

# The Implementation of Green Housekeeping to Increase Efficiency of Operational Cost of Housekeeping Department at Holiday Resort Lombok

I Ketut Murta Jaya Kusuma<sup>1</sup>, Dewa Made Suria Antara<sup>2\*</sup>, Ni Gst Nym. Suci Murni<sup>3</sup>, Raden Roro Rieta Anggraheni<sup>4</sup>

<sup>1,2,3,4</sup>Politeknik Negeri Bali, Badung, Indonesia

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## ABSTRACT

This observation-based research aims to investigate the impact of the implementation of green housekeeping at the Holiday Resort Lombok, particularly on the operational cost efficiency. The data were collected in three months through observation, interview, and documentation technique, involving as many as 4 (four) informants and 10 (ten) respondents. The data were analyzed using descriptive quantitative analysis technique and the discussion was focused on the influence of Internal and External factors on the efficiency of operational cost. The research result shows that the implementation of green housekeeping has a positive impact in decreasing the operational cost and increasing the amount of savings yearly. In 2018, before the implementation of green housekeeping, the total savings of operational cost was Rp 2.045.750.506, while in 2019 there was a greater amount, indicating a significant result by 18.43% more frugal due to the green housekeeping implementation. Studying the global trend of green hotel, Holiday Resort wants to point out and emphasize the advantages offered by the green hotels. This also suggests that Holiday Resort can become a more competitive destination considering its potential and resources. However, it is recommended that Holiday Resorts Lombok allocate more funds for composting and vermi composting, biomethanation, and biosanitizing processes.

## Introduction

Today, hundreds of millions of people travel both domestically and internationally which makes tourism a global business. The industry of tourism has long been referred to as the smokeless one, but in actuality, there are a variety of ways that people's travels increase carbon emissions. In other words, the increased traffic brought on by tourism-related activities releases carbon dioxide that could be harmful to the environment. Other than that, many tourist attractions, including hotels, restaurants, theme parks, and even events or artistic performances, produce a lot of waste and consume a lot of energy to run their systems, which results in greenhouse gases that are thought to be one of the factors contributing to global warming (Andari and Setiyorini, 2016). Hotel is the primary element of a tourist destination (Gunn, 2002), but a considerable number of hotels heavily influence the consumption of resources such as water, energy (electricity, fuel) and environmental repercussions from waste (Baker et al., 2014; Jaiswal and Kant, 2017). In recent decades, there has been a change in people's interest in traveling, by demanding more variety in needs, types, and patterns of travel. Specific-interest tourism is now giving greater emphasis on environmental and social factors resulting in "humanization of travel" (Weiler and Hall, 1992).

The changing era results in the emergence and development of green tourism and sustainable tourism. Green tourism, a type of eco-tourism, focuses on ensuring that visitors do not cause any harm to the places they visit. It includes assessing environmental and cultural aspects as well as promoting practices like reduce, reuse, recycle, energy efficiency, water conservation, and community empowerment for the development of economic activities. Additionally, according to a special report by the US Ecotourism

<sup>1</sup> Corresponding author.

E-mail : [ketutjaya.hri@gmail.com](mailto:ketutjaya.hri@gmail.com) (I Ketut Murta Jaya Kusuma), [dwsuria@pnb.ac.id](mailto:dwsuria@pnb.ac.id), (Dewa Made Suria Antara), [gustinymsucimurni@pnb.ac.id](mailto:gustinymsucimurni@pnb.ac.id) (Ni Gst Nym. Suci Murni), [rororietaanggraheni@pnb.ac.id](mailto:rororietaanggraheni@pnb.ac.id) (Raden Roro Rieta Anggraheni)

Market, WTO, it can reduce environmental damage, aid in the preservation of the area, encourage community empowerment, increase appreciation for local culture and values, and increase public awareness of environmental and nature conservation (Andari and Setiyorini, 2016).

The practices of sustainable tourism, green tourism, or eco-tourism, therefore, have been on the rise, particularly in the accommodation businesses. Some of the hotel industry's motivations to switch to sustainable management include competitiveness, customer loyalty, labor retention, recognition and award, policy or political compromise, risk management, and enhancing the company's brand value (Graci and Kuehnel, 2011). To implement green tourism successfully, several attempts and commitments should be made. One of the important points is that the implementation of green tourism will need to refer to certain standardization. The operational activities of a hotel, for instance, should be based on international environmental standards and conducted in accordance with one of the certifications obtained such as ISO 14001 about environmental management system. Obeying local regulations and implementing local wisdom are also important (Murni et al., 2017). Besides, the hotel staff and guests must also be encouraged and motivated to support energy-saving and environmentally friendly activities. One of the efforts is giving cards to the guests. A study found that the use of messages with descriptive and reciprocal norms gave positive impacts on the guests' participation in reusing linens and towels (Santika et al., 2013).

Holiday Resort Lombok is one of the leisure and business accommodations. It has a concern on creating and enhancing green hotels based on green tourism. Holiday Resort Lombok intends to adapt the concept known as 6R which stands for refine, reduce, reuse, recycle, recover, and retrieve energy, based on the research conducted by Ramadhan (2020) entitled "Environmental Friendly Concepts in Office". This practice has not been thoroughly accepted due to various constraints such as perceptions and procedures about green housekeeping which is identical with costly maintenance, the support and government participation through a policy that has not been optimal, and lack of understanding of green hotel procedures are things. Meanwhile, the tourist trend that shows a tendency to care more about the environment and be aware of the importance of green products and eco-labels is a driving factor that will further enhance the spread of green hotel practices. This research, therefore, aims at unraveling how green housekeeping is implemented and whether the implementation give significant impacts, particularly on the cost savings of the Housekeeping Department. Referring to Robinot and Giannelloni (2015), savings on different expenses is a hotel's most valuable advantage. The hotel can maximize efforts efficiently and reduce waste so that it becomes more cost-effective than its competitors. Moreover, the hotel will be a more competitive destination considering its potential and resource, with new technology of implemented natural waste processing to support green activity of composting and vermin composting, biometanation, and biosanitizing.

## Method

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This research which was accomplished through a descriptive quantitative analysis was carried out in 3 (three) months starting from April 2022 until July 2022 in the Housekeeping Department at Holiday Resort Lombok. Quantitative descriptive analysis allows the researcher to study circumstances of natural objects (Sugiyono, 2018). Two sources of data were used in this research in the forms of primary data and secondary data. The primary data were obtained from the discussion with the Executive Housekeeper and staff regarding the implementation of green housekeeping at Holiday Resort Lombok and the questionnaire results that were distributed to the 10 research respondents. These 10 respondents were selected from the total Housekeeping Department population consisting of 20 persons/employees through saturation sampling technique. The key informant who was the Executive Housekeeper was determined using purposive sampling technique. Meanwhile, the secondary data which included the hotel history, hotel product, facilities, organization chart, and number of staff were gathered from the literature and documentation study.

Five methods of collecting data were used in this research. The first is conducting literature study by reading research journals, articles, and books. The second step is observing research object in the Housekeeping Department for 5 (five) months starting from February 2022 until June 2022. The third method is interviewing the 4 (four) informants including Executive Housekeeper, Room Division Manager, Resort Manager, and President Director. The fourth method is collecting hotel documents (documentation) about the hotel history, organization chart product, and hotel facilities. Lastly, the questionnaires were

distributed to the Housekeeping Department staff at Holiday Resort Lombok as the respondents. The data were then analyzed using qualitative descriptive method.

The qualitative data in this research were the general information about Holiday Resort Lombok including its history, location, hotel products and facilities, job descriptions, green programs, organization chart of Housekeeping Department, and interview results with the informants about the implementation of green housekeeping in Holiday Resort Lombok. The quantitative data in this research included the number of staff at Housekeeping Department, the number of room facilities, the percentage of housekeeping performance in running features of the implementation of green Housekeeping Department, and the data calculation from distributing questionnaires.

The data analysis focused on the result of interview, observation, and documentation and attempted to examine variables which were identified into two factors, Internal Factor and External Factor. The Internal Factor was adapted from the concept proposed by Ramadhan (2020) which is known as 6R (Refine, Reduce, Reuse, Recycle, Recovery, and Retrieve Energy), while based on Walker et al. (2008) in Rosydi (2021), the indicators of external factor consist of government regulation, consumer, competition, and social environment.

## Findings and Discussion

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Holiday Inn Resort Lombok is a four-star hotel that was established in 1994 and inaugurated (Grand Opening) by the Governor of NTB, Mr. Warsito on October 2nd, 1995. Since January 2006 Holiday Inn Resort Lombok has changed to Holiday Resort Lombok which is owned by PT Lombok Seaside Cottage, part of the PT Blue Bird Group. The slogan of Holiday Resort Lombok is "Absolutely Leisure" which means "Really Enjoying Your Free Time." With this slogan, Holiday Resort Lombok hopes that it will become the first choice for customers to stay with a very pleasant and calm atmosphere so that customers really enjoy spending their time in the hotel.

In terms of operational, Holiday Resort Lombok has a structure of organization to ensure the operational activities of the hotel run well. The structure of organization is very necessary as it plays an important role in regulating the relations between team units, dividing and coordinating tasks and authorities effectively. Below is the organizational structure at Holiday Resort Lombok.

1. *President Director*, is the person who is responsible for implementing existing plans and policies, improving the company's financial strength, supporting ongoing digital business transformation and setting future strategy. In essence, he or she creates and implements business strategies for the hotel in line with the standards and philosophy of the organization. The hotel's president director is in charge of every aspect of the hotel and is the key player making all crucial decisions.
2. *General Manager*, is an executive who has overall responsibility for managing both the revenue and cost elements of a company's income statement, known as profit & loss (P&L) responsibility. A general manager usually oversees most or all of the firm's marketing and sales functions as well as the day-to-day operations of the business. Frequently, the general manager is responsible for effective planning, delegating, coordinating, staffing, organizing, and decision making to attain desirable profit-making results for an organization.
3. *Resort Manager*, is a person who manages all the business aspects of a lodging or resort location. A resort manager is responsible for hiring and training staff, ordering supplies, marketing and advertising, maintaining budget, maintaining customer service along with accommodating the needs of guests.
4. *Department Head*, is a person who has knowledge and responsibility for his or her own department such as managing accounting, sales, company growth, or customer support. He or she is responsible for supervising the daily activities and operations. In doing his or her job, a department head should maintain communication and coordination with all staff in his or her department.
5. *Employees*, are persons who support all operational activities in order to ensure everything runs well and report any issue or information to the leader that will be passed through to the department head. In general, they can be classified into three different categories: administration staff, guest services, and support staff. Essentially, they take care of everything necessary to make visitors feel at ease, including making reservations, cleaning rooms, organizing events, and maintaining the hotel building.

Based on the interviews with the Executive Housekeeper and Supervisor, some of the impacts of implementing green housekeeping at Holiday Resort Lombok are reducing operational cost at the hotel, saving energy consumption, offering eco-friendly facilities, encouraging environment sustainability,

improving the hotel image, and reducing carbon footprint. This research highlights the implementation of green behavior on Housekeeping Department at Holiday Resort Lombok and the effectiveness of green housekeeping at the hotel.

Eco green housekeeping refers to implementing energy saving, waste management, and eco-friendly products as part of the accommodation sector's business operation practices to achieve the goals of environmentally sustainable development strategies. The result of the study indicates that green housekeeping both from internal variables using eco-friendly concept of 6R (Refine, Reduce, Reuse, Recycle, Recovery, and Retrieve Energy and external variables consisting of government regulation, consumer, and competition factors have been implemented properly.

Due to the growing consumer awareness of environmental problems, Holiday Resort Lombok has been developing green practices in response to the environmental concerns of their guests and in order to improve their image as well as to increase the degree of trust and satisfaction of their guests to maintain long-term relationships. Holiday Resort Lombok has collaborated with local waste entrepreneurs who offer alternatives to hotel waste collecting programs. What Holiday Resort does to protect the environment is collaborating with the World-Wide Fund for Nature (WWF) for turtle conservation.

More importantly, the implementation of green housekeeping in the hotel has an economic impact. There was a significant decrease in operational cost that can be described on following table which compares the cost before the implementation in 2018 and the cost in 2019 after the implementation of green behavior at Housekeeping Department of Holiday Resort Lombok.

**Tabel 1.**  
Comparison of Operational Cost Before and After Implementation of Green Housekeeping

Month	2018		2019		Variant	
	Occ	Total Saving	Occ	Total Saving	Saving	Percentage
January	49,63 %	145.582.567	59,62 %	169.960.455	24.377.888	16,75
February	52,06 %	135.098.172	56,42 %	158.833.928	23.735.756	17,57
March	58,51 %	182.101.627	62,93 %	211.250.518	29.148.891	16,01
April	52,93 %	160.934.314	56,58 %	186.990.039	26.055.725	16,19
May	70,59 %	204.391.203	72,64 %	237.162.003	32.770.800	16,03
June	40,75 %	87.947.058	47,39 %	107.234.680	19.287.622	21,93
July	82,47 %	216.718.719	89,06 %	268.110.267	51.391.548	23,71
August	79,86 %	235.905.152	88,56 %	288.236.264	52.331.112	22,18
September	67,41 %	180.998.395	74,74 %	209.460.266	28.461.871	15,72
October	58,15 %	155.941.493	62,82 %	182.658.239	26.716.746	17,13
November	60,09 %	170.065.903	68,64 %	200.269.335	30.203.432	17,76
December	58,12 %	170.065.903	79,84 %	202.517.075	32.451.172	19,08
<b>TOTAL</b>		<b>2.045.750.506</b>		<b>2.422.683.069</b>	<b>376.932.563</b>	<b>18,43</b>

Source: Holiday Resort Lombok

The data show that before the implementation of green housekeeping in 2018 the total amount of operational cost saving was Rp 2.045.750.506, while in 2019 the total saving of operational was Rp 2.422.683.069. This suggests that there is a significant increment in 2019 compared to that in 2018. The implementation of green housekeeping in 2019 shows a significantly positive result by 18.43% of total saving than that in the previous year. The data clearly indicate that the implementation of green housekeeping give a positive impact in that it decreases the operational cost at Holiday Resort Lombok.

### Implementation Green Housekeeping to Increase Efficiency of Operational Cost

The implementation of green housekeeping in Holiday Resort Lombok is divided into internal variable and external variable. Internal variables are adapted from the eco-friendly concept by Ramadhan (2020) that is known as 6R which stands for refine, reduce, reuse, recycle, recovery, and retrieve energy. Further information regarding the indicators is elaborated on Table 2.

External factors are elements that influence a business' results, performance, and success from the outside. External factors consist of government regulation, consumer, and competitors. The implementation of external factors at Holiday Resort Lombok can be seen on the Table 3.

**Tabel 2.**

Internal Factors of the Implementation of Green Housekeeping at Holiday Resort Lombok

