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THE EUROPEAN GREEN DEAL (EGD) IN THE PUBLIC OPINION – ASSESSMENT OF AWARENESS OF ENVIRONMENTAL POLLUTION AND THREATS TO HEALTH AND LIFE

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ABSTRACT: The main objective of this study is to assess the level of public awareness of environmental threats and their perceived impact on the health and lives of citizens, in the context of implementing the European Green Deal (EGD). The study focuses on analyzing the opinions of users of information on environmental pollution, its health effects, and the perceived opportunities and barriers related to implementing the EGD. Specific objectives include: (1) identifying public opinions on selected diseases related to environmental degradation; (2) assessing the perceived benefits and risks of implementing the EGD; and (3) analyzing the relationship between demographic characteristics and the level of acceptance for pro-environmental activities. The study is based on a survey method using a questionnaire, supplemented by a literature review. Descriptive and bivariate statistics were used to examine the significance of relationships between variables. The results indicate that respondents perceive a link between environmental pollution and diseases such as asthma, cancer, and lung disease. EGD is seen as an opportunity to improve environmental quality and public health, although implementation barriers such as cost, lack of public acceptance, and excessive regulation are also identified. This study contributes to our understanding of the role of public perception as a factor in the effectiveness of EU environmental policies. Key Findings of the article are: (1) Public Awareness: The study reveals that society is aware of the threats posed by environmental pollution to health and life. Diseases such as asthma, chronic lung diseases, and cancer are highlighted as major concerns; (2) Strengths of the EGD: The EGD is seen as beneficial for providing stable electricity supply, improving the natural environment, reducing waste, and promoting clean production. It also emphasizes sustainable agriculture, circular economy, and creating new jobs; (3) Weaknesses of the EGD: High implementation costs, lack of social acceptance, time-consuming political negotiations, and excessive regulations are identified as significant weaknesses. There are also concerns about the administrative costs and potential problems for small and densely populated countries in meeting EU requirements; (4) Opportunities: The EGD presents opportunities for future generations to live in a better environment, advancements in therapeutic interventions, and the creation of green jobs. It also promotes multidisciplinary cooperation and better mental health for urban inhabitants; (5) Threats: Potential threats include limiting traditional agriculture, nuclear safety risks, resistance to political changes, and uncertainties about the effectiveness of planned interventions. There are also concerns about economic disruptions in high-emission industries and regions.

KEYWORDS: European Green Deal, social awareness, environmental pollution

Introduction

The European Green Deal (EGD) is a set of initiatives and projects of the European Commission, the primary goal of which is to achieve climate neutrality by European countries. Such a policy results from the ongoing climate change resulting in global warming (Wibig, 2020; Wolf et al., 2021; Pattak et al., 2023; Sokal & Kachel, 2025). EGD has become a basic tool for implementing decarbonization policy in the European Union (EU). This concept covers most spheres of socio-economic life. It sets out directions of action and instruments for all sectors of the economy that are to contribute to achieving net zero emissions in 2050 (Stankiewicz, 2023; Geels, 2014; Raihan et al., 2023; Sultana et al. 2023, Bacenetti et al., 2018). The EGD strategy is based on three levels of implementation, and each of these levels includes specific thematic and financial instruments. The first level is the national energy and climate plans, i.e. the contribution of each Member State to the implementation of the EU climate goals (Burgