

## MANAGING ENVIRONMENTAL SOCIAL RESPONSIBILITY IN CITIES ACCORDING TO THE YOUNG GENERATION

Katarzyna SUKIENNIK<sup>1\*</sup>, Michał DZIADKIEWICZ<sup>2</sup>

<sup>1</sup> Politechnika Częstochowska, Wydział Zarządzania; katarzyna.sukiennik@pcz.pl,  
ORCID: 0000-0002-0195-7002

<sup>2</sup> Politechnika Częstochowska, Wydział Zarządzania; michal.dziadkiewicz@pcz.pl,  
ORCID: 0000-0001-5450-1669

\* Correspondence author

**Objective:** The subject matter discussed in the article presents a very important issue regarding the environmental social responsibility of the young generation. The main objective is to assess the awareness and social and environmental activities implemented in Poland in the field of environmental social responsibility.

**Project/methodology/approach:** The objective of the work was achieved through theoretical and practical analysis. The article analyzes the results of the conducted research and compares the authors' own research with national studies on the presented subject matter.

**Findings:** The work indicates similarities and differences relating to environmental social responsibility. During the analysis of the collected materials, it was noticed that there is a high level of knowledge in the field of environmental protection and great opportunities and willingness, especially of the young generation, to implement environmental projects.

**Limitations/research implications:** The subject matter discussed in the article is very important and up-to-date, therefore research in this area should be published. However, research opportunities are limited, and significant changes occur from year to year. Therefore, there is a need to carry out repeated tests and to expand the area covered. The authors plan to continue conducting both domestic and international research, which will increase the knowledge of the investigated subject matter.

**Practical implications:** Due to the information provided in the article, entrepreneurs can find out what the social demand for eco-friendly products and initiatives is. They can use this knowledge to increase competitiveness and acquire new customers.

**Social implications:** The presented research will influence public awareness in the field of ecology and environmental protection. Recipients will learn about the state's capabilities in terms of environmental protection and what actions they can implement in their immediate surroundings. The article will allow the assessment of own attitudes towards natural resources and their protection.

**Originality/value:** The added value of the article is the opportunity to learn about attitudes and social awareness in various regions of Poland. The presented subject matter is up-to-date and very important in terms of future activities and the functioning of future generations in the city.

**Keywords:** Environmental social responsibility, ecology, environmental awareness, ecological generation.

**Category of the paper:** Research paper.

## **Introduction**

At a time of dynamic changes related to socio-economic development, it is important to hold responsibility for the natural environment. The implementation of modern technological solutions should take into account the public interest. While having in mind making responsible economic decisions and adapting to modern social and environmental standards, traditional management should be combined with environmental management. Modern societies increasingly appreciate the importance of the natural environment and are more willing to take it into account in their development plans. Environmental corporate social responsibility is not only slogans, but also activities aimed at protecting the natural environment, even at the cost of own professional success. Young people, wishing to show care for the natural environment, are involved in many social initiatives that allow them to implement specific corrective actions. The concept of environmental social responsibility allows for striving to gain a competitive advantage in many areas of operation.

## **Principles of environmental social responsibility in theoretical terms**

Modern forms of management of enterprises and institutions oriented towards conscious action in the public and environmental interest, and not only the economic one, can be observed nowadays (Tewari, Bhattacharya, 2022; Gast, Gundolf, Cesinger, 2017). The issue of the natural environment is increasingly appearing in both management theory and practice (Ren, Huang, Liu, Yan, 2022; Arruda, 2017). Enterprises around the world are facing increasing pressure regarding pro-social and pro-environmental activities (Shiu, Yang, 2017; Lamarche, Bodet, 2018). Dynamic changes in the environment, intensifying globalization processes, as well as growing social and environmental requirements result in greater and more frequent involvement in pro-environmental activities (Gonzalez-Perez, 2016; Tliche, 2020). The perspectives of corporate social responsibility and sustainable development create added value in business strategies (Borda et al., 2021; Kim et al., 2021). Enterprises operating in accordance with environmental principles benefit from both internal and external environments (Chi-Shiun Lai et al., 2010; Sullivan, Thomas, Rosano, 2018). An increasing number of enterprises and institutions inform about CSR activities and, when issuing reports on their operations, they take into account the applied CSR principles (Hąbek, Wolniak, 2016; Wenbing Jiang, Wang, Du, 2023). There is a relationship between corporate social responsibility and the financial performance of enterprises (Ali, Danish, Asrar-ul-Haq, 2019; Cubilla-Montilla et al., 2019). The way of conduct of enterprises and their response to climate change is also relevant (Wright, Nyberg, 2017). Climate changes have become serious challenges to the sustainable

development of developing countries (Nureen, Liu, Irfan, Işik, 2023). Environmental awareness is changing as people notice that preventing environmental degradation is simpler and cheaper than repairing the damaged nature later (Butler, Hackney, 2021). Environmental social responsibility is all social activities focusing on compliance with environmental protection regulations and implementing activities to improve life in relation to ecology (Lyon, Maxwell, 2008). The concept of environmental responsibility relates to social initiatives aimed at limiting the negative impact on the natural environment and applying the principles of environmental protection and sustainable development. Environmental social responsibility takes into account the issues of people and the planet that lead to meeting social needs, both current and future. Strong networks of local and global connections operating in accordance with pro-environmental principles are important for modern consumers (Schembera, 2018; Stranieri, Orsi, Banterle, Ricci, 2019; Filho, 2017). Developing environmental attitudes among employees allows for the implementation of new environmental solutions (Giuliano, Mahy, Rycx, Vermeulen, 2017; Salehi-Amiri et al., 2021). The subject matter of environmental social responsibility is particularly noticed by representatives of the younger generation, among whom increased care for the natural environment is an increasingly common phenomenon (Pencarelli et al., 2020). It is acknowledged that the youngest generation, i.e. people born after 2001, particularly care for the natural environment (Fazlagić, 2010; Kurz, Li, Vine, 2019). Generation Z are conscious consumers and initiators of many pro-environmental activities (Alonso-Almeida, Llach, 2019). This is a generation that is very aware, limits its negative impact on the environment and willingly engages in pro-environmental and health-promoting initiatives (Kureshi, Thomas, 2020). The activities they implement allow for reducing the negative economic impact on the natural environment and adhering to the principles of sustainable development (Hur, Kim, Kim, 2018). They want to protect natural resources and surround themselves with nature. According to many scientific studies, people born after 2001 will experience rapid unfavorable climate changes, which are a consequence of operations carried out so far, aimed at economic development (Luten, Ryan, Wakefield, 2021). Failure to take into account the principles of sustainable development for years has made changes in the natural environment around the world occur much faster than expected. Dynamic economic development has contributed to achieving a high standard of living at the cost of the loss of certain natural resources. The change in behavior taking into account environmental protection is a long-term process that requires high social and economic awareness (Shams et al., 2020; Böcker, Meelen, 2017). Nowadays, the compliance with the principles of environmental social responsibility is a social obligation resulting from the awareness of threats to the natural environment.

## Characteristics of the research sample and research methods applied

The article presents the analyzes from the authors' own research conducted in 2021 and 2022 and the research conducted by PBS Sp. z o. o. commissioned by the Ministry of Climate and Environment in 2021 and 2022. All the studies were carried out among both women and men, of different ages, with various levels of education, living in different regions of the country, etc. The quantitative research was used based on traditional and electronic survey questionnaires, as well as computer-assisted telephone interviews.

The first own research conducted in 2021 was addressed to the residents of Częstochowa in the Silesian Voivodeship. 362 respondents took part in the study. The study was conducted using a survey method including single- and multiple-choice closed-ended questions. The objective of the survey was to examine the environmental awareness of the residents and the need to implement pro-environmental solutions in the areas of their residence.

The second own research conducted in 2022 took place with the participation of representatives from various voivodeships from all over Poland and included 605 anonymous respondents. The questionnaire was developed to assess public awareness of the implementation of environmental and economic solutions. The survey was divided into parts concerning pro-environmental and pro-social activities undertaken to build the environmental awareness of residents and individual attitudes of residents in terms of the dissemination of environmental solutions in their own households. In addition, the survey questionnaire shows whether the residents feel the need to promote the principles of sustainable development. The article presents only some of the respondents' answers that directly influenced the accomplishment of the objective of the article.

In the authors' own research, a Likert scale was used, which allowed for measuring the intensity of the respondents' attitude using a bipolar ordinal scale with values from 1 to 5. The answers were given numerical values, maintaining the principle that the assigned values increase in accordance with the nature and direction of the defined feature. A five-point scale was used to measure significance with statements, and the values were described verbally and numerically.

The research conducted by PBS Sp. z o. o. commissioned by the Ministry of Climate and Environment has been carried out as part of a multi-year research program since 2011 ([www.gov.pl/web/klimat/badania-swiadomosci-ekologicznej](http://www.gov.pl/web/klimat/badania-swiadomosci-ekologicznej)). Cyclical research allows for tracking the dynamics of changes in Poles' environmental awareness and behavior in many areas and to program activities in terms of environmental education. The research was carried out using the CATI method in 2021 (on a sample of 1004 respondents) and 2022 (on a sample of 600 respondents). The analyzes were carried out using analytic weighting, which means that the collected data are weighted in such a way that the structure of the sample corresponds to the actual structure of urban residents in Poland.

The processing of the obtained research material allowed for the assessment of public awareness in terms of ecology. Based on the literature review, the hypotheses were formulated that were supported by the quantitative research. The main objective of the article was to assess the willingness to implement pro-environmental initiatives among the young generation. The basis for the accomplishment of the objective was the main hypothesis: representatives of the young generation are oriented towards implementing environmental initiatives in cities to obtain future benefits. To justify the main hypothesis, two the sub-hypotheses were formulated.

H1. There is a relationship between pro-environmental activities and age.

