

Implementation 3R (Reduce Reuse Recycle) In linen And Towel Programs By Housekeeping Department At Sheraton Bandung Hotel & Towers

Risa Sandika Melinia ^{1*}, I Gusti Putu Sutarma ², Ni Luh Eka Armoni ³

¹ Tourism Bussiness Management, Tourism, Politeknik Negeri Bali

² Tourism Bussiness Management, Tourism, Politeknik Negeri Bali

³ Tourism Bussiness Management, Tourism, Politeknik Negeri Bali

*Corresponding Author: risasandika07@gmail.com

Abstract: This research was analyzed at Sheraton Bandung Hotel & Towers in Housekeeping Department which is located on Jl. Ir. H. Juanda No. 390, Dago, Coblong District, Bandung City, West Java. This study aims to determine the implementation 3R (reduce reuse recycle) in linen and towel program by Housekeeping Department at Sheraton Bandung Hotel & Towers. The data analysis technique used is descriptive analysis using quantitative and qualitative statistical approaches, which means that the data obtained during research will be described in detail and systematically. The method of determining the key informants used in the study is a resource person who is an expert on the problem question, namely the Executive Housekeeper, SPV Laundry and housekeeping staff. After conducting interviews and data analysis, Housekeeping Department has implemented 3 indicators fields of energy, water, waste and showed 67% of the program implementation results. This shows that implementation has not run optimally. In reduce variable for the aspect of reducing energy and water, it reaches a percentage of 66% of total variable indicator. The reuse variables in terms of the reuse of energy, water and waste utilization reached 67%. Meanwhile, in the recycle variable, the management aspect of water recycling and waste recycling reached 67%. However, after implementation of the linen and towel program, Housekeeping Department was able to increase the reduction of water and energy use, waste water management and detergent waste water recycling for linen and towel washing activities from before the program was implemented in 2018 until now..

Keywords: Implementation, 3R, Program, housekeeping, linen and towels

Article Information: Submission to Repository on September 2022

Introduction

Hotel is a type of accommodation that uses part or all of its parts to provide lodging, food and beverage services and other supporting services for the public which is managed commercially. (Mutiara, 2018) The special feature of the hotel is that it has a restaurant that is managed directly under the management of the hotel. With this it can be concluded that the hotel is one of the most important businesses in supporting tourism activities in order to support a business activity and the hotel is also a means of lodging for travel tourists which supports various facilities and several comfort requirements. Housekeeping Department is one part of the hotel that is responsible for cleanliness, tidiness, completeness, and security both in the room and all areas of the hotel, with good quality service to guests staying at the hotel. (Emmita & Wicaksono, 2015) To maintain the smooth running of daily operations, the Housekeeping Department has several sections in order to reach all areas of its duties. One of the sections that play an important role in housekeeping operations is the linen room section. Linen room section is the section that is responsible for procuring, circulating and controlling linen and towels for housekeeping, restaurant, banquet, and other departments in the hotel. (Putra, 2019). The circulation of linen and towels also has an impact on one of the linen and towel reuse programs. This program supports several things to reduce the use of excess detergent and supports the Environmental Care Movement. The hotel offers the use of linen and towels more than once in order to save several things such as reduced costs, water, energy, labor, and the use of linen changes. Even this program is only applied to in-house rooms, not to check-out rooms, because each hotel is required to replace all linen and towels for check-out rooms. (Santika et al., 2013)

Sheraton Bandung Hotel & Towers as a 5-star hotel with 156 rooms also implements linen and towel reuse programs. This program is implemented by the management of Sheraton Bandung Hotel & Towers which is directly under the supervision of Marriot International in order to minimize use, stock, and support the Environmental Care Movement. The implementation of reuse is the application concept of 3R (reduce reuse recycle) which in its implementation strategy can be focused on reducing the efficiency of the use of water,

electrical energy, and the disposal of detergent waste for the hotel industry. (Ioannidis et al., 2021) Based on information obtained from the laundry attendant at Sheraton Bandung Hotel & Towers when occupancy decreases, the hotel must save energy use, such as water, energy, and the use of detergent waste to minimize washing of linen and towels in the hotel. This linen and towel program will help minimize hotel expenses related to the use of washing linen and towels. (Mills, 2014) However, sometimes in its implementation, this program does not run effectively and sometimes hampers the operation of the hotel. There are still some programs that have not been run optimally. For this reason, this study will focus on how big the percentage of the 3R indicator is to the implementation of the 3R (reduce reuse recycle) in the linen and towel program at the Sheraton Bandung Hotel & Towers.

