



**Penang  
Green  
Council**

# **PENANG GREEN HOTEL SURVEY 2025**

**PREPARED BY:**

**DR ASSIF SHAMIM  
BIN MUSTAFFA @ SULAIMAN  
THINK TANK & PROJECT DEVELOPMENT**

**PENANG  
2030**

## 1. Background

The Penang2030 Vision has provided a strong platform to facilitate the green transformation of hotels in Penang. Specifically, Target D4T3 aims for 80% of all hotels in Penang to adopt green practices by 2030. However, currently, only two hotels in Penang are officially recognized as Green Hotels by the Ministry of Tourism, Arts, and Culture Malaysia (MOTAC) in 2024.

In order to understand the current green practices within the hotel industry in Penang, a baseline study survey was designed focusing on four key areas: energy conservation, water conservation, waste management, and sustainable sourcing and green procurement. Insights gathered from the survey will guide evidence-based planning and policy formulation for the Penang Green Hotel Framework.

## 2. Methodology

This study was conducted between February 2024 and January 2025 to assess the adoption of sustainability practices within Penang's hotel industry. The sampling frame comprised 244 registered hotels, identified through official records provided by the Penang Island City Council (MBPP) and the Seberang Perai City Council (MBSP).

Data collection was carried out through multiple channels, including external email invitations, direct engagement by field enumerators, and collaborative outreach efforts with two academic institutions: UOW Malaysia KDU Penang University College and INTI International College Penang. Following a rigorous data cleaning and verification process, a total of 106 valid responses were obtained.

Although the total population of hotels collected from both local councils are 244, the final sample size of 106 was primarily determined by the voluntary nature of participation and response rate limitations commonly encountered in survey-based research within the hospitality sector. Despite this, the sample is considered adequate for exploratory analysis and provides a meaningful representation of the current sustainability practices adopted by Penang's hotel industry.

### 3. Results

#### 3.1 Section A: Demographic Profile

A total of 106 hotel industry respondents from Penang Island and Seberang Perai participated in the survey, which consisted of 38 questions distributed via Google Forms. This section primarily focuses on the hotelier's demographic profile.

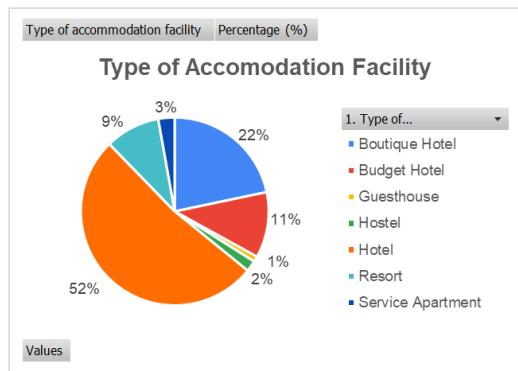


Figure 1. Type of Accommodation Facility

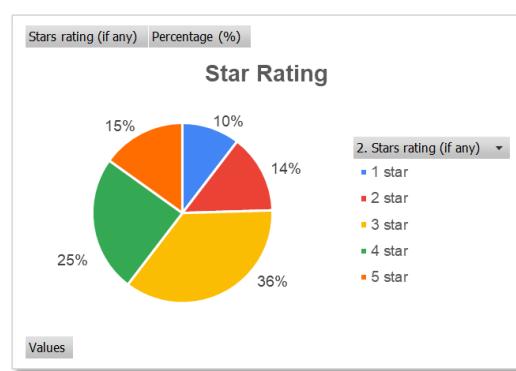


Figure 2. Star Ratings

The results as presented, indicate that the majority of accommodation facilities are hotels (**51.89%**). In terms of star rating, the highest proportion of respondents represent 3-star hotels (**35.85%**).

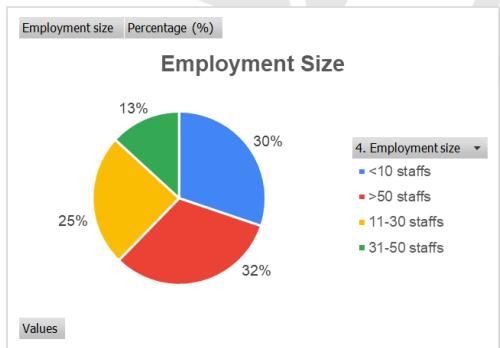


Figure 3. Employment Size



Figure 4. Total Beds Available

Regarding employment size, hotels with more than 50 staff constitute the largest group (**32.08%**). For bed capacity, the majority of hotels have fewer than 100 beds (**53.77%**).