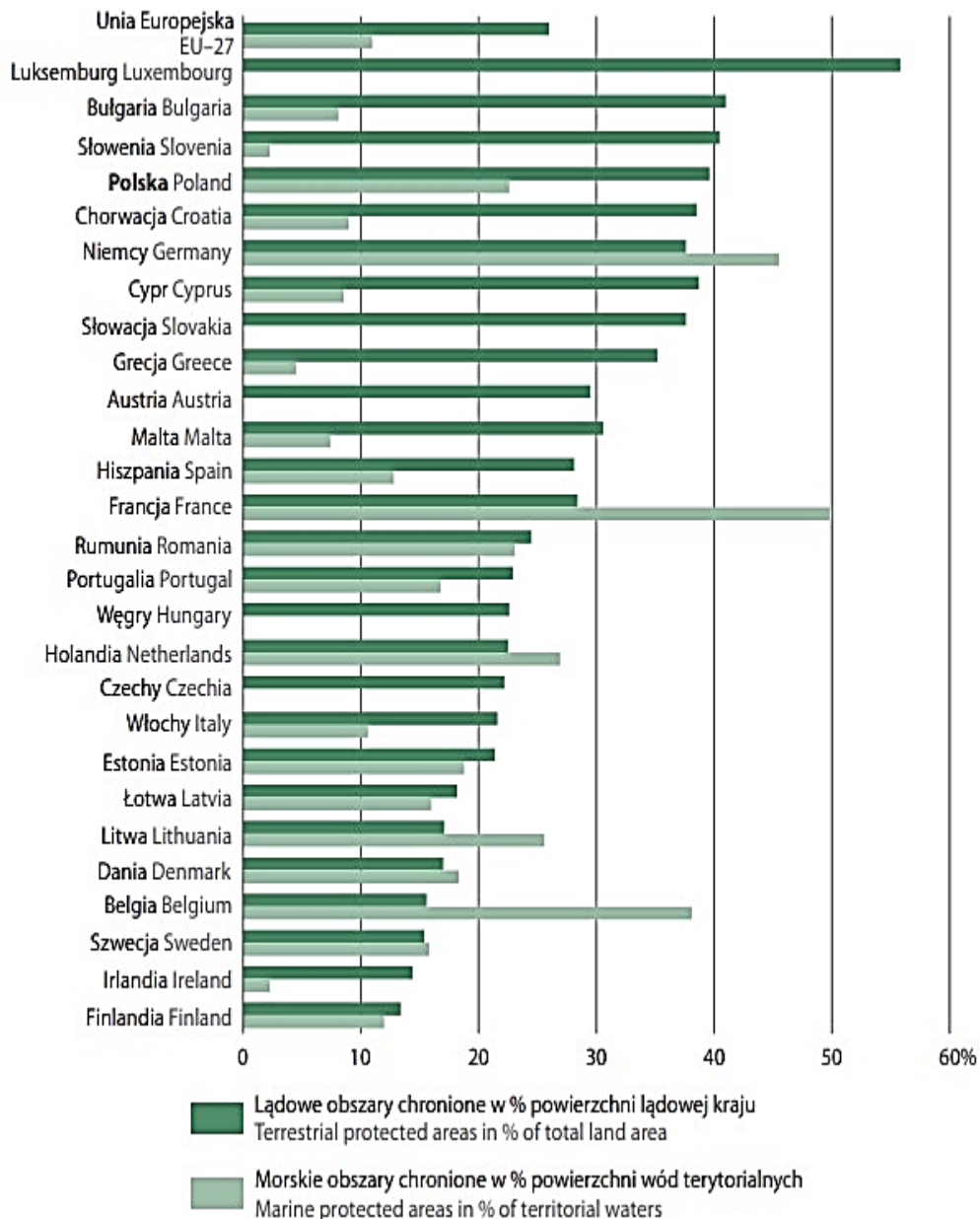
H2. The environmental social responsibility of Generation Z representatives affects their involvement in urban activities.

All the studies cited were analyzed in terms of the respondents' behavior resulting from their age and involvement in pro-environmental activities, especially in cities. Representatives of the young generation point to many initiatives that prove their environmental responsibility.

## **Analysis of the results obtained and discussion/conclusions and recommendations**

The conducted research indicates that environmental social responsibility is increasing every year, which has a positive impact on initiatives undertaken in the field of environmental protection. Poland is one of European Union countries that stands out in terms of biodiversity. The location of Poland and the prevailing climate are of particular importance. Its diversified topography is also relevant. According to the data, the area of legally protected areas in Poland in 2022 was over 10.1 million hectares, which constituted 32.3% of the country's area ([www.stat.gov.pl](http://www.stat.gov.pl)). The size of protected areas in European Union countries in 2022 is presented below.

According to the above data (Fig. 1), Poland is in the 4<sup>th</sup> place among European Union countries in terms of land and territorial water protected areas. Only Luxembourg, Bulgaria and Slovenia have more protected areas. Protected biological diversity is the indisputable wealth of every country. Therefore, actions should be taken to maintain a high level of biodiversity through social initiatives.



**Figure 1.** Size of protected areas in European Union countries in 2022.

Source: The World Bank database <https://stat.gov.pl/obszary-tematyczne/srodowisko-energia/srodowisko/ochrona-srodowiska-2023,1,24.html>

In the survey questionnaire conducted by the authors of the article in 2022, the respondents were asked whether activities aimed at protecting biodiversity were being undertaken in their surroundings. The study covered various regions of Poland, which proves a broad approach to the subject matter. The answers obtained related to both local, regional, nationwide and individual activities implemented by the respondents. The respondents who could point out more than one answer indicated the following actions (Table 1).

**Table 1.***Characteristics of local and individual activities aimed at protecting biological diversity*

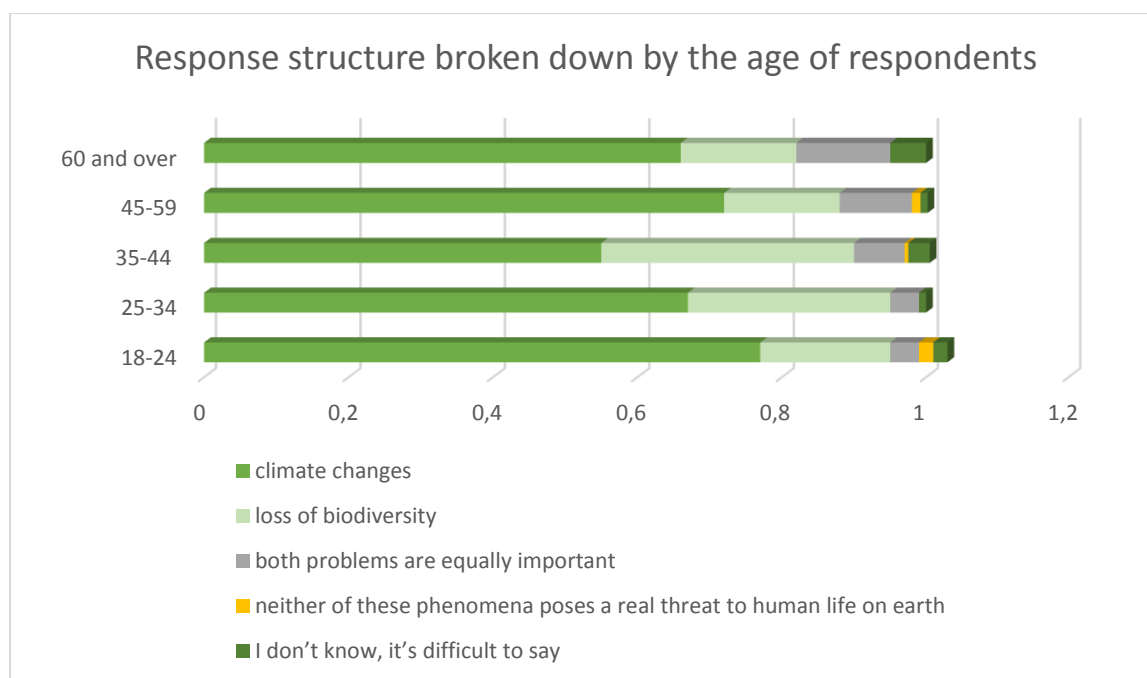
Type of local activities	Response structure	Type of individual activities	Response structure
Expanding green areas (e.g. by rebuilding concrete squares, limiting the expansion of sidewalks, etc.)	21.75%	Possessing wild landscape features	7.69%
Increasing water-absorbing utility surfaces (e.g. parking lots, sidewalks made of water-permeable material - grids)	10.74%	Reducing the use of chemicals in the garden in favor of liquid manure, herbal extracts, etc.	15.94%
Creating flowering gardens	11.62%	Creating a flowering garden	20.40%
Creating façade gardens	5.97%	Growing herbs	19.78%
Creating flower meadows	10.43%	Creating a flower meadow	10.25%
Reducing deforestation and forest degradation	5.36%	Constructing houses for insects	10.75%
Caring for old trees	12.07%	Installing nesting boxes on trees	10.38%
Planting new trees	18.93%	-	-
Renaturalization (rewilding) of the landscape	3.13%	Renaturalization of part of the plot - "giving it back to wildlife"	4.82%

Source: Own study, N = 605.

The above data from Table 1 indicate the activities that are the most important for the respondents to maintain biodiversity and influence the protection of the natural environment in their surroundings. The top-rated activities undertaken as part of local initiatives are the following: expanding green areas (21.7%) and planting new trees (18.93%), affecting the environmental and visual effect for the respondents. Residents of many regions, especially cities, see the need to implement initiatives that have a positive impact on the natural environment. Among individually implemented initiatives, the top-rated values were establishing flowering gardens (20.4%), growing own herbs (19.78%) and reducing the use of chemicals in the garden in favor of natural products (15.94%). Most of the activities are implemented locally and individually to ensure biodiversity and maintain the appropriate condition of the natural environment in urban spaces.

According to the research conducted in 2021 commissioned by the Ministry of Climate and Environment, almost two thirds (64%) of the respondents claim that biodiversity on Earth has decreased over the last 50 years. When asking the respondents what they thought was a bigger problem for preserving human life on Earth, the following results were obtained (Fig. 2).

The data in Fig. 2 indicate that representatives of the younger generation in particular notice that climate change is the biggest problem (77% of the respondents' answers). Environmental threats relating to sustaining human life on Earth should be a socio-economic priority in all countries around the world.



**Figure 2.** Assessing global issues for preserving life on Earth.

Source: <https://www.gov.pl/web/klimat/badania-swiadomosci-ekologicznej>.

All actions focused on minimizing global problems may start with local operations. Therefore, there is a need to restore the natural state of the environment. According to the cited study, the biggest problems in city centers in Poland are too few green areas, concrete spaces, etc. Detailed data are presented in Table 2.

**Table 2.**

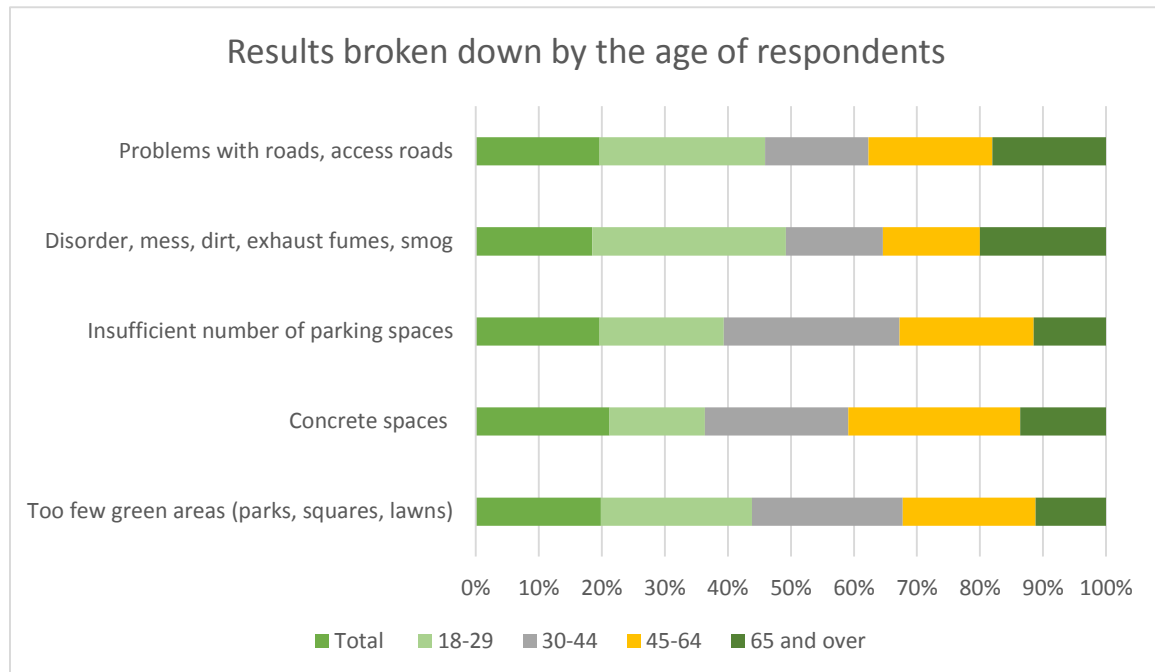
*Response structure in terms of the most significant problems in city centers in Poland*

Indicated problems	Response structure
Too few green areas (parks, squares, lawns)	48%
Concrete spaces	14%
Insufficient number of parking spaces	12%
Disorder, mess, dirt, exhaust fumes, smog	12%
Problems with roads, access roads	12%
Lack of infrastructure - benches, baskets, playgrounds, etc.	11%
Traffic jams	11%
Lack/too few bicycle paths and bicycle racks	6%
Lack/or poor condition of representative spaces (town square, squares, promenades)	5%
Difficulties in pedestrian movement	4%
Too many buildings	4%
Tree felling	2%
Renovations	2%
Troublesome overheating of squares and streets in summer	1%
Frequent flooding after downpours/storms	1%
Other problems	7%
No problems	8%
I don't know, it's difficult to say	9%

Source: Survey among city dwellers concerning urban greenery, Warszawa 2022.  
<https://www.gov.pl/web/klimat/badania-swiadomosci-ekologicznej>, N = 600.



All the problems in Table 2 show that the recent years of social activity oriented towards economic development without taking into account environmental needs have resulted in many unfavorable changes in urban spaces. According to the respondents, the lack of natural infrastructure has a negative social impact. Below is the structure of the five most frequently indicated answers, broken down by the age of the respondents (Fig. 3).



**Figure 3.** Response structure broken down by the age of respondents.

Source: Survey among city dwellers concerning urban greenery, Warszawa 2022.  
<https://www.gov.pl/web/klimat/badania-swiadomosci-ekologicznej>, N = 600.

According to the respondents, too few green areas in cities is a problem for 58 respondents in the 18-29 and 30-44 age group, while for the representatives of the 45-64 age group, this problem was indicated as the most important by 51 respondents. The respondents over 65 years of age find the number of green areas too small in 27 responses. The group of representatives of the young generation, in the second place, indicated disorder (20 responses) and then problems with access roads (16 responses). All representatives of different age groups notice socio-environmental problems in cities. Improving conditions in this area will bring many benefits to urban space in the future. By creating socio-environmental initiatives supporting the protection of biodiversity, applied individually and collectively, the chances for positive changes in the natural environment increase.

The respondents taking part in the survey also indicated other ways in which they care for the natural environment and climate (Tab. 3).