Method

This research was conducted at the Sheraton Bandung Hotel & Towers which is located on Jl. Ir. H. Juanda No. 390, Bandung, West Java. The selection of Sheraton Bandung Hotel & Towers as the research location was carried out based on existing problems, consideration of data availability, and hotel management's willingness to be researched. The object of research is the Housekeeping Department. The subject of this research is the linen section which covers the work system in the Housekeeping Department related to the implementation of the linen and towel reuse program at the Sheraton Bandung Hotel & Towers. There are two variables in this study, namely the x variable and the y variable. Variable x is 3R (reduce reuse recycle) while variable y is related to 3R (reduce reuse recycle) in the linen and towel program. the indicator of the variable x is the percentage of the aspect of reducing energy, water, and waste. The indicator of the variable y is the data related to the percentage reduction of the 3R (reduce reuse recycle) indicator on the linen and towel program in the housekeeping department at Sheraton Bandung Hotel & Towers. Data collection was carried out from January to July 2022.

Sources of data in this study can be directly by the researchers through interviews, observations, and documentation on the housekeeping department employees at the Sheraton Bandung Hotel & Towers. Determination of key informants in this study are employees who are still active and working in the Housekeeping Department at Sheraton Bandung Hotel & Towers such as high-ranking housekeeping department namely Executive Housekeeper/Asst Executive Housekeeper, housekeeping employees and Supervisor. The data analysis technique used by the author is descriptive analysis technique with qualitative and statistical/quantitative approaches. mentions quantitative descriptive analysis technique is data analysis by describing or describing data that has been collected as it is without intending to make conclusions that apply to the public. Descriptive research in this study was conducted to determine the value of independent variables, either one or more (independent) variables without making comparisons or connecting with other variables.(Ahyar, 2020).

In qualitative research, the quality of research is highly dependent on the quality and completeness of the data produced. Questions that are always considered in data collection are what, who, where, when, and how. In qualitative research data collection will use the method of observation, documentation and interviews. Using non-human sources of information, such as documents, and records. In carrying out this data analysis, the authors need to know the implementation of 3R (reduce reuse and recycle) in the linen and towel program. The direction in this study uses descriptive techniques to describe the data obtained from interviews, observations, literature studies, and documentation of operational activities in the Housekeeping Department at Sheraton Bandung Hotel & Towers.

Result and Discussion

Implementation is an action taken after a policy has been established and the way in which a policy can achieve its goals (Apriandi, 2017). Furthermore, implementation is the most important stage in a policy, without implementation a policy cannot run. Policy is a set of goal-oriented actions and is not a single decision, but consists of several options to achieve certain goals (Pramudita et al., 2013). The linen and towel program is one of the activities at the hotel, especially the Sheraton Bandung Hotel & Towers. This program was established by Marriott International after implementing policies related to the towel reuse program for all Marriott International subsidiaries, especially Sheraton. The linen and towel program at Sheraton Bandung Hotel & Towers is expected to reduce the use of labor, excess water and detergent and support the environmental awareness movement. At the implementation stage, the linen and towel program at Sheraton Bandung Hotel & Towers has been implemented for a long time but has only been effective in 2018 until now.

Based on the results of the author's interview with one of the Sheraton Bandung Hotel & Towers staff, together with the laundry supervisor said that the linen and towel program has been implemented for a long time by the Sheraton Bandung Hotel & Towers, especially the Housekeeping Department. However, the implementation

of this program has only been running from 2018 until now. The implementation of 3R (reduce reuse recycle) has a strategy in the context of tourism and hospitality that is centered on the fields of energy, water, and waste management efficiency (Ayuningtyas, 2019). Which means this strategy will lead to several things in the form of reducing. On the strategy of the 3R concept which is the benchmark in the implementation of 3R (reduce reuse recycle) in the linen and towel program, variable indicators are obtained, namely indicators of energy, water, and waste reduction that affect each reduce, reuse and recycle variable based on theory (Ioannidis et al., 2021). The per-variable indicators are:

- Reduce (energy reduction aspect, water reduction aspect, and waste reduction aspect)
- Reuse (Aspects of reusing energy and water as well as aspects of waste utilization)
- Recycle (Water recycling management aspects and waste recycling management aspects)

Based on the data obtained during interviews with the Housekeeping Department, the percentage of data obtained from the three aspects of the indicators of the application of the 3R (reduce reuse recycle) field in its implementation efforts. The following is a table of how much effort to implement 3R (reduce reuse recycle) in the linen and towel program in the housekeeping department at Sheraton Bandung Hotel & Towers.

Table 1. Implementation 3R(Reduce Reuse Recycle) in Linen and Towel Program by Housekeeping Department at Sheraton Bandung Hotel & Towers

Indicator	Implementation Effort	Information	%
Reduce Energy reduction aspect	improve energy reduction efficiency	Already implemented	66%
	Reduce the use of light and air temperature	Already implemented	
Water reduction aspect	Reduce use water	Already implemented	
Waste reduction aspects	Reduce wet waste	not effectively implemented	
	Reduce solid waste	Already implemented	
	Reducing chemical waste such as fertilizers and pesticides	not effectively implemented	
Reuse Aspects of energy and water reuse	Linen and towel reuse program	Already implemented	67%
Aspects of waste utilization	Utilization of waste linen and towels	Already implemented	
	Utilizing waste from leftover food	not effectively implemented	
Recycle Aspects of water recycling management	Recycle greywater wastewater to be treated together with detergent waste and rainwater (STP/IPAL)	Already implemented	67%
	Recycle glass, metal and hazardous raw materials	not effectively implemented	
Aspects of waste recycling management	Recycling waste linen and towels into rags or other functions	Already implemented	
Total Average			67%

Source: Developed by author data processed on MS excel, 2022

The Relation Of The Implementation 3R (Reduce Reuse Recycle) To The Efficiency Of The Linen And Towel Program In Housekeeping Department

Based on the results of observations at the Sheraton Bandung Hotel & Towers, data obtained from the relationship of 3R (reduce reuse recycle) to the efficiency of the linen and towel program in the Housekeeping Department at the Sheraton Bandung Hotel & Towers.

a. Reduce Efficiency in Linen and Towel Program

Reduce is an activity related to the concept of reducing an item, product, service that results in waste. (Kholifah, 2019). Based on the results of interviews with the laundry supervisor of the Sheraton Bandung Hotel & Towers Housekeeping Department, it shows that the link between the linen and towel program and the reduce variable is the reduction in the use of electricity and water when washing linen and towels in the laundry. Reducing the use of water for laundry washing is reduced by about 15% to 25%. With the management program for linen and towels, it can save the use of water used when washing linen and towels.

b. Reuse Efficiency in the Linen and Towel Program

As a five-star hotel with 156 rooms, of course, it requires more and more linen and towels. The hotel is not possible to buy new linen and towels every day for the smooth operation of the hotel. For this reason, the Housekeeping Department implements a linen and towel reuse program offered to guests, who stay more than 1 night or in-house rooms. This program is only applied to in-house rooms, not to check-out rooms. This is because each check-out room is required to replace all new linens and towels which will be filled by new guest reservations. The efficiency of this program can be seen from the calculation of the use of linen and towels from 2018 to 2020. Data collection is carried out by calculating the use of the number of linens and towels used in 156 rooms every day in in-house rooms and check-out rooms. Data analysis is taken from linen inventory which is recorded every day by the linen attendant and room boy control sheet which will be recapitulated every month. After analyzing the calculation of data related to the use of linen and towels that are used repeatedly (reuse), the number of linen and towels used from 2018 to 2020 in check-out rooms is more than in-house rooms. The following is a comparison table for the use of linen and towels for check-out and in-house rooms.

Table 2. Amount of Linen and Towel Usage in Check-out and In-house Rooms

Year	Check-Out	In-House	Amount	percentage	
				Check-Out	In-House
2018	81820	44668	126488	65%	35%
2019	67488	32068	99556	68%	32%
2020	43536	17772	61308	71%	29%
			Average	68%	32%

Source: (Data processed on MS excel, 2022)