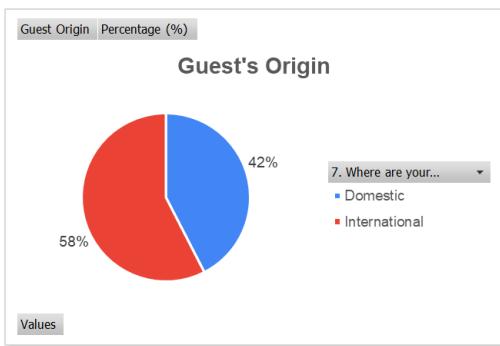


Figure 5. Guest's Origin



Figure 6. Purpose of Visit

With regard to guest origin, **57.55%** of hotel guests are **international travellers**, while **42.45%** are **domestic visitors**. The primary purpose of hotel stays is **leisure** (**70.75%**), with business travel accounting for **29.25%**.

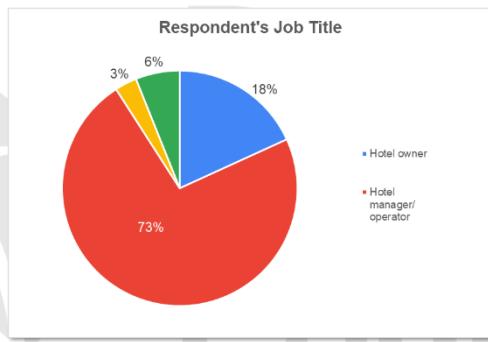


Figure 7. Respondent's Job Title

Finally, **72.73%** of survey responses were provided by hotel managers or operators, followed by hotel owners (**18.18%**), researchers (**6.06%**), and hotel investors (**3.03%**).

### 3.2 Section B: Hotels' Green Commitment

This section aims to evaluate the current status of green amenities, energy and water-saving practices, waste reduction, and green procurement, alongside hotelier's intentions to adopt more sustainable operations.

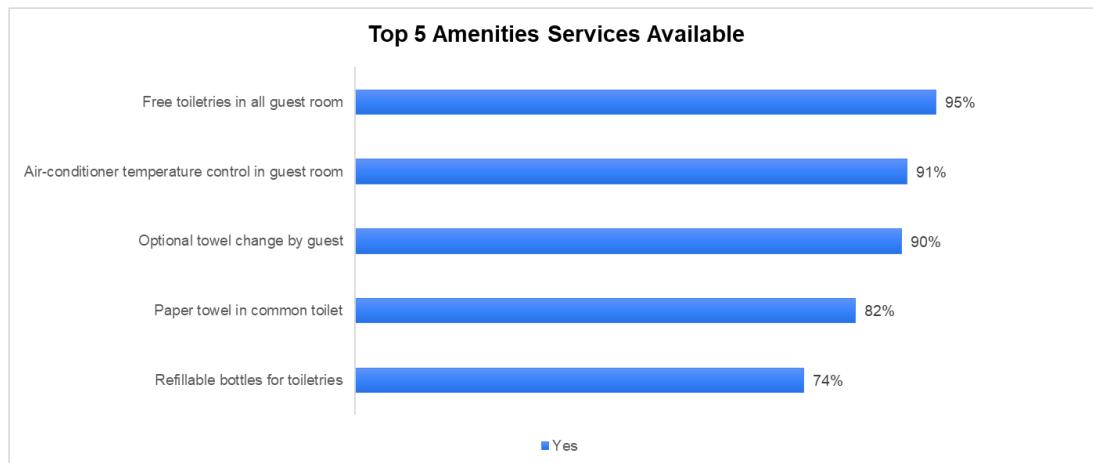


Figure 8. Top 5 Amenities Services Available

Figure 8 shows that the top five amenities provided by hoteliers in Penang, where the highest amenities are providing free toiletries in all guest rooms (95%).

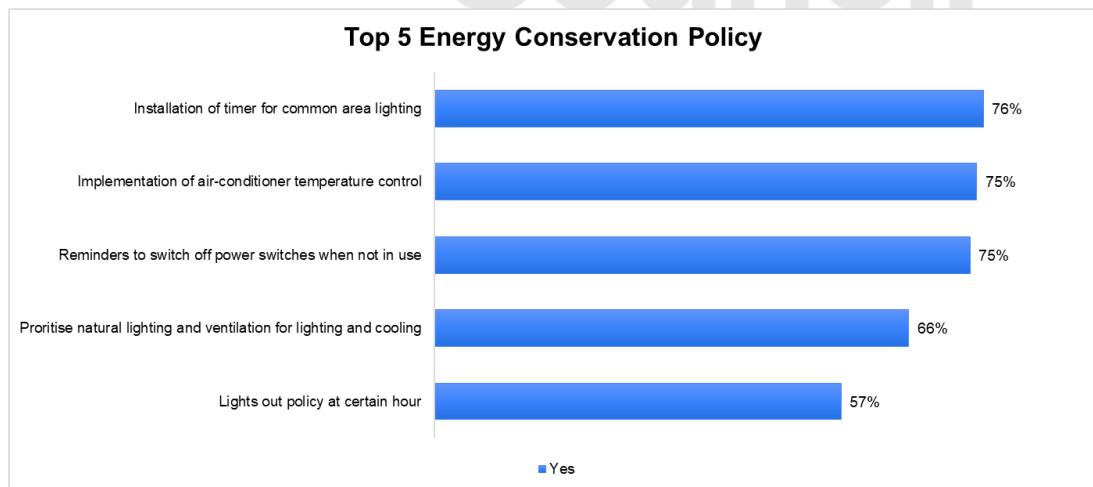


Figure 9. Top 5 Energy Conservation Policy

As shown in Figure 9, the most commonly adopted energy saving practice in this category is the installation of timers for common area lighting (76%).

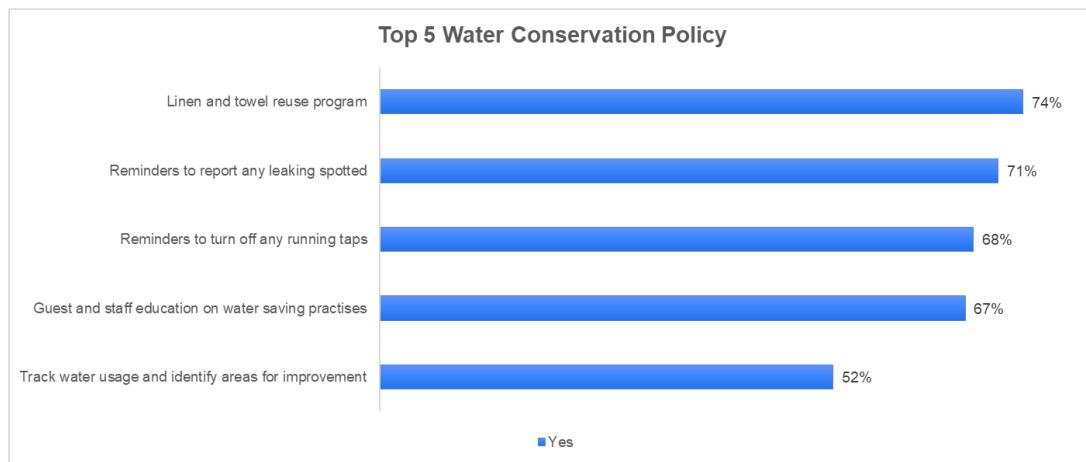


Figure 10. Top 5 Water Conservation Policy

Figure 10 highlights the water-efficient practices and policies implemented by hoteliers. The most commonly adopted practice is the **linen and towel reuse program (74%)**.

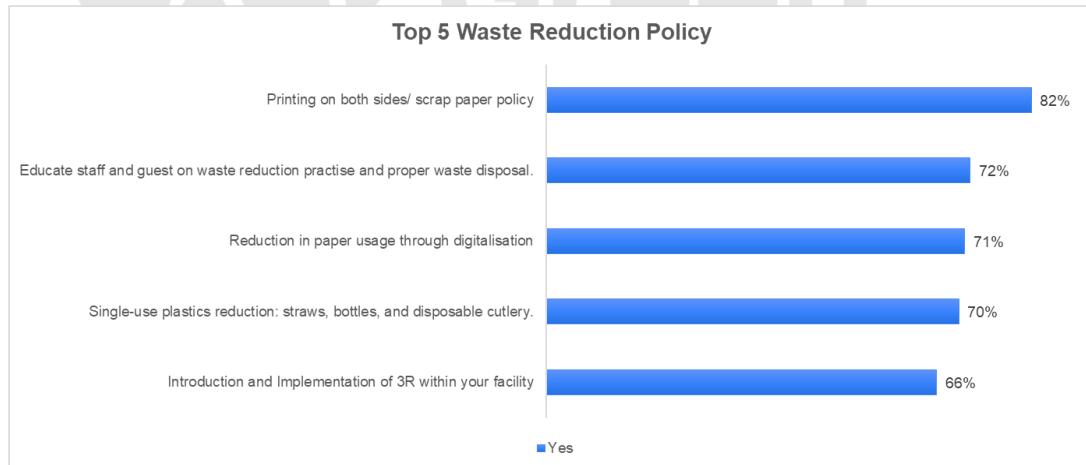


Figure 11. Top 5 Waste Reduction Policy

Figure 11 presents an overview of waste reduction policies among hoteliers in Penang, where the use of **double-sided printing or a scrap paper policy (82%)** was the most implemented waste reduction practices.



Figure 12. Top 5 Procurement Policy

Figure 12 shows that the most common green procurement practice among hoteliers in Penang is **purchasing locally produced goods** whenever possible (**82%**).

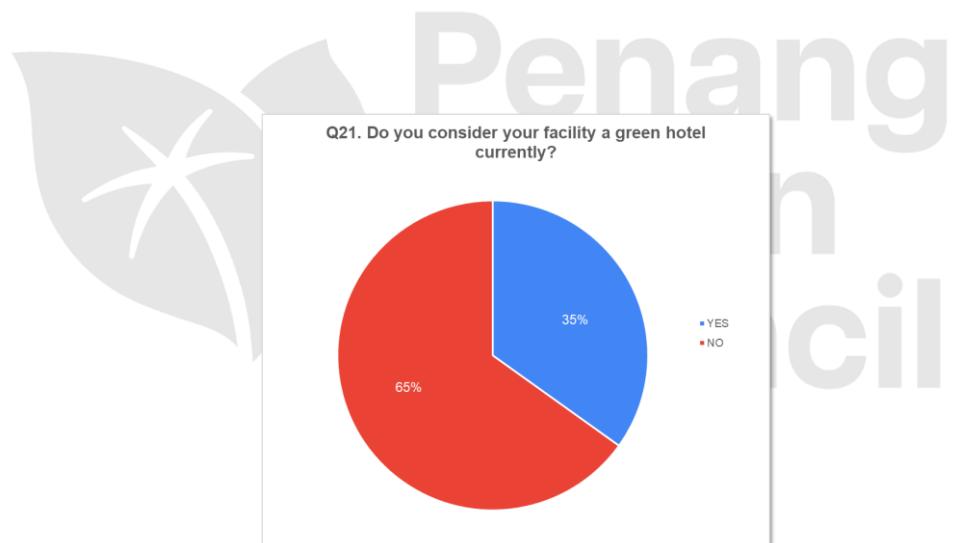


Figure 13. Current Green Hotel Self-Identification Among Hoteliers

As depicted in Figure 13, out of 106 survey respondents, **65%** respondents ( $n=69$ ) did not characterise their hotel as green hotel, where the remaining **35%** ( $n=37$ ) would consider their facility as green hotel.

Moreover, **95%** out of 37 respondents who answered yes in Figure 13 would **encourage their peers to convert their green facility to green hotel**. Also, **95%** out of the 69 respondents who answered no in Figure 13 would also **consider converting facility into green hotel within the next 5 years**.

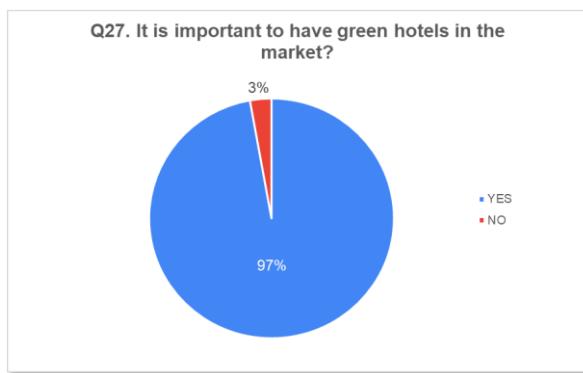


Figure 14. Perception of the Importance of Green Hotels in the Market

Figure 14 shows that **97%** out of 106 respondents **agrees that it is important to have green hotels** in the market, with a fraction of 3% did not agree to this statement.

### 3.3 Section C: Pull and Push Factors

This section explores the pull and push factors affecting hoteliers' willingness to convert their establishments into green hotels.

Table 1. The Top 5 Pull Factor in Establish / Convert to a Green Hotel

Pull Factor Statement	Mean
My staff will require additional training for green hotel compared to conventional ones	3.76
I require training before I can operate a green hotel compared to a conventional one	3.67
It will cost more to build a green hotel than a conventional one	3.62
It will cost more to operate a green hotel than a conventional one	3.34
There is no guideline provision for green hotel	2.94

Table 1 presents the top five pull factors influencing hoteliers to establish or convert their hotels into green hotels, based on the average scores from the survey responses. Generally, hoteliers agree that both training and cost considerations are significant factors in green hotel operations.

Specifically, they believe that **additional training is required for both their staff (mean = 3.76) and the hotel management (mean = 3.67)** when transitioning from conventional to green hotel operations.

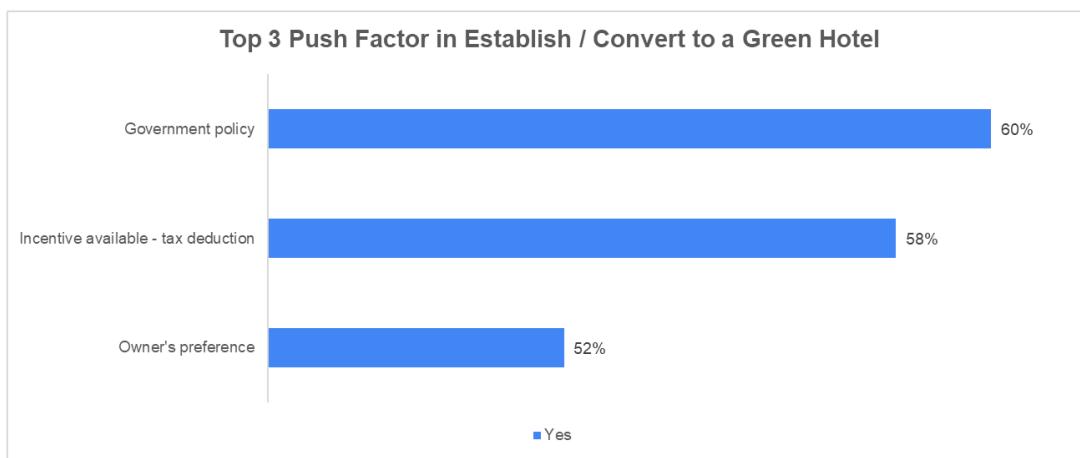


Figure 15. The Push Factor in Establish / Convert to a Green Hotel

The findings in Figure 15 indicate that the three primary push factors influencing hoteliers' decisions to convert their facilities into green hotels are government policy (**60%**), tax deduction incentives (**58%**), and owner's preference (**52%**).

#### 4. Conclusion

Overall, the survey findings provide a comprehensive overview of Penang's hotel industry, highlighting the diverse range of accommodation types, star ratings, employment sizes, and guest demographics. The majority of respondents operate three-star hotels, with a significant proportion managing facilities with fewer than 100 beds. Additionally, a higher percentage of guests are international travellers, primarily visiting for leisure. The survey responses were predominantly provided by hotel managers and operators, indicating a strong representation of decision-makers in the industry. These insights are crucial for understanding the current landscape of Penang's hotel sector and the factors influencing the adoption of sustainable practices.

The study also highlights key sustainability practices implemented by hoteliers, particularly in energy efficiency, water conservation, waste management, and green procurement. While some measures, such as air-conditioning temperature control, linen reuse programs, and waste reduction policies, are widely adopted, more advanced initiatives, such as solar panel installation and rainwater harvesting, remain limited, likely due to cost concerns. Additionally, the findings reveal that financial and regulatory assessment incentives are stronger motivators for green hotel conversion than accreditation or market-driven factors. Addressing barriers such as training gaps, cost constraints, and regulatory clarity will be essential in fostering a broader transition to sustainable hospitality practices in Penang.