

## Article

# Social Responsibility of Economic Units and the Well-Being of Society in the Tourism Sector: Example of Accommodation Facility

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**Abstract:** Corporate social responsibility (CSR) assumes that companies should justify their existence with services for various stakeholders and not with profit alone. There is a strong emphasis on the implications of CSR for managing human resources in hotels and other accommodation services, supporting local communities, and promoting environmental sustainability. This article aims to present the adjustment of business entities providing accommodation services in Poland to the CSR principles. Two aspects were examined: the environmental aspect, i.e., waste segregation and the use of economic energy receivers, while the social aspect included engaging employees, as well as investing in improving their qualifications towards pro-ecological awareness. The study was conducted on a sample of 207 owners and managers of economic entities in the accommodation sector in Poland. The Statistica software was used to analyze the obtained results, including Chi<sup>2</sup> statistics and correspondence analysis. Based on the obtained results, it can be concluded that the employees of accommodation centers usually deal with the final segregation of waste because they believe that tourists do not follow the rules of proper segregation. Most hotels are equipped with bins for all fractions of waste. The affiliation of a center to a specific macroregion in Poland was not statistically significant in terms of waste segregation practices. Only in the southern macroregion of Poland, ordinary light bulbs are used in accommodation establishments, which account for 0.97% of the surveyed population. In other regions,  $\frac{3}{4}$  establishments use energy-saving receivers in all rooms. Only 1/3 of the facilities invested in developing their staff by organizing training courses toward sustainable development. The most popular subjects were topics related to waste segregation, energy and water saving, and environmental protection.

**Keywords:** corporate social responsibility; sustainability; sustainable tourism; Poland; energy saving and waste segregation



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## 1. Introduction

The concept of sustainable development played a huge role in the second half of the 20th century in shaping the way of thinking about the mutual relations between society, economy, and natural environment resources [1,2]. It provides a holistic view of “development that meets the needs of the present without compromising the ability of future generations to meet their needs” [3]. It combines approaches to address emerging economic development challenges such as sustainable cities and communities, responsible consumption and production, climate change, and the reduction of inequalities, combined under the Sustainable Development Goals [4,5]. Debates on corporate social responsibility (CSR) focused on sociopolitical [6] and institutional infrastructure, with a strategic framework involving different regulators [7–11], and highlighted the unprecedented need to

redesign organizational strategies. There is increasing pressure from stakeholders such as governments and destination management organizations on small and medium-sized enterprises and family businesses in the hospitality sector to be more sustainable and socially responsible in their operations [12]. While the direct and intimate relationship of the tourism sector with its physical, economic, and social environment is increasingly evident, the results of tourism research and CSR management are still modest compared to other sectors [13], even if interest is growing. The problem stems from the very definition of what CSR is or should be in the tourism sector. The lack of precise use of the numerous definitions of this term existing in the general literature and its models and indicators proves the lack of a critical conceptualization of the tourism sector, especially since the specificity of the sector is not considered [14]. It should be remembered that tourism is not a homogeneous service sector, but rather a multi-sector composed of various companies from various industries: accommodation, catering, transport, intermediary (travel agency), entertainment, and culture, which makes research and comprehensive analysis difficult from a traditional microeconomic point of view, typically applied to other sectors of the economy based on the goods and services they offer.

CSR focuses on benefits for both companies and society. All definitions of this concept indicate that enterprises must satisfy both the interests of shareholders and stakeholders [15]. Although CSR has gained more attention recently and has been studied from various approaches, its application to the tourism sector, and more specifically to the hospitality industry, is still relatively small [15–17]. One should talk about the social consequences of managing holiday resorts and inspire facilities to be guided by ethical motives when managing their businesses [18,19].

Nevertheless, there is still a limited amount of tourism management research related to CSR, especially research to understand further how to engage employees and achieve competitive success [20–22] considering CSR policy and sustainable development.

This study does not focus on all dimensions of CSR policy, but only on the environmental aspect and staff development, looking for similarities and differences between macroregions in Poland and different types of facilities providing accommodation services. The study was a pilot experiment covering the entire country. This study aimed to check what attitude companies providing accommodation services have to the guidelines of the sustainable development concept and whether they apply a policy of social responsibility in the context of environmental protection.

Therefore, in this study, the following research questions were asked:

RQ1: Is the segregation of waste carried out by guests or by site staff? Are there differences between the macroregions of the studied area?

RQ2: Do the facilities implement energy-saving rules?

RQ3: Do owners of accommodation facilities in Poland see the need for personnel training in the field of sustainable development in the industry?

RQ4: Are there differences in CSR application between macroregions in Poland among owners of accommodation facilities?

RQ5: Are there statistical differences in applying the CSR policy between different accommodation establishments in Poland?

## 2. Background: Sustainability, CSR, and Accommodation Facility

The tourism industry is one of the largest industries in the world and brings the highest income to the community. However, the degrading effects of tourism have become a big problem and need to be addressed. Considering the importance of these aspects, the concept of sustainable tourism has emerged, which aims to reduce the adverse effects of tourism activities, and which has become almost universally accepted as a desirable and politically appropriate approach to the development of tourism [23]. Sustainability includes all the elements that make up a complete travel experience.

Sustainable development has become a global slogan in many sectors, especially following the publication of the United Nations 2030 Agenda for Sustainable Develop-

ment [24,25]. Sustainable development is based on an ethical principle that recognizes how what we do now affects and can be harmful to future generations in financial, sociocultural, and environmental terms [26]. The United Nations World Tourism Organization (UNWTO) defines sustainable development as principles relating to tourism development's environmental, economic, and sociocultural aspects and stresses that a proper balance must be struck between these three dimensions [10]. Sustainable development is assigned as a concept in which companies have to draw strategies that integrate economic aspects (financial results), social demand (quality and equality of people, communities, and nations), and environmental issues (climate change and environmental management) [24]. Sustainability is another best business practice requirement relating to a long-term goal and promotes accountability to many stakeholders.

The European Commission [7] states that CSR applies when companies integrate social and environmental considerations into their business activities and interactions with stakeholders. Corporate social responsibility is a tool by which entrepreneurs integrate economic, social, political, and environmental goals in making strategic decisions [27]. Although there are many definitions of CSR in the literature, only a few mention social responsibility in small and medium-sized enterprises [28,29], including some economic entities providing accommodation services.

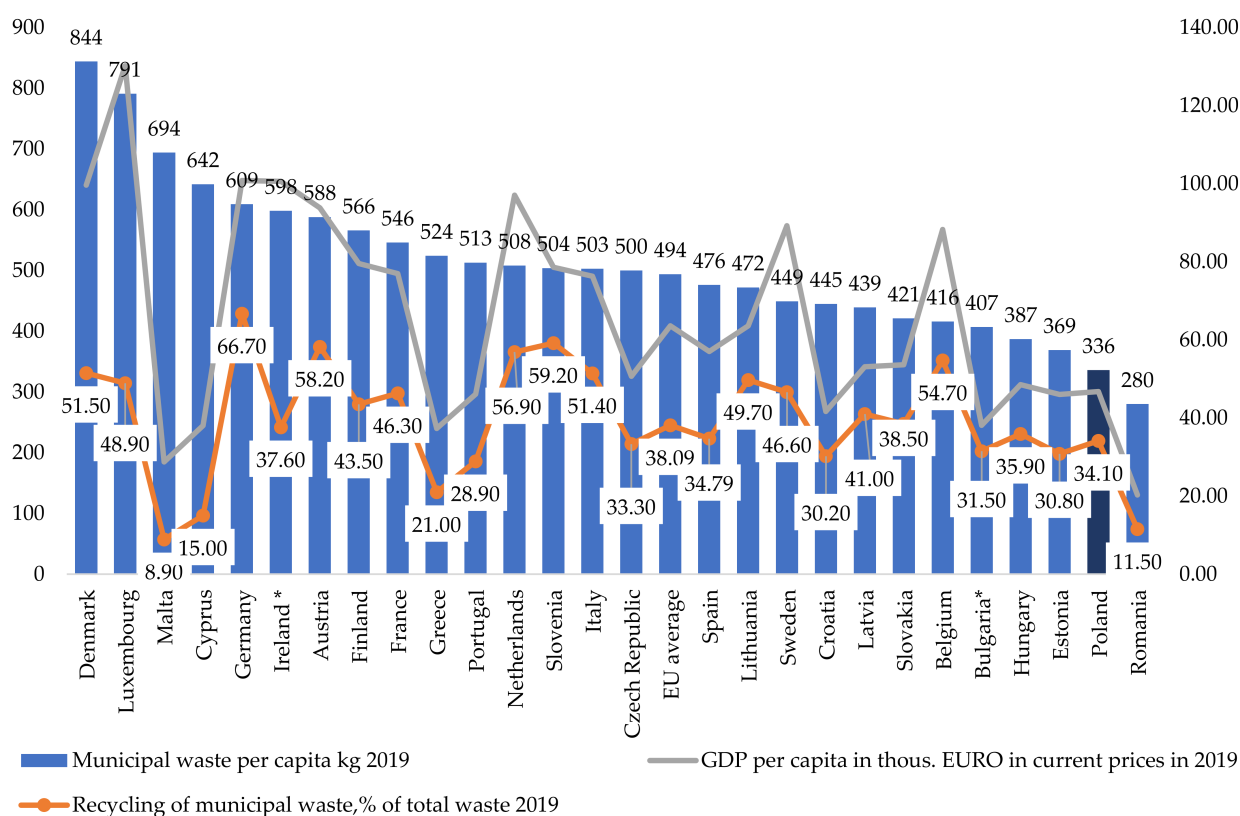
Mihalic [30] noted that the debate on the differences between CSR, sustainable development, and sustainable and green tourism in small businesses "seems counterproductive as they all converge and relate to the same pillars." The researcher says a tool is needed to understand, measure, and monitor the implementation of sustainable development in small hospitality companies. Economic performance is a top priority in the hospitality sector as measured by customer satisfaction, public policy on sustainable tourism, tourism enterprise performance, tourism flow (volume and value), and social and cultural impact on the community [31]. A strategy that creates an appropriate organizational culture to cultivate CSR must enable the company's employees to feel that they identify with its values and act according to their personal values of pro-sustainable development [32]. The role that management staff (managers, owners of hotel facilities) and staff play in implementing CSR programs is gaining attention in the literature on tourism and hospitality [33–36].

The hospitality sector is often criticized for its significant footprint and negative sociocultural and environmental impact. However, it is a crucial factor in tourism revenue. From the literature review, it can be concluded that the activities carried out in CSR focus mainly on the environmental dimension [37–40], with little disclosure of these policies [41], where aspects that reduce costs and affect economic profitability, such as water saving or energy efficiency, dominate [42]. Due to the relatively recent pursuit, the field still does not have clear standards for implementing CSR in companies related to tourism [15]. Figure 1 presents the guidelines for sustainable tourism with the CSR policy proposed by the Ministry of Tourism and Sport, included in the guides of the responsible tourist. The materials are located in the hospitality sector and are available to visitors. Information on waste segregation and energy saving is also provided in the appropriate places in the facilities.

Statistical data on waste in the EU published by EUROSTAT is presented in Figure 2. Paradoxically, the least waste is generated by the inhabitants of countries where ecology and care for the climate are relatively young areas, usually treated seriously for no longer than the period required by EU regulations. The leaders are Romanians—272 kg/person, followed by Poles—315 kg/person during the year. Six of the ten EU countries where the citizens generate the most rubbish are in the wealthiest ten countries at the same time. Moreover, Eurostat data show that the beneficiaries of the tourism sector have the most outstanding contribution to the production of waste, and it is usually produced in larger quantities in regions attractive to tourists [44].



**Figure 1.** Responsible tourism together with CSR principles. Note: Top left: save resources; bottom left: use public transport; right: benefit from environmentally responsible tourism enterprises. Source: Poradnik turystyczny. Fundacja nasza Ziemia [43].



**Figure 2.** The amount of waste produced in the EU-27 and its recycling. Note: \* no data for garbage recycling 2019, data from 2018. GDP per capita in thous. EUR in current prices in 2019: EU average—25.51, Denmark—48.15, Luxembourg—81.29, Malta—19.84, Cyprus—23.05, Germany—34.11, Ireland—62.98, Austria—35.61, Finland—36.07, France—30.69, Greece—16.30, Portugal—17.20, Netherlands—40.16, Slovenia—19.40, Italy—24.89, Czech Republic—17.34, Spain—22.35, Lithuania—13.89, Sweden—42.65, Croatia—11.50, Latvia—12.13, Slovakia—15.09, Belgium—33.56, Bulgaria—6.60, Hungary—12.64, Estonia—15.25, Poland—12.68, Romania—8.78. Source: Eurostat [44–46].



The Danes owe their top place in the production of waste according to the tourism sector. Only in Copenhagen's municipality, in Denmark's capital (which is undoubtedly attractive for tourists), the evaluation of the food waste recycling system showed that 72 percent of society segregates waste [44,45]. Almost 15% of electricity there comes from biodegradable waste. Biological waste can be processed into biogas or fertilizer, and the Danes believe very much in the circular economy model.

The Council of the EU, the European Commission, and the European Parliament have signed an agreement on energy efficiency. The goal is to reduce the EU's annual energy consumption by 32.5% by 2030. The conclusion of an agreement on this issue is the third of eight proposals for the Clean Energy for All Europeans package, adopted in November 2016.

The Ministry of Economics is working on a new act on energy efficiency, introducing an EU directive specifying standards in this area into the national law. The act has, among others, assigned economic units to tasks related to reducing energy consumption, obliging them to implement at least one of the energy efficiency improvement measures. These include a contract, the subject of which is implementing a project aimed at improving energy efficiency and the purchase, replacement, or modernization of equipment, installations characterized by low energy consumption, and thermo-modernization in perspective. Economical and efficient use of energy is promoted worldwide as a model of conscious care for the environment in which we live. The very change of habits in energy use allows reducing its costs from 5% to 15%. Even the use of energy-saving light bulbs brings energy savings to facilities. The hotel sector included in the service sector, according to statistical data, consumes 11.3% of total energy in Poland.

### 3. Materials and Methods

#### 3.1. Sample and Study Design

Tourism combines many sectors of economic life. In this study, the authors focused on one of them, namely the sector of accommodation enterprises.

The study used a diagnostic survey with an original questionnaire (the questionnaire was prepared in Polish due to the study's country). The survey was conducted in the period from June 2020 to September 2020. The survey contained 14 research questions, including additional questions specifying the characteristics of the surveyed economic units—accommodation facilities. Due to the epidemic and difficulties in reaching the respondents, the questionnaire was sent directly to the selected objects and posted on internet forums. The questions concerned the pro-ecological behavior of the owners of accommodation facilities. A nominal scale was used in the questionnaire.

Two hundred seven centers conducting economic activity (Table 1)—providing accommodation in the territory of Poland (2.01% of facilities included in the Central Statistical Office in 2020) (10,291—number of accommodation facilities in Poland according to the data of the Central Statistical Office as of 22 July 2021 (data for 2020)—Appendix A Table A1) [47]. The study uses the division of Poles into seven macroregions, which has been used by the Central Statistical Office since January 2021 (Figure 3).

The objects that participated in the study were divided into 3 groups:

- Hotels (\*-\*\*\*\* categories)—143 facilities (69.08%);
- Campsites, hostels, and recreation centers—21 facilities (10.14%); and
- Family guest rooms (agritourism farms, apartments, boarding houses, guest rooms)—43 facilities (20.77%).

#### 3.2. Statistical Analyses

The information obtained from the questionnaire was statistically analyzed in the Statistica 13.1 PL program (StatSoft Inc., Tulsa, OK, USA). To examine the relationship between nominal variables, cross tables were used to synthetically present the emerging relationships using the  $\chi^2$  measure. Correspondence analysis was also used in the

analysis of the results. Correspondence analysis was first presented by Hill in 1974. The input matrix is a two-dimensional contingency table:

$$N = [n_{ij}], 1 \leq i \leq r, 1 \leq j \leq c \quad (1)$$

where:  $n_{ij}$ —number of units with the  $i$ -th category of the first variable (rows) and the  $j$ -th category of the second variable (columns).

**Table 1.** Distribution of the studied objects by regions in Poland ( $n = 207$ ).

| Macroregion          | Number of Accommodation Facilities | Percentage |
|----------------------|------------------------------------|------------|
| South                | 71                                 | 34.30      |
| Eastern              | 47                                 | 22.71      |
| Northern             | 32                                 | 15.46      |
| Southwest            | 17                                 | 8.21       |
| Central              | 16                                 | 7.73       |
| Masovian Voivodeship | 15                                 | 7.25       |
| North-West           | 9                                  | 4.35       |
| Poland               | 207                                | 100.00     |

Source: author's own analysis based on study material.



**Figure 3.** Division of Poland into regions. Source: author's own project on the basis of data from the Central Statistical Office [48].

The purpose of the correspondence analysis is to present points representing the variables in the factor space with the smallest dimensions, which, at the same time, most accurately reflects the distances between the points representing the categories of a given variable. When we restore the distances between points representing the categories of a given variable in the space with the maximum dimension, we restore the original configurations of the points without any distortions (the angles between the vectors, the distances of the vectors representing the row (column) profiles, and thus also the distances between the points are preserved). Thus, there is no loss of information about the phenomenon under study when passing from the configuration of points representing rows (columns) in the output matrix placed in space.

## 4. Results

### 4.1. Waste Segregation in Accommodation Facilities

Two-thirds of the surveyed facilities declared that a facility employee sorted waste from guest rooms. Every fifth object does not do it at all, and every tenth entrusts this task to tourists. The region in which the facility is located had no significant impact on the distribution of the facility responses. However, it is visible that the Mazovian Voivodeship was distinguished by almost twice as many facilities where waste from guest rooms is not sorted compared to the national average (Table 2).

**Table 2.** Sorting waste from guest rooms by regions in Poland [%] ( $n = 207$ ).

| Macroregion          | Waste is Not Sorted | Waste is Sorted by          |             | Chi <sup>2</sup> | <i>p</i> |
|----------------------|---------------------|-----------------------------|-------------|------------------|----------|
|                      |                     | An Employee of The Facility | The Tourist |                  |          |
| Central              | 12.50               | 75.00                       | 12.50       | 10.328           | 0.587    |
| Southwest            | 29.41               | 64.71                       | 5.88        |                  |          |
| South                | 16.90               | 71.83                       | 11.27       |                  |          |
| North-West           | 22.22               | 77.78                       | -           |                  |          |
| Northern             | 15.63               | 78.13                       | 6.25        |                  |          |
| Masovian Voivodeship | 40.00               | 53.33                       | 6.67        |                  |          |
| Eastern              | 19.15               | 63.83                       | 17.02       |                  |          |
| Poland               | 19.81               | 69.57                       | 10.63       |                  |          |

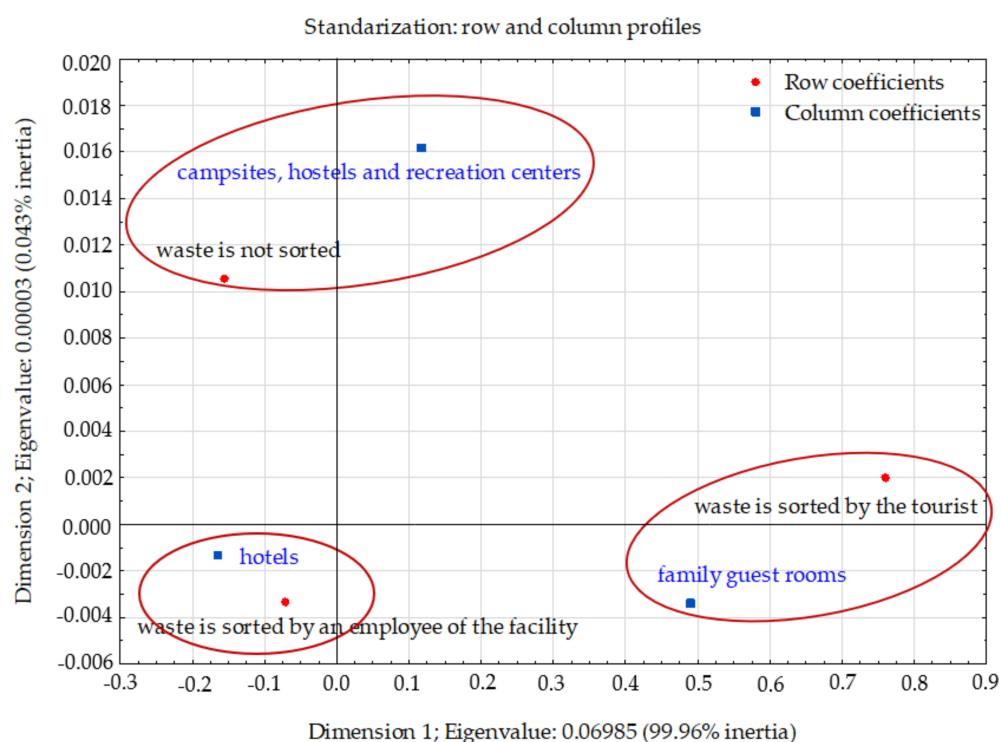
Source: author's own analysis based on study material.

The Chi<sup>2</sup> independence test showed a statistically significant difference between sorting waste from guest rooms and the type of accommodation facility (Chi<sup>2</sup> = 14.466;  $p = 0.005$ ) (Appendix A Table A2). The total inertia was 0.070, which means that the scattering of the profiles was not too great. The category “tourist sorts waste” had the most significant impact on the dispersion of row profiles—it accounted for 87.93% of relative inertia. It also made the most outstanding contribution to the creation of the first dimension of the factor space. All three-row categories were mapped mainly by the first dimension (cos<sup>2</sup> values > 0.99). The “family guest rooms” category was responsible for 71.22% of total inertia. There were three distinct clusters in the factorial space. Hotels were characterized by a significant predominance of responses that an employee sorted the waste from guest rooms. Family guest rooms distinguished themselves from the others by transferring this responsibility to guests. The third category of facilities stood out in terms of not sorting garbage from guest rooms. The hotels were located on the opposite side of the axis than the other types of facilities and also differed significantly from them (Figure 4).

Most of the facilities (80.19%) do not sort waste directly in the guest rooms. Some of them decide to place two baskets for the dry and wet fraction and a small percentage (7.73%) for segregation into different fractions, e.g., paper, plastic, glass. The region in which the facility was located did not result in statistically significant differences between the respondents' answers. However, the Central and Eastern Region stood out from the rest by using many baskets (Table 3).

Moreover, the type of facility did not significantly differentiate the respondents' answers. However, it is evident that family guest rooms have been chosen more often than other establishments to place two baskets in the guest rooms. On the other hand, campsites, hostels, and holiday centers stood out in terms of placing baskets in the guest rooms for different fractions (Table 4).

Most of the examined objects did not provide their guests with a kitchen. Of those who did, most put only one basket (55.55%). Two dry and wet fractions were chosen by 27.77% and the more significant number by 16.76% (Table 5).



**Figure 4.** Sorting of waste from guest rooms by type of facility (correspondence analysis). Source: author's own analysis based on study material.

**Table 3.** Types of waste bins in guest rooms by regions in Poland [%] ( $n = 207$ ).

| Macroregion          | Bin for All Types of Waste | Bins for             |                     | Chi <sup>2</sup> | p     |
|----------------------|----------------------------|----------------------|---------------------|------------------|-------|
|                      |                            | Dry and Wet Fraction | Different Fractions |                  |       |
| Central              | 68.75                      | 18.75                | 12.50               | 6.942            | 0.861 |
| Southwest            | 88.24                      | 5.88                 | 5.88                |                  |       |
| South                | 83.10                      | 8.45                 | 8.45                |                  |       |
| North-West           | 88.89                      | 11.11                | -                   |                  |       |
| Northern             | 81.25                      | 12.50                | 6.25                |                  |       |
| Masovian Voivodeship | 86.67                      | 13.33                | -                   |                  |       |
| Eastern              | 72.34                      | 17.02                | 10.64               |                  |       |
| Poland               | 80.19                      | 12.08                | 7.73                |                  |       |

Source: author's own analysis based on study material.

**Table 4.** Types of waste bins in guest rooms by type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | Bin for All Types of Waste | Bins for             |                     | Chi <sup>2</sup> | p     |
|--|----------------------------|----------------------|---------------------|------------------|-------|
|  |                            | Dry and Wet Fraction | Different Fractions |                  |       |
| hotels                                     | 82.52                      | 11.89                | 5.59                | 6.342            | 0.175 |
| campsites, hostels, and recreation centers | 76.19                      | 4.76                 | 19.05               |                  |       |
| family guest rooms                         | 74.42                      | 16.28                | 9.30                |                  |       |

Source: author's own analysis based on study material.

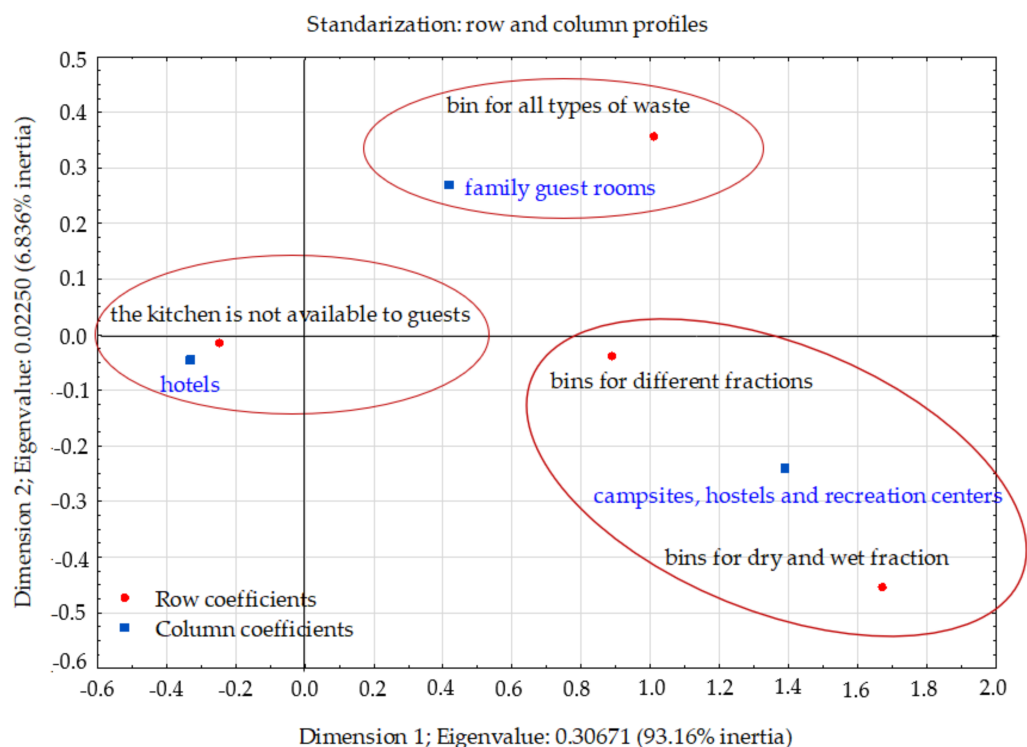
The Chi<sup>2</sup> independence test showed a statistically significant difference between sorting waste in a communal kitchen and the type of accommodation facility (Chi<sup>2</sup> = 68.148;  $p < 0.000$ ) (Appendix A Table A3). The total inertia was 0.329 and indicated that the profiles were quite dispersed. The profiles were mapped mainly by the first dimension (93.2%). There were three distinct clusters in the factorial space. Most of the hotels (95.1%) did

not provide their guests with a kitchen, and those that decided to do so provided only one waste bin. The family guest rooms differed from other facilities in terms of placing a bin for all types of waste. By contrast, campsites, hostels, and holiday resorts stood out in choosing baskets for different factions in the kitchen. The hotels were located on the opposite side of the axis than the other facilities and differed significantly from the other two groups of accommodation facilities (Figure 5, Appendix A Table A3).

**Table 5.** Types of waste bins in a kitchen open to guests by regions in Poland [%] ( $n = 207$ ).

| Macroregion          | The Kitchen is Not Available to Guests | Bin for All Types of Waste | Bins for             |                     | Chi <sup>2</sup> | <i>p</i> |
|----------------------|--|----------------------------|----------------------|---------------------|------------------|----------|
|                      |  |                            | Dry and Wet Fraction | Different Fractions |                  |          |
| Central              | 93.75                                  | -                          | 6.25                 | -                   | 18.820           | 0.403    |
| Southwest            | 94.12                                  | 5.88                       | -                    | -                   |                  |          |
| South                | 83.10                                  | 9.86                       | 2.82                 | 4.23                |                  |          |
| North-West           | 88.89                                  | 11.11                      | -                    | -                   |                  |          |
| Northern             | 87.50                                  | 9.38                       | 3.13                 | -                   |                  |          |
| Masovian Voivodeship | 93.33                                  | -                          | 6.67                 | -                   |                  |          |
| Eastern              | 65.96                                  | 17.02                      | 10.64                | 6.38                |                  |          |
| Poland               | 82.61                                  | 9.66                       | 4.83                 | 2.90                |                  |          |

Source: author's own analysis based on study material.



**Figure 5.** Types of waste bins in the kitchen available to guests by type of facility (correspondence analysis). Source: author's own analysis based on study material.

Almost two-thirds of the facilities in the publicly available space do not choose to arrange baskets for different factions. Of those who choose to do so, three-quarters place several baskets for different factions. The object location region did not significantly influence the distribution of the respondents' answers. However, it can be seen that the Eastern and Southern Region stand out in terms of the percentage of objects that favor high segregation (Table 6).

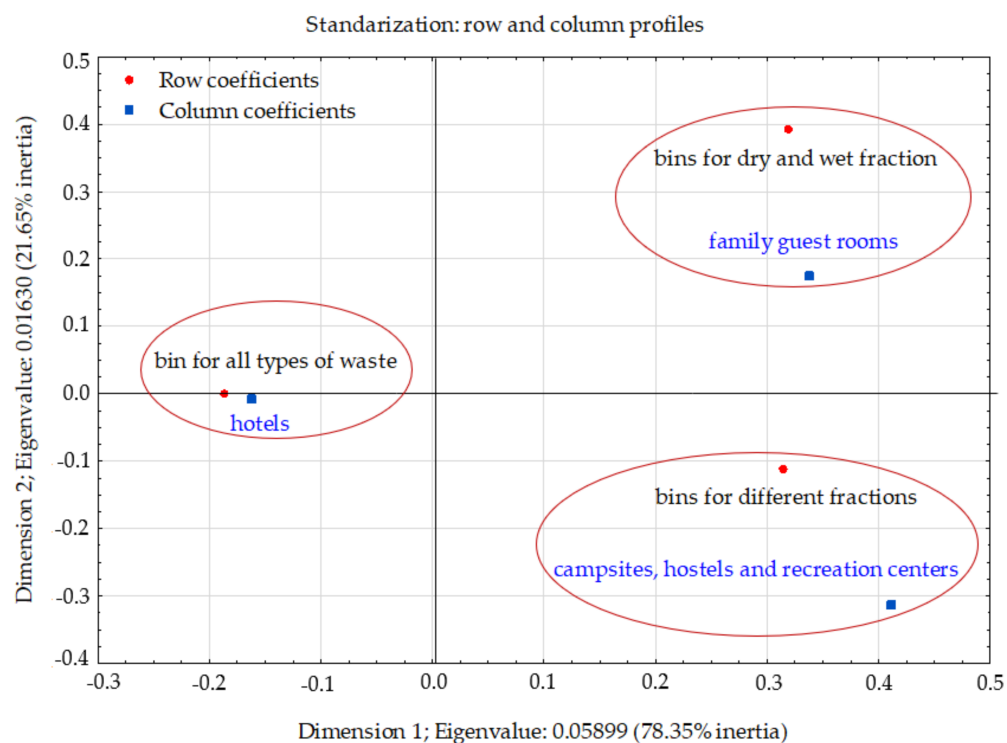


**Table 6.** Types of waste bins in a space open to all guests (e.g., hall, bathrooms, garden) by regions in Poland [%] ( $n = 207$ ).

| Macroregion          | Bin for All Types of Waste | Bins for             |                     | Chi <sup>2</sup> | <i>p</i> |
|----------------------|----------------------------|----------------------|---------------------|------------------|----------|
|                      |                            | Dry and Wet Fraction | Different Fractions |                  |          |
| Central              | 81.25                      | 6.25                 | 12.50               | 16.321           | 0.177    |
| Southwest            | 70.59                      | 5.88                 | 23.53               |                  |          |
| South                | 60.59                      | 5.63                 | 33.80               |                  |          |
| North-West           | 66.67                      | 11.11                | 22.22               |                  |          |
| Northern             | 62.50                      | 9.38                 | 28.13               |                  |          |
| Masovian Voivodeship | 93.33                      | -                    | 6.67                |                  |          |
| Eastern              | 46.81                      | 14.89                | 38.30               |                  |          |
| Poland               | 62.80                      | 8.21                 | 28.99               |                  |          |

Source: author's own analysis based on study material.

The Chi<sup>2</sup> independence test showed a statistically significant difference between sorting waste in a space open to guests and the type of accommodation facility (Chi<sup>2</sup> = 15.586;  $p = 0.004$ ) (Appendix A Table A4). The total inertia was equal to 0.075 and indicated that the profiles were not very dispersed. The profiles were formed by both dimensions, of which almost 78.4% was formed by the first. There were three distinct clusters in the factorial space. Hotels were characterized by a significant advantage of using collective waste bins in the generally accessible space. Family guest rooms were distinguished by objects that placed bins for a dry and wet fraction in the shared space. The last category of facilities stood out in terms of the use of baskets for different fractions in their facilities. The hotels are located on the opposite side of the axis and differ significantly from the other two groups of accommodation facilities (Figure 6).

**Figure 6.** Types of waste bins in the space open to all guests (e.g., hall, bathrooms, garden) according to the type of facility (correspondence analysis). Source: author's own analysis based on study material.

One-fifth of the facilities do not check whether tourists will sort the waste. Almost one-third believes that tourists do not or instead do not follow the sorting rules, and 40.58% are almost or sure of it. The region where the facility was located did not significantly affect the perception of tourists' involvement in sorting waste in the facility (Table 7).

**Table 7.** Adherence to the rules regarding the sorting of waste by tourists in the opinion of accommodation facilities by regions in Poland [%] ( $n = 207$ ).

| Macroregion          | They Do Not Check It | Not   | Probably Not | Probably Yes | Yes  | Chi <sup>2</sup> | <i>p</i> |
|----------------------|----------------------|-------|--------------|--------------|------|------------------|----------|
| Central              | 31.25                | 12.50 | 12.50        | 43.75        | -    | 26.854           | 0.311    |
| Southwest            | 41.18                | -     | 5.88         | 52.94        | -    |                  |          |
| South                | 22.54                | 14.08 | 19.72        | 35.21        | 8.45 |                  |          |
| North-West           | 33.33                | -     | 33.33        | 33.33        | -    |                  |          |
| Northern             | 34.38                | 6.25  | 28.13        | 31.25        | -    |                  |          |
| Masovian Voivodeship | 40.00                | 20.00 | 20.00        | 20.00        | -    |                  |          |
| Eastern              | 17.02                | 14.89 | 23.40        | 42.55        | 2.13 |                  |          |
| Poland               | 27.05                | 11.59 | 20.77        | 37.20        | 3.38 |                  |          |

Source: author's own analysis based on study material.

Hotels stand out from other types in terms of not checking the sorting of waste by tourists. Moreover, the type of facility does not have a statistically significant impact on the opinions that tourists adhere to the rules of sorting waste. On the other hand, in the other two groups, over 55% of respondents are sure or almost sure that tourists are committed to sorting waste (Table 8).

**Table 8.** Adherence to the rules for sorting waste by tourists in the opinion of accommodation facilities by type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | They Do Not Check It | Not   | Probably Not | Probably Yes | Yes  | Chi <sup>2</sup> | <i>p</i> |
|--|----------------------|-------|--------------|--------------|------|------------------|----------|
| hotels                                     | 30.07                | 13.29 | 23.08        | 30.77        | 2.80 | 9.612            | 0.293    |
| campsites, hostels, and recreation centers | 19.05                | 9.52  | 14.29        | 52.38        | 4.76 |                  |          |
| family guest rooms                         | 20.93                | 6.98  | 16.28        | 51.16        | 4.65 |                  |          |

Source: author's own analysis based on study material.

#### 4.2. Use of Energy-Saving Light Bulbs in the Facility

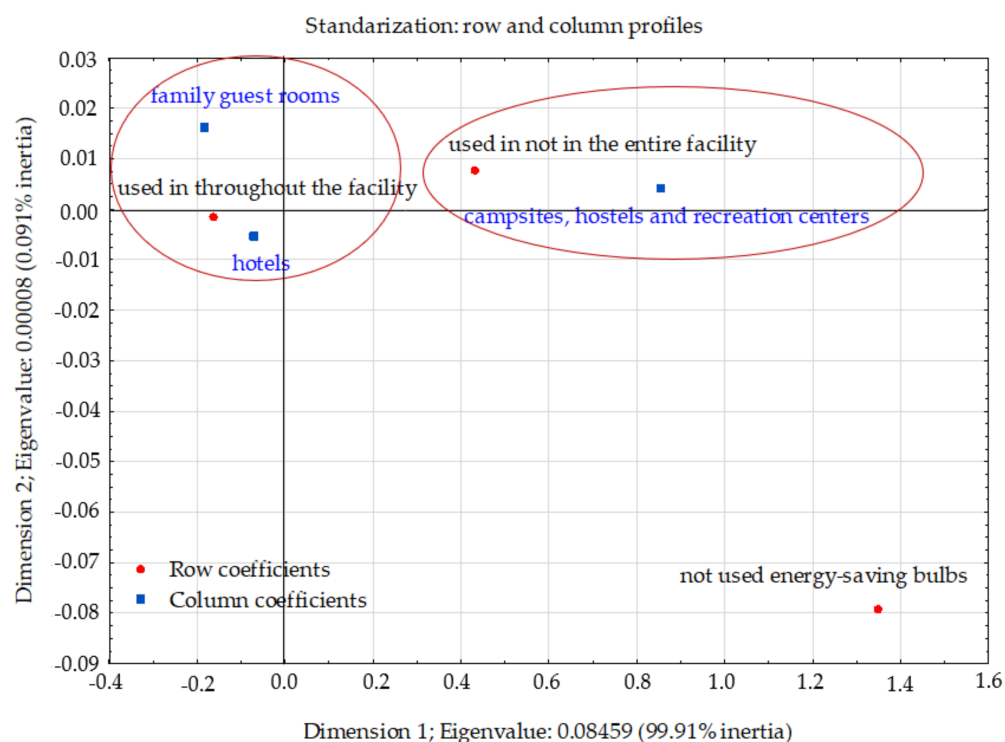
Over 99% of facilities use energy-saving light bulbs in their facility, three-quarters of which are used throughout the facility and the remainder in some rooms. The region did not significantly differentiate the distribution of respondents' answers. However, there is a significant difference between the Central and Southwest regions (Table 9).

**Table 9.** The use of energy-saving light bulbs in the facility by regions in Poland [%] ( $n = 207$ ).

| Macroregion          | They Are Not Used | They Are Used in           |                         | Chi <sup>2</sup> | <i>p</i> |
|----------------------|-------------------|----------------------------|-------------------------|------------------|----------|
|                      |                   | Not in the Entire Facility | Throughout the Facility |                  |          |
| Central              | -                 | 6.25                       | 93.75                   | 13.322           | 0.346    |
| Southwest            | -                 | 5.88                       | 94.12                   |                  |          |
| South                | 2.82              | 25.35                      | 71.83                   |                  |          |
| North-West           | -                 | 44.44                      | 55.56                   |                  |          |
| Northern             | -                 | 28.13                      | 71.88                   |                  |          |
| Masovian Voivodeship | -                 | 33.33                      | 66.67                   |                  |          |
| Eastern              | -                 | 29.79                      | 70.21                   |                  |          |
| Poland               | 0.97              | 25.12                      | 73.91                   |                  |          |

Source: author's own analysis based on study material.

The test of independence ( $\chi^2 = 17.526$ ;  $p = 0.002$ ) shows a significant relationship between the use of energy-saving bulbs by objects and the types of these objects (Appendix A Table A5). The total inertia (profile scattering) was 0.085, which means that the profile scattering is not too high. The profiles were mapped mainly by the first dimension (99.9%). Two clusters were visible in the factorial space. Hotels and family guest rooms most often had energy-saving bulbs in the entire facility, of which 76.9% of the first and 81.4% of the second. On the other hand, campsites, hostels, and holiday centers were characterized by a significant percentage of facilities that had not yet used energy-saving bulbs in the entire facility (Figure 7).



**Figure 7.** The use of energy-saving bulbs in the facility according to the type of facility (correspondence analysis). Source: author's own analysis based on study material.

#### 4.3. Training in the Field of Sustainable Development among the Staff of the Accommodation Facility

Two-thirds of the accommodation establishments do not organize in-house training on sustainability in their establishments. The region in Poland where the facility is located did not significantly differentiate this fact. However, in three regions, greater involvement in their organization was visible—Mazovian Voivodeships, South, and South-West (Table 10).

The type of facility did not significantly differentiate their involvement in the organization of internal training on sustainable development. However, this percentage was visibly higher than in the other two in the hotel group (Table 11).

Most of the internal training aimed to provide the staff with the rules of sorting waste in the facility. Among the rest, many were related to rational management and saving, including electricity, water, gas, chemicals, and paper (Table 12).

A small percentage of the surveyed facilities decided to undergo external training on sustainable development. The region in Poland did not significantly affect the percentage of facilities interested in this (Table 13).

The type of facility did not significantly differentiate the responses to employee participation in external training. A small percentage of hotel and family guest room employees were sent to them (Table 14).

**Table 10.** Internal training on sustainable development conducted among staff by regions in Poland [%] ( $n = 207$ ).

| Macroregion          | Internal Training Is |               | Chi <sup>2</sup> | <i>p</i> |
|----------------------|----------------------|---------------|------------------|----------|
|                      | Being Conducted      | Not Conducted |                  |          |
| Central              | 31.25                | 68.75         | 6.387            | 0.381    |
| Southwest            | 35.29                | 64.71         |                  |          |
| South                | 38.03                | 61.97         |                  |          |
| North-West           | 22.22                | 77.78         |                  |          |
| Northern             | 25.00                | 75.00         |                  |          |
| Masovian Voivodeship | 46.67                | 53.33         |                  |          |
| Eastern              | 21.28                | 78.72         |                  |          |
| Poland               | 31.40                | 68.60         |                  |          |

Source: author's own analysis based on study material.

**Table 11.** Internal training on sustainability among staff by type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | Internal Training Is |               | Chi <sup>2</sup> | <i>p</i> |
|--|----------------------|---------------|------------------|----------|
|  | Being Conducted      | Not Conducted |                  |          |
| hotels                                     | 34.27                | 65.73         | 1.783            | 0.410    |
| campsites, hostels, and recreation centers | 23.81                | 76.19         |                  |          |
| family guest rooms                         | 25.58                | 74.42         |                  |          |

Source: author's own analysis based on study material.

**Table 12.** Topics of internal training related to sustainable development ( $n = 53$  \*).

| Subject   | Number of Accommodation Facilities | Percentage |
|---|------------------------------------|------------|
| waste sorting (instruction, rules)                          | 39                                 | 73.58      |
| saving electricity, turning off the lights                  | 19                                 | 35.85      |
| environmental protection                                    | 10                                 | 18.87      |
| water saving  | 10                                 | 18.87      |
| economical approach to the use of the facility              | 3                                  | 5.66       |
| saving gas energy   | 3                                  | 5.66       |
| rational management of chemicals                            | 2                                  | 3.77       |
| saving paper  | 2                                  | 3.77       |
| principles of occupational health and safety                | 2                                  | 3.77       |
| sustainable development of the company                      | 1                                  | 1.89       |
| reducing waste generation                                   | 1                                  | 1.89       |
| the reuse of some waste                                     | 1                                  | 1.89       |
| optimal use of pro-ecological systems—recuperation, heating | 1                                  | 1.89       |
| renewable energy sources—photovoltaics                      | 1                                  | 1.89       |
| disposal of disposable packaging                            | 1                                  | 1.89       |
| emission of harmful substances                              | 1                                  | 1.89       |
| corporate social responsibility                             | 1                                  | 1.89       |
| optimal use of food   | 1                                  | 1.89       |

\* Out of 65 facilities that declared that their staff participated in internal training on sustainable development, 53 responded to the open-ended question about their subject. Source: author's own analysis based on study material.

**Table 13.** External training on sustainable development conducted among staff by regions in Poland ( $n = 207$ ).

| Macroregion          | External Training Is |               | Chi <sup>2</sup> | <i>p</i> |
|----------------------|----------------------|---------------|------------------|----------|
|                      | Being Conducted      | Not Conducted |                  |          |
| Central              | 6.25                 | 93.75         | 3.201            | 0.783    |
| Southwest            | 5.88                 | 94.12         |                  |          |
| South                | 2.82                 | 97.18         |                  |          |
| North-West           | 11.11                | 88.89         |                  |          |
| Northern             | 3.13                 | 96.88         |                  |          |
| Masovian Voivodeship | -                    | 100.00        |                  |          |
| Eastern              | 2.13                 | 97.87         |                  |          |
| Poland               | 3.38                 | 96.62         |                  |          |

Source: author's own analysis based on study material.

**Table 14.** External training on sustainability among staff by type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | External Training Is |               | Chi <sup>2</sup> | <i>p</i> |
|--|----------------------|---------------|------------------|----------|
|  | Being Conducted      | Not Conducted |                  |          |
| hotels                                     | 4.20                 | 95.80         | 1.172            | 0.557    |
| campsites, hostels, and recreation centers | -                    | 100.00        |                  |          |
| family guest rooms                         | 2.33                 | 97.67         |                  |          |

Source: author's own analysis based on study material.

The subject of external training focused mainly on ecology. The other mentioned pieces of training concerned the general subject (Table 15).

**Table 15.** Topics of external training related to sustainable development ( $n = 6$  \*).

| Subject                              | Number of Accommodation Facilities | Percentage |
|--------------------------------------|------------------------------------|------------|
| elements of environmental protection | 1                                  | 16.7       |
| ecology in the hotel industry        | 1                                  | 16.7       |
| waste sorting                        | 1                                  | 16.7       |
| health and safety rules              | 1                                  | 16.7       |
| how to be an eco-hotel               | 1                                  | 16.7       |
| Eco Zakopane project                 | 1                                  | 16.7       |
| organization management              | 1                                  | 16.7       |

\* Out of 7 facilities that declared that their staff participated in external training on sustainable development, 6 answered the open-ended question about their subject. Source: author's own analysis based on study material.

## 5. Discussion

In the first decades of current environmental policy (the 1970s and 1980s), the priority was to reduce the emission of harmful substances. Later, climate protection, the abuse of natural resources, and waste were brought to the fore [49]. The municipal economy is also of great importance for the practical implementation of sustainable development. Even in 2010, municipal waste management was considered one of Poland's most neglected areas of the municipal economy. Back then, the waste management model was based mainly on their storage in the environment [50]. In 2003, waste collected selectively constituted only 1.5% of total waste. Legislative changes have led to this percentage rising to 37.9% in 2020 [51]. Therefore, it may come as no surprise that still not all facilities see the sense of sorting waste from guest rooms—19.8% of facilities do not. Poland is still in the process of changing its mentality and getting used to sorting waste.



The waste problem is also still visible internationally. A new financing period for the European Union's cohesion policy for 2021–2027 begins. One of its objectives set out in the Partnership Agreement, i.e., the strategy for using European Funds agreed with the European Commission, is "Objective 2: A more environmentally friendly, low-emission Europe", including the sub-objective: "Waste management and efficient use of resources." One of the planned activities that could be used by the tourism industry, including accommodation facilities, is environmental education and good waste prevention practices, including food waste [52]. However, a lot will depend on the facility itself, whether it will be willing to join the projects, because, as pointed out by Symonides [53], no state office in the country would oversee the implementation of the principles of environmental policy relating to the sustainable development of tourism. There are also no regulations that would be directly related to tourism, which would, in a way, force entrepreneurs to care for the natural and social environment [54].

The spatial structure in each country is not homogeneous, and this is related to the diversification of the level of socioeconomic development, which several factors, e.g., historical, may condition. The analysis carried out by Kapera [54] showed that there are differences in the implementation of the principles of sustainable development between voivodeships in Poland. Eastern Poland is also considered more flawed and less developed. However, regions in Poland did not significantly differentiate the approaches of the surveyed facilities to waste management, energy saving, and raising employees' qualifications regarding sustainable development.

CSR is already part of the reality of enterprises providing accommodation services. Many Polish enterprises implement CSR policies and set models and good practices [55]. In a way, modern enterprises are required to engage in pro-ecological and pro-social activities.

Kapera [54] believes that promoting pro-ecological and pro-social solutions among tourists may, consequently, influence entrepreneurs' activities in this area. Moreover, da Rosa and Silva [56] and Scholz [57] emphasize that consumer expectations are essential for stimulating certain behaviors among entrepreneurs.

It is necessary to undertake further consistent and multi-faceted actions aimed at improving this situation. Hogg et al. [58] believe that a combination of technical, educational, legislative, and financial tools is necessary to halt the increase in the amount of waste generated and increase the level of its recycling. Niezgoda [59,60] and Kapera [54] have a similar opinion regarding implementing the principles of sustainable development in Poland. Kazimierczak [61] emphasizes that at the heart of the whole process is education, which helps bring the concepts to life.

The examined facilities have a lot of catching up to do in terms of waste management. Therefore, it is important to involve customers in the pro-ecological activities of facilities, including selective waste collection, the use of soap dispensers, and the possibility of resigning from the daily exchange of bed linen and towels [62]. It was easiest to introduce several types of baskets in the kitchen and common space that allow guests to sort and build good habits. So far, as many as 55.6% of facilities provide a collective basket in the kitchen, while for 62.8% of facilities, it is in the shared space.

The problem is also partly on the side of tourists. Despite growing environmental awareness, 32.1% of the surveyed facilities believe that tourists do not follow the rules regarding waste sorting. The biggest problem is visible in hotels (36.4%). In the other two categories of facilities, approximately 23–24% of respondents think so. According to Bohdanowicz [63], accommodation facilities can use informal education tools, such as kiosks with multimedia presentations, brochures, and ecological corners.

The frequency of implementing pro-ecological solutions will increase if their benefits exceed the costs of their implementation [62]. According to Mousavi et al. [64], managers who notice savings try to optimize energy and water consumption and reduce the amount of waste. The facilities introduce ecological solutions for economic reasons—lowering operating costs [65,66]. Many of the examined objects undoubtedly pay attention to the savings aspect. It is evident in training courses organized by facilities for their staff, among

others, saving energy, water, gas, cleaning products, paper, heating, food, and general economic approach to the use of the facility.

Further aspects include the growing ecological awareness of facilities and image (marketing) considerations [65]. All these aspects were also highlighted by Niezgoda [59,60] and Niezgoda together with Markiewicz [67]. Kapera [54] surveyed 405 hotel guests. More than half of the surveyed tourists believed that pro-ecological activities should be carried out in hotels, and 23.4% believed that there should be activities aimed at sustainable development. People who believed that the hotel should conduct pro-ecological activities also showed statistically significant higher willingness to incur additional costs. The readiness of consumers to pay more for accommodation in facilities that comply with pro-ecological principles is also indicated by other analyses, e.g., Berezana et al. [68], Kang et al. [69], and Kostakis and Sardianou [70]. Moreover, the UNWTO, after its research, noticed the increasing readiness of visitors to pay more for supporting local communities and the environment [71].

Another reason why facilities need to pay attention to environmental issues is that young people under 30 for whom environmental issues are vital are an essential part of the tourism market [62]. Generation Y (the so-called millennials) is considered to be ecologically oriented, and the Y generation (so-called millennials) is socially oriented and involved in the problems of the modern world, including those related to ecology and environmental protection [62]. Understanding their sources of satisfaction and their purchasing motives is crucial for effective sales because it was predicted that the value of the tourist market of young people in 2020 would amount to USD 400 billion [72].

Many companies still have a low level of awareness of the environmental impacts of their prowess. Research conducted by Zuzek and Mickiewicz [73] among 150 small and medium-sized enterprises in Poland showed that over 76% assess their impact on the environment as small, and only 4% consider it high. Research that Bohdanowicz [63] conducted among 942 Polish hoteliers also showed that the study participants are aware that their facilities impact the natural environment. However, the scale of these impacts was often underestimated. Therefore, it is crucial that 68.6% of the facilities surveyed by the authors organize internal training for their employees on sustainable development. Their subject focuses on the rules of sorting waste in the facility. Secondly, it is energy and water saving, but also the general topic of environmental protection. Borkowska-Niszczoła [55] studied the activities of socially responsible hotel facilities in Poland. In the area of environmental protection, aspects related to the segregation of waste into fractions and the use of energy-saving light bulbs, as well as aspects in which the objects studied by the authors conducted training courses, among others, on saving resources and minimizing consumption, were often repeated. From 117 accommodation establishments surveyed by Kapera [54], the majority of owners (82.5%) believed that pro-ecological activities should be undertaken in the facilities, especially recycling (46.5%) and saving electricity (37.2%) and water (22.1%). The same training topics were also most often conducted among the staff of the surveyed facilities. Kapera [54] also surveyed 405 hotel guests who, pointing to actions for sustainable development, focused primarily on ecology—waste segregation, water, and energy saving. Therefore, these topics are still relevant both for accommodation facilities and tourists visiting them, and they are repeated in many studies.

Modern hotel facilities introduce various types of ecological initiatives, which also improve their ecological awareness, e.g., they organize green events [65,67]. An example is the offer of the Courtyard by Marriott Warsaw Airport hotel, which is based on three pillars: food (local, seasonal, green), environmental protection (e.g., encouraging the use of public transport), and waste reduction (e.g., sorting rubbish in the banquet area) [65].