Indicator	Implementation Green Housekeeping at Holiday Resort Lombok
Refine	<ol style="list-style-type: none"> <li>Using eco green chemical</li> <li>Using refillable dispensers for soaps, shampoos, and conditioners.</li> <li>Using washable cloth products and dishware instead of disposable ones; install water efficiency system</li> <li>Using water filters instead of plastic bottles</li> <li>Using paperless billing</li> <li>Single-use products. By using hand dryers and washcloths in bathrooms instead of paper towels, hotels can decrease the rate of deforestation, global warming, and waste.</li> </ol>
Reduce	<ol style="list-style-type: none"> <li>Toiletries. Swap miniature bottles for bulk-size toiletries instead</li> <li>Establishing a water management plan</li> <li>Minimizing water usage from bathrooms</li> <li>Minimizing water usage from laundry services</li> <li>Minimizing water usage from swimming pools</li> <li>Minimizing water usage from landscaping</li> <li>Taking showers rather than baths</li> <li>Reducing solid waste</li> <li>Reducing and reusing supplies packaging materials</li> <li>Reducing the number of paper products</li> <li>Reducing chemical waste (fertilizers and pesticides)</li> </ol>
Reuse	Reusing linens, towels, pencil, laundry bag, glass cover, note pad, and eco green letter
Recycle	<ol style="list-style-type: none"> <li>Landscaping with native species that have adapted to their environment</li> <li>System of collecting rainwater and recycling waste water for watering the path and garden</li> <li>System of collecting, sorting, and reprocessing old material into usable raw materials</li> <li>Recycling consumables (such as shampoo and soap)</li> </ol>
Recovery	<ol style="list-style-type: none"> <li>Wastewater streams are suitable for treatment and reuse, from food-service wastewater, to water from bathroom fixtures, to stormwater from roofs, grounds, and parking lots</li> <li>Using safely treated recycled water that goes beyond landscaping. They include: <ul style="list-style-type: none"> <li>Water for flushing toilets</li> <li>Water for pressure-washing drives, walkways, and buildings</li> </ul> </li> <li>Improving the energy efficiency of the buildings</li> <li>Replacing light bulbs with more efficient ones.</li> <li>Upgrading lighting with certified LED bulbs. Trade regular light bulbs for LED ones to improve sustainability and save money. It uses at least 75% less energy, and last 25 times longer, than incandescent lighting. Saving energy reduces air and water pollution as well as light bulb budgets.</li> </ol>
Retrieve Energy	<ol style="list-style-type: none"> <li>Educating and training staff on the ways to improve energy efficiencies; encouraging staff investment can make a program a success. Trying to establish a green team for hotel efforts, or even a weekly staff meeting to educate and evaluate successes. The staff and guests should know the benefits of recycling and may want to encourage sustainability and environmental practices at Holiday resort Lombok.</li> <li>Incentivising staff to think of ways to reduce energy consumption across the hotel</li> <li>Using signage and notes to remind guests of energy-saving best practices, such as re-using towels</li> <li>Heating and cooling during periods of low occupancy</li> </ol>

Source: Holiday Resort Lombok

**Tabel 3.**

External Factors of the Implementation of Green Housekeeping at Holiday Resort Lombok

Indicator	Implementation of External Factors
Government Regulation	<ol style="list-style-type: none"> <li><i>Global code of ethics for tourism</i></li> <li>Asean Green Hotel Standard</li> <li>Regulation of the Minister of Environment and Forestry of Indonesia</li> <li>NTB Provincial Regulation Number 5, 2019 about Waste Management</li> </ol>
Consumer	The reason the consumer chooses the green hotel: <ol style="list-style-type: none"> <li>More affordable</li> <li>Reduce carbon footprint</li> <li>Healthier hotel</li> </ol>
Competition	Green hotel is the way to: <ol style="list-style-type: none"> <li>Promote hotel image</li> <li>Increase the degree of trust and satisfaction of their guests to maintain long-term relationships</li> </ol>
Social Environment	<ol style="list-style-type: none"> <li>Recycling partnerships</li> <li>Hotel management get involved with local recycling initiatives.</li> </ol>

Source: Holiday Resort Lombok



## Conclusion

Based on the research results, several conclusions could be drawn. Firstly, the implementation of green housekeeping at Holiday Resort Lombok are divided into internal variable and external variable. Internal variables adapt the eco-friendly concept known as 6R which stands for refine, reduce, reuse, recycle, recovery, and retrieve energy. External variables consist of government regulation, consumer, and competition. Holiday Resort Lombok designed the whole property with green surroundings and it utilized solar power to heat the property. The hotel could maximize the concept with the updated green design so it would still be on an updated model without leaving the green program. Secondly, the recycling program represents conservation activity and a recycling program onsite has raised interest of the customers. This strategy can also be a beneficial factor to promote the hotel as customers of green hotel keep growing. Thirdly, energy saving policy in Holiday Resort Lombok shows that the hotel runs water-saving, electricity-saving, and energy-saving programs.

The implementation of green housekeeping shows a positive impact in that it decreases the operational cost or, in other words, the green act is able to increase the amount of savings yearly. The implementation of green housekeeping has a positive impact on reducing the operational cost in the housekeeping department by increasing the total savings of 18,43% in 2019. Ultimately, the result of this study has offered a new perception on the findings of the earlier studies that could be of interest for researchers and hotel practitioners in understanding the effect of green hotel programs on customer satisfaction.

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