The results of the calculation of the use of the number of linen and towels showed that the linen and towel program had an association with the reuse variable. This can be proven by the percentage of data on the daily use of linen and towels which is repeated. Calculation of data obtained by comparing the results of using linen and towels for three months in check-out rooms and in-house rooms (reuse). After analyzing the use of linen and towels in check-out rooms, 68% more than in-house rooms. The number of linen and towels used in in-house rooms is only 32% of the total number of linens and towels that are used repeatedly. The small percentage of linen and towel reuse is influenced by several things, such as the calculation of the data and the number of participants using linen and towels. The calculation of the data carried out when the linen and towels will be distributed and the calculations carried out by the room boy control sheet are also not maximized because there are some linens and towels that are issued not from the linen inventory such as

linen and towels requested by guests from the floor or outside the laundry. This program also only applies to in-house rooms not to check-out rooms because each check-out room is required to replace all linen and towels for rooms that will be filled by new guests. The use of the number of linens and towels is also influenced by several factors such as the daily occupancy rate. If the occupancy rate is higher, the linen and towels used will also be higher. conversely Another factor is that there are still guests who do not care about the importance of the message hung by the hotel in the bathroom regarding the use of hotel linens and towels and there are some guests who do not take the initiative to ask the hotel to change linen and towels such as changing sheets, pillowcases, beds cover, bath towel hand towel, and face towel in the room. The following are some solutions that can be given to guests and housekeeping staff to help with the reuse of linen and towels. Provide a message in each room regarding the importance of saving water and preserving the environment.

1. Offers reuse of linen and towels to guests who stay more than once. By installing a more attractive towel reuse card so that it can attract the attention of guests to participate.
2. Provide education to guests regarding the importance of linen and towel reuse programs, for guests staying more than one night.
3. The hotel can also provide education regarding the importance of the linen and towel reuse program on the company website
4. The hotel can provide complimentary guests in the form of cakes, drinks, or vouchers to guests who take part in this program.

c. Recycle Efficiency in the Linen and Towel Program

Recycle is an activity related to waste recycling management activities. Recycle in the linen and towel program relates to indicators of aspects of water management for washing linen and towels as well as linen and towel waste OO (out of operations). Water management from linen and towel washing waste is managed by the STP (Sewage Treatment Plant) system which is a detergent waste management installation. This detergent water waste will be processed directly by STP and managed into clean water for watering plants. The head of the management said that about 80% of the wastewater mixed with water and detergent, 40% to 50% of it can be managed into clean water for watering plants. This proves that the residual water from washing linen and towels has been well managed for the aspect of managing linen and towel waste OO (out of operations). The head of the laundry department said that with the linen and towel program that was already running, the management of linen and towels that were no longer suitable for use had not been carried out optimally. This is because all unused linen and towels must be stored in the linen inventory warehouse. Only some linen and towels will be taken when needed. Linen and towels that are issued must also go through several stages. These stages include a request form on the order taker related to taking linen and towels and then requesting approval from the EHK (Executive Housekeeper). Linen and towels that are usually issued will be used as rags in the laundry section but are not distributed to the room attendant for room cleaning. Because Sheraton Bandung Haotel & Towers has standard use of cloths, namely 5 color clothes for room cleaning. The head of the laundry department also said that the percentage of linen and towel waste management was only about 5% after the linen and towel program was implemented because before the linen and towel program, linen and towels were only stored in linen warehouses. The linen and towels that are issued will later be used specifically as foot mats, bathmats, and washcloths or other functions by the laundry and back office departments.

Based on the 3R linkages in the linen and towel programs, it is concluded that the percentage of linen and towel programs in each implementation of the Energy, Water, and Waste sector. These results indicate that after the implementation of the linen and towel program, it can help the work efficiency of the Housekeeping Department staff.

Table 3. Percentage of 3R (reduce reuse recycle) in linen and towel program by Housekeeping Department

No	Variabel	Presentase
1	<i>Reduce</i>	
	Indicator Energy	Reduced Approx 5%
	Indicator Water	Reduced Approx 15% - 25%
	Indicator Waste	not effectively implemented
2	<i>Reuse</i>	
	Indicator Energy & Water	Increase approx 32%
	Indicator Waste	Increase approx 2% hingga 4 %
3	<i>Recycle</i>	
	Indicator Water	Increase approx 40%
	Indicator Waste	Increase approx 5%

Source: (Data processed on MS excel, 2022)

Conclusion

Based on the results of research at the Sheraton Bandung Hotel & Towers regarding the implementation of 3R (reduce reuse recycle) in the linen and towel program at the Housekeeping Department, the Housekeeping Department has implemented 3 field indicators but the implementation has not run optimally. In the reduce variable for the aspect of reducing energy and water it reaches a percentage of 66% of the total variable indicator that is run. The reuse variable in the aspect of reusing energy, water and waste utilization reached 67%, while in the recycle variable the aspects of water recycling management and waste recycling reached 67%. Implementation for reuse and recycle has not run optimally due to several factors, such as: corporate governance schemes, human resources, and sources of availability of company facilities so that it can be concluded that the implementation of 3R (reduce reuse recycle) in the linen and towel program at the Housekeeping Department at Sheraton Bandung Hotel & Towers has been implemented with a percentage of 67%. Of all field indicators based on the theory.