The research carried out by Borkowska-Niszczoła [55] shows that despite the high involvement of hotel facilities in implementing CSR activities, there is still a need to expand their scope. Almost 72% of the accommodation facilities surveyed by Kapera declare that they undertake activities in sustainable development, while 64% are pro-ecological activities. Szymańska's [74] research also confirmed the interest in the accommodation

base in undertaking activities in the field of sustainable development. Research by Bogdanowicz [63], showed that hotels engage in activities aimed at environmental protection. Kapera [75] points out that waste segregation exists in accommodation establishments and they initiate activities to limit its production but rarely go further and try, for example, for certification. CSR activities in hotel facilities should be regulated to a greater extent by basic standards that directly relate to social responsibility, such as the ISO 26,000 standard, the AA 1000 series standards, or the SA 8000 standard. As the research discussed in the previous chapter showed, hotels have a lot of catching up to do compared to other accommodation types. Compared to the other two groups, the most significant percentage of hotels does not sort waste from guest rooms. Moreover, the smallest percentage of objects inserts more baskets to facilitate sorting in the rooms and the common area. Campsites, hostels, and recreation centers did the best in terms of sorting quality. In all spaces (rooms, kitchens, and common areas), they decided much more often than other facilities on baskets for different fractions. The family guest rooms did their best to keep the room waste sorted. They also handed the most responsibility for this to tourists compared to other types of facilities. However, their sorting was not qualitative because they most often decided to use a collective basket or two for a dry and wet fraction in all spaces.

Importantly, over 99% of facilities use energy-saving bulbs in their facility, three-quarters of which are used throughout the facility, and the remainder in some rooms. Campsites, hostels and recreation centers have to catch up on this aspect because in many facilities energy-saving bulbs are not yet in the entire facility. Moreover, in the Scholza [57] research on 96 accommodation facilities, the most frequently used pro-ecological action was the use of energy-saving lighting.

The last aspect worth paying attention to is that a small percentage (3.4%) of the respondents decided to undergo external training on sustainable development. Therefore, it is worth organizing “eco-facility” and “eco-region” training and inviting accommodation facilities. Bogdanowicz [63] also pointed to the need to develop unique training courses and encourage the participation of all employees and managers. The hotel industry in Poland is dominated by facilities owned and managed independently [76]. Unlike hotel chains, such facilities have considerable freedom of action, and concern for the environment and willingness to act will be intensely dependent on the owner’s knowledge, attitudes, and financial situation [63,66,77–79]. Therefore, it is worth introducing extensive modules in formal hotel and tourism education programs devoted to environmental issues and pro-ecological activities [63]. Education and additional training can sensitize them to moral and social responsibilities regarding the environment [80,81].

### *Limitations*

The study carried out had some limitations. One was the ongoing COVID-19 pandemic, which made it difficult to reach respondents. Reaching the sample in the form of 207 surveyed enterprises can be called a success on the one hand because enterprise owners are reluctant to take part in questionnaire surveys.

The survey covered only some areas, since the authors wanted to check whether a given research topic would have a response among the surveyed entities. However, the study’s main limitation was that not all the CSR and sustainability factors that companies influenced were considered. All aspects (determinants) of sustainable development and CSR in accommodation facilities should be considered when conducting future research.

Among the guidelines for the future for researchers, there should be support in conducting research from local authorities in order to maximize the responsiveness of research questionnaires.

## **6. Conclusions**

These studies are the first step towards showing the CSR gap in accommodation companies in Poland, which is waste segregation. It is essential to train the staff that the owners of centers organize for their employees, provide bins for different fractions of waste

in different parts of the facility and guest rooms, and make clients aware of the need to put waste into specific bins. It is necessary to increase knowledge and promote a variety of solutions, as combining them enables creating a sustainable waste management system at the local level.

On the other hand, we are glad that 99% of facilities use energy-saving receivers (light bulbs) and see the need to conduct training courses to improve personnel qualifications regarding the determinants of sustainable development. Advertising campaigns conducted in Poland by local governments with the support of recognizable influencers may help improve pro-ecological behavior. It will also be important to know whether the accommodation facilities will be included in projects based on EU funds.

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## Appendix A

**Table A1.** Number of accommodation facilities in Poland in 2020.

| Category of the Accommodation Facility         | Number of Accommodation Facilities | Percentage |
|--|------------------------------------|------------|
| hotels   | 2498                               | 24.27      |
| guest rooms                                    | 2149                               | 20.88      |
| holiday centers                                | 1020                               | 9.91       |
| other hotel facilities                         | 983                                | 9.55       |
| agritourism accommodation                      | 645                                | 6.28       |
| complexes of tourist lodges                    | 555                                | 5.39       |
| other unclassified objects                     | 461                                | 4.48       |
| guesthouses                                    | 412                                | 4.00       |
| training and recreation centers                | 369                                | 3.59       |
| shelters (including youth and school shelters) | 307                                | 2.98       |
| spa establishments                             | 197                                | 1.91       |
| camping sites                                  | 151                                | 1.47       |
| hostels  | 150                                | 1.46       |
| campsites                                      | 149                                | 1.45       |
| motels   | 97                                 | 0.94       |
| colony centers                                 | 86                                 | 0.84       |
| excursion houses                               | 33                                 | 0.32       |
| creative work houses                           | 29                                 | 0.28       |
| Together                                       | 10,291                             | 100.00     |

Source: author's own analysis based on GUS (21.07.2021) [49].

**Table A2.** Sorting of waste from guest rooms by type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | Waste is Not Sorted | Waste is Sorted by          |             | Chi <sup>2</sup> | <i>p</i> |
|--|---------------------|-----------------------------|-------------|------------------|----------|
|  |                     | An Employee of the Facility | The Tourist |                  |          |
| hotels                                     | 21.68               | 72.73                       | 5.59        | 14.466           | 0.005 *  |
| campsites, hostels, and recreation centers | 19.05               | 66.67                       | 14.29       |                  |          |
| family guest rooms                         | 13.95               | 60.47                       | 25.58       |                  |          |

\* Statistically significant differences ( $p < 0.05$ ). Source: author's own analysis based on study material.

**Table A3.** Types of waste bins in the kitchen available to guests by type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | The Kitchen is Not Available to Guests | Bin for All Types of Waste | Bins for             |                     | Chi <sup>2</sup> | <i>p</i> |
|--|--|----------------------------|----------------------|---------------------|------------------|----------|
|  |  |                            | Dry and Wet Fraction | Different Fractions |                  |          |
| hotels                                     | 95.10                                  | 2.80                       | 0.70                 | 1.40                | 68.148           | 0.000 *  |
| campsites, hostels, and recreation centers | 33.33                                  | 28.57                      | 28.57                | 9.52                |                  |          |
| family guest rooms                         | 65.12                                  | 23.26                      | 6.98                 | 4.65                |                  |          |

\* Statistically significant differences ( $p < 0.05$ ). Source: author's own analysis based on study material.

**Table A4.** Types of waste bins in the space open to all guests (e.g., hall, bathrooms, garden) according to the type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | Bin for All Types of Waste | Bins for             |                     | Chi <sup>2</sup> | <i>p</i> |
|--|----------------------------|----------------------|---------------------|------------------|----------|
|  |                            | Dry and Wet Fraction | Different Fractions |                  |          |
| hotels                                     | 70.63                      | 6.29                 | 23.08               | 15.586           | 0.004 *  |
| campsites, hostels, and recreation centers | 42.86                      | 4.76                 | 52.38               |                  |          |
| family guest rooms                         | 46.51                      | 16.28                | 37.21               |                  |          |

\* Statistically significant differences ( $p < 0.05$ ). Source: author's own analysis based on study material.

**Table A5.** The use of energy-saving bulbs in the facility according to the type of facility [%] ( $n = 207$ ).

| Type of Accommodation Facility             | They Are Not Used | They Are Used in           |                         | Chi <sup>2</sup> | <i>p</i> |
|--|-------------------|----------------------------|-------------------------|------------------|----------|
|  |                   | Not in the Entire Facility | Throughout the Facility |                  |          |
| hotels                                     | 0.70              | 22.38                      | 76.92                   | 17.526           | 0.002 *  |
| campsites, hostels, and recreation centers | 4.76              | 57.14                      | 38.10                   |                  |          |
| family guest rooms                         | -                 | 18.60                      | 81.40                   |                  |          |

\* Statistically significant differences ( $p < 0.05$ ). Source: author's own analysis based on study material.

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