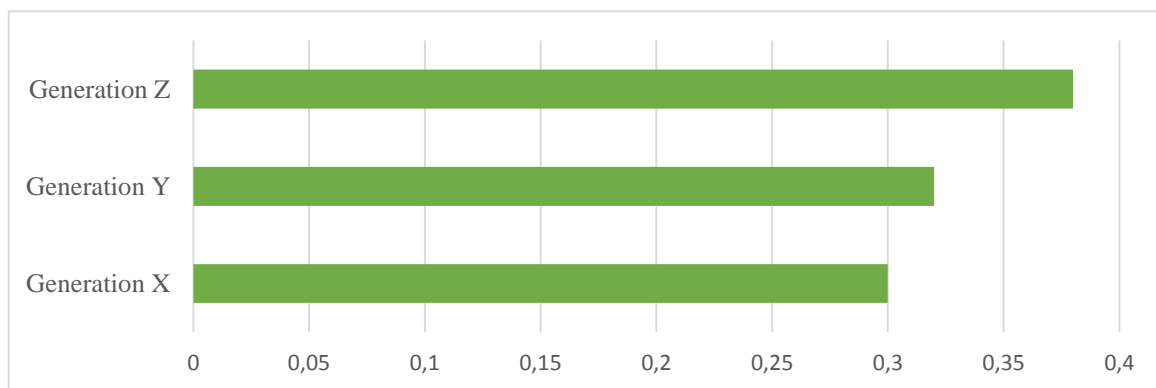
**Table 3.***Characteristics of activities aimed at protecting the natural environment and climate*

Type	Number of responses
Reducing consumption (e.g. limiting the purchase of products and services)	233
Eco-friendly driving (e.g. driving steadily, maintaining optimal engine RPM, etc.)	207
Limiting driving (e.g. using public transport, taking a neighbor to work, etc.)	213
Reducing meat consumption	113
Shopping for sustainable products (e.g. organic food, products made from recycled materials, etc.)	111

Source: Own study, N = 605.

The presented results of own research conducted in 2022 confirm the level of social awareness related to the need to take measures to protect the natural environment and rational use of natural resources in various age groups. All changes in everyday life implemented for the sake of the natural environment bring results in the long run, therefore it is important to promote and implement them.

Among the survey questions regarding elements of social responsibility in local activities, the respondents considered raising the environmental awareness of residents to be the most important (Fig. 4).

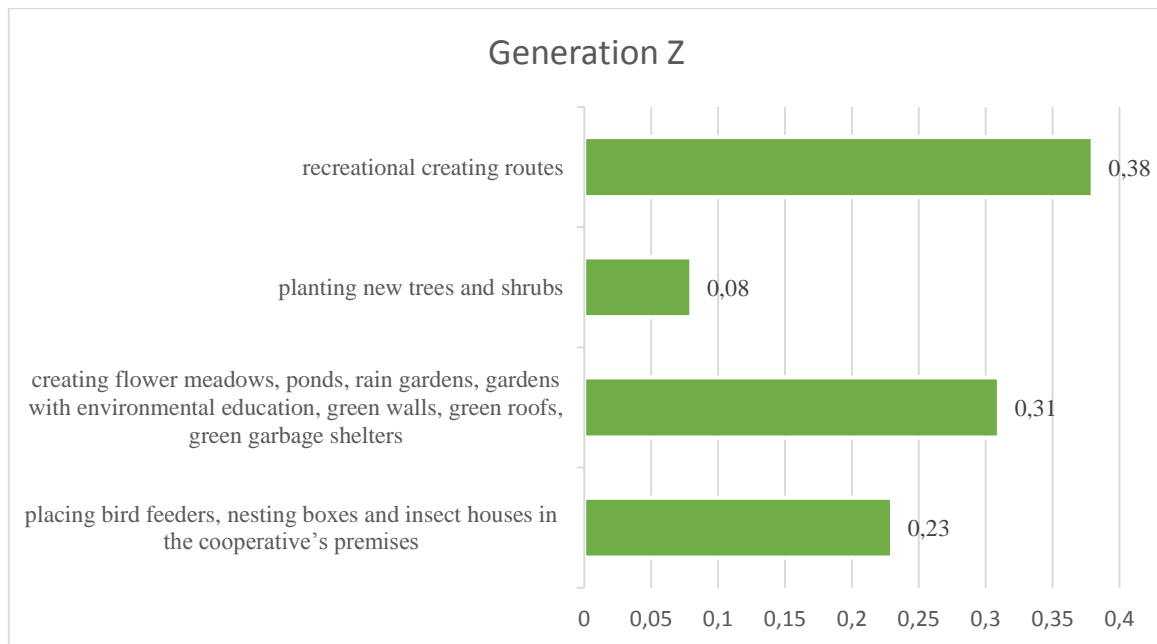


**Figure 4.** Sample structure broken down by the generation group.

Source: Own study, N = 362.

The data presented in Fig. 4 indicate that the respondents from all the generation groups equally considered it to be important to raise the environmental awareness of residents. Knowledge always allows for making informed choices. All the initiatives that increase environmental awareness among city dwellers bring social benefits.

Among the representatives of Generation Z, the most important activities in raising environmental awareness are the following (Fig. 5).



**Figure 5.** The structure of responses provided by Generation Z representatives concerning pro-environmental activities.

Source: Own study, N = 362.

Figure 5 indicates that for Generation Z, recreational routes constitute the largest percentage of responses (38%). However, in the second place they indicate the creation of flower meadows, ponds, rain gardens, gardens with environmental education, green walls, green roofs, and green garbage shelters (31% of responses). All the activities are particularly important for representatives of the young generation.