After interviewing the Housekeeping Department regarding the relationship between 3R and the linen and towel program, the percentage analysis was obtained as follows. In the reduce variable, the energy reduction indicator is reduced by about 5% and the water reduction indicator is reduced by about 15% - 25%. The water indicator reuse variable increased by about 32% and the waste recycling indicator increased 2% to 4%. In the recycle variable, the indicators of water and waste increased by 40% and 5%. The relationship between the 3Rs and the linen and towel program can be seen in the percentage increase in efficiency in terms of reducing water and energy, managing waste water and recycling waste water. This program management efficiency is carried out so that the ongoing program can continue to run effectively and maximally in accordance with the company's objectives.

Acknowledgment

The author wants to express his gratitude to I Gusti Nyoman Suci Murni and I Gusti Agung Mas Krisna Komala Sari as the examiner who has given advice and input for the completion of this article. Thank you, the authors will also say to all the Housekeeping Department staff who play a role in the process of collecting data and availability of hotel management who have been pleased to be used as the location and object of research. So that the results of the implementation can be disclosed in written form and informed to the reader.

Reference

- Ahyar, H. (2020). *Buku Metode Penelitian Kualitatif & Kuantitatif* (A. Husnu Abadi, A.Md. (Ed.); Issue March).CV Pustaka Ilmu Grup
- Apriandi, I. (2017). Implementasi Qanun Nomor 11 Tahun 2002 Tentang Syariat Islam Di Kota Langsa. *Implementasi Kebijakan; Sosialisasi; Kepatuhan Masyarakat*, 11–35.
- Ayuningtyas, R. A. (2019). Penerapan Prinsip 3R (Reduce, Reuse, Recycle) Dalam Pengelolaan Sampah Di Restoran Cepat Saji Kfc Yogyakarta Dalam Era Go-Food (Studi Kasus Restoran Cepat Saji Kfc Sudirman). *Skripsi, Universitas Atma Jaya Yogyakarta*.
- Emmita, D. H. P., & Wicaksono, F. (2015). Peranan Housekeeping Dalam Meningkatkan Kenyamanan Tamu Di The Sahid Rich Yogyakarta. *Khasanah Ilmu*, 6(2), 46–55. <https://doi.org/10.31294/Khi.V6i2.488>
- Ioannidis, A., Chalvatzis, K. J., Leonidou, L. C., & Feng, Z. (2021). Applying The Reduce, Reuse, And Recycle Principle In The Hospitality Sector: Its Antecedents And Performance Implications. *Business Strategy And The Environment*, 30(7), 3394–3410. <https://doi.org/10.1002/Bse.2809>
- Kholifah, Zulfia. (2019). *Pengaruh Penerapan 3R (Reduce, Reuse, Recycle) Terhadap Perkembangan Karakter Peduli Lingkungan Peserta Didik Kelas Iv Di Sdn 1 Jatikulon Jati Kudus*. 9–25.
- Mills, R. (2014). What It Means To Go Green: Reduce, Reuse, Repurpose, And Recycle. *All Current Publications, Paper 1675*(June).
- Mutiara, F. A. (2018). *Peran Housekeeping Dalam Usaha Meningkatkan Kepuasan Tamu Di Hotel*. 1–7. <https://doi.org/10.31219/Osf.io/C4z6x>
- Pramudita, A., Lestari, H., & Sulandari, S. (2013). Implementasi Pembangunan Kepariwisata Di Taman Margasatwa Mangkang Kota Semarang. *Journal Of Public Policy And Management Review*, 2(1), 11–20.
- Putra, H. Perdana. (2019). *Sirkulasi Linen Bagian Tata Graha Di Art Deco Hotel Bandung*.
- Santika, W. G., Antara, D. M. S. A., & Harmini, A. A. A. N. H. (2013). Memotivasi Perilaku Hemat Energi Dan Ramah Lingkungan Di Sebuah Hotel. *Bumi Lestari Journal Of Environment*, 13(2), 374–383.