the hospitality industry, especially within the context of Bali's Tri Hita Karana philosophy.

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