Based on the research carried out, the following pro-environmental activities were specified:

- placing bird feeders, nesting boxes, insect houses in the cooperative's premises,
- creating flower meadows, ponds, rain gardens, gardens with environmental education, green walls, green roofs, green garbage shelters,
- planting new trees and shrubs,
- creating recreational routes,
- installing rainwater tanks, photovoltaic panels on roofs, heat pumps for buildings, anti-smog ventilators, LED lighting,
- creating white roofs.

Generation Z residents are always willing to engage in pro-environmental initiatives in their immediate surroundings, regarding these activities as a chance to improve their immediate living space. The research indicates that the representatives of all generation groups are highly aware of the need to adapt urban space to ensure closer contact with the natural environment. Therefore, many changes need to be made to take care of the environment as much as possible and not lead to its degradation.

## Conclusions

Summarizing the information presented in the article, it can be clearly stated that modern society is aware of the threats and benefits resulting from the assumptions of environmental social responsibility. All the activities undertaken in the field of environmental protection and reasonable management of resources allow for a better life for future generations. Representatives of the young generation, who want to take care of their own and their children's future, must focus on introducing the necessary changes now so that these actions can pay off in the future. It takes many years to develop urban space in accordance with the principles of environmental social responsibility. The article presents the implemented changes that improve the comfort of social life and closer contact with nature. This affects not only the physical, but also mental aspects of life, which is now very dynamic. Creating new environmental spaces and places for relaxation does not always require large financial outlays. By recommending the implementation of the following actions: waste minimization, care for energy and water consumption, encouraging the implementation of environmental initiatives in the immediate surroundings, digitization of documents, etc., one can minimize the adverse impact on the environment. Socio-environmental behavior in urban spaces influences building awareness in this area. The article analyzes and assesses social behavior in the field of ecology and in accordance with environmental social responsibility. This research proves the hypotheses and objectives of the article, indicating that representatives of the young generation are focused on implementing environmental initiatives in cities to obtain future benefits. The pro-environmental activities indicated in the surveys contribute to improving life in the city and building awareness of consumer behavior in terms of environmental responsibility. All possible actions implemented locally will allow for global changes.

## References

1. Ali, H.Y., Danish, R.Q., Asrar-ul-Haq, M. (2019). How corporate social responsibility boosts firm financial performance: The mediating role of corporate image and customer satisfaction. *Corporate Social Responsibility and Environmental Management*, 1-12. <https://doi.org/10.1002/csr.1781>.
2. Alonso-Almeida, M.D.M., Llach, J. (2019). Socially responsible companies: Are they the best workplace for millennials? A cross-national analysis. *Corporate Social Responsibility and Environmental Management*. *John Wiley & Sons*, vol. 26(1), pp. 238-247. DOI: 10.1002/csr.1675.

3. Arruda Filho, N.D.P. (2017). The agenda 2030 for responsible management education: An applied methodology. *The International Journal of Management Education*, 15(2, Part B), 183-191. doi: <https://doi.org/10.1016/j.ijme.2017.02.010>.
4. Böcker, L., Meelen, T. (2017). Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environmental Innovation and Societal Transitions*. Elsevier, 23, 28-39. <https://doi.org/10.1016/J.EIST.2016.09.004>.
5. Borda, A., Morales, O., Teegen, H., Rees, G., Gonzalez-Perez, M.A. (2021). Addressing Sustainable Rural Development with Shared Value: A Peruvian Model from the Cacao Industry. *Sustainability*, 13, 8028.
6. Butler, T., Hackney, R. (2021). The role of informational mechanisms in the adoption of Green IS to achieve eco-sustainability in municipalities. *Information & Management*, Vol. 58, Iss. 3, April, p. 103320.
7. Chi-Shiun Lai, Chih-Jen Chiu, Chin-Fang Yang, Da-Chang Pai (2010). The effect of corporate social responsibility on Brand performance: The mediating effect of industrial Brand equity and corporate reputation. *Journal of Business Ethics*; 95(3), 457-469.
8. Cubilla-Montilla, M., Nieto-Librero, A.-B., Galindo-Villardón, M. P., Vicente Galindo, M.P., Garcia-Sanchez, I.-M. (2019). Are cultural values sufficient to improve stakeholder engagement human and labour rights issues? *Corporate Social Responsibility and Environmental Management*, 26(4), 938-955. <https://doi.org/10.1002/csr.1733>.
9. Fazlagić, J. (2010). Szczególne zjawisko. Pokolenie Y wyzwaniem dla pracodawców. *Personel i Zarządzanie*, 3.
10. Gast, J., Gundolf, K., Cesinger, B. (2017). Doing business in a green way: A systematic review of the ecological sustainability entrepreneurship literature and future research directions. *Journal of Cleaner Production*, 147, 44-56. <https://doi.org/10.1016/j.jclepro.2017.01.065>.
11. Giuliano, R., Mahy, B., Rycx, F., Vermeulen, G. (2017). Does corporate social responsibility make over-educated workers more productive? *Applied Economics*, 49(6), 587-605. <https://doi.org/10.1080/00036846.2016.1203061>.
12. Gonzalez-Perez, M.A. (2016). Climate Change and the 2030 Corporate Agenda for Sustainable Development, Climate Change and the 2030 Corporate Agenda for Sustainable Development. *Advances in Sustainability and Environmental Justice*, Vol. 19. Emerald Group Publishing Limited, pp. 1-6. <https://doi.org/10.1108/S2051-503020160000019005>.
13. Hąbek, P., Wolniak, R. (2016). Assessing the quality of corporate social responsibility reports: The case of reporting practices in selected European Union member states. *Quality & Quantity*, 50(1), 399-420. <https://doi.org/10.1007/s11135-014-0155-z>.
14. Hur, W.-M., Kim, H., Kim, H.K. (2018). 'Does customer engagement in corporate social responsibility initiatives lead to customer citizenship behaviour? The mediating roles of customer-company identification and affective commitment'. *Corporate Social*

- Responsibility and Environmental Management*, November 2017, pp. 1-12. <https://doi.org/10.1002/csr.1636>.
15. Kim, S.-S., Baek, W.-Y., Byon, K.K., Ju, S.-B. (2021). Creating Shared Value to Enhance Customer Loyalty: A Case of a Sporting Goods Company in Korean Athletic Shoe Market. *Sustainability*, 13, 7031.
  16. Kureshi, S., Thomas, S. (2020). Testing the influence of message framing, donation magnitude, and product category in a cause-related marketing context. *Journal of Marketing Communications*, Vol. 26, No. 3.
  17. Kurz, C.J., Li, G., Vine, D.J. (2019). Are millennials different? In: *Handbook of US Consumer Economics*. Academic Press Cambridge.
  18. Lamarche, T., Bodet, C. (2018). Does CSR contribute to sustainable development? What a regulation approach can tell us. *Review of Radical Political Economics*, 50(1), 154-172.
  19. Luten, S., Ryan, E., Wakefield, J. (2021). *Born into the Climate Crisis: Why we must act now to secure children's rights*.
  20. Lyon, T.P., Maxwell, J.W. (2008). Corporate social responsibility and the environment: A theoretical perspective. *Review of Environmental Economics and Policy*, 2(2), 240-260.
  21. Nureen, N., Liu, D., Irfan, M., Işık, C. (2023). Nexus between corporate social responsibility and firm performance: a green innovation and environmental sustainability paradigm. *Environmental Science and Pollution Research*, 30, 21, 10.1007/s11356-023-26675-1 (59349-59365).
  22. Pencarelli, T., Ali Taha, V., Škerháková, V., Valentiny, T., Fedorko, R., (2020). Luxury Products and Sustainability Issues from the Perspective of Young Italian Consumers. *Sustainability*, 12.
  23. *Raport z badania przeprowadzonego przez PBS Sp. z o.o. na zlecenie Ministerstwa Klimatu i Środowiska* (2023). Warszawa: Ministerstwo Klimatu i Środowiska, [www.gov.pl/web/klimat/badania-swiadomosci-ekologicznej](http://www.gov.pl/web/klimat/badania-swiadomosci-ekologicznej)
  24. Ren, S., Huang, M., Liu, D., Yan, J. (2022). Understanding the impact of mandatory CSR disclosure on green innovation: Evidence from Chinese listed firms. *British Journal of Management*. doi:10.1111/1467-8551.12609.
  25. Salehi-Amiri, A., Zahedi, A., Hajiaghaei-Keshteli, M., Akbapour, N. (2021). Designing a sustainable closed-loop supply chain network for walnut industry. *Renew. Sustain. Energy Rev.*, 141, 110821.
  26. Schembera, S. (2018). Implementing corporate social responsibility: empirical insights on the impact of the UN global compact on its business participants. *Business & Society*, 57(5), 783-825.
  27. Shams, G., Rehman, M., Samad, S., Oikarinen, E. (2020). Exploring customer's mobile banking experiences and expectations among generations X, Y and Z. *Journal of Financial Services Marketing*, 25.

28. Shiu, Y.M., Yang, S.L. (2017). Does engagement in corporate social responsibility provide strategic insurance-like effects? *Strategic Management Journal*, 38(2), 455-470.
29. Stranieri, S., Orsi, L., Banterle, A., Ricci, E.C. (2019). Sustainable development and supply chain coordination: The impact of corporate social responsibility rules in the European Union food industry. *Corporate Social Responsibility and Environmental Management*, 26(2), 481-491. <https://doi.org/10.1002/csr.1698>.
30. Sullivan, K., Thomas, S., Rosano, M. (2018). Using industrial ecology and strategic management concepts to pursue the Sustainable Development Goals. *Journal of Cleaner Production*, 174, 237-246. <https://doi.org/10.1016/j.jclepro.2017.10.201>.
31. Tewari, S., Bhattacharya, B. (2022). Financial resources, corporate social responsibility, and ownership type: Evidence from India. *Asia Pacific Journal of Management*. doi:10.1007/s10490-022-09810-3.
32. Tliche, Y., Taghipour, A., Canel-Depitre, B. (2020). An improved forecasting approach to reduce inventory levels in decentralized supply chains. *European Journal Operational Research*, 287, 511-527.
33. Wenbing Jiang, Xuejun Wang, Lei Du (2023). Intergenerational externalities and corporate innovation. *Sustainable Development*, 31, 4, 10.1002/sd.2501 (2212-2221).
34. Wright, C., Nyberg, D. (2017). An inconvenient truth: how organizations translate climate change into business as usual. *The Academy of Management Journal*, 60(5), 1633-1661.
35. [www.stat.gov.pl](http://www.stat.gov.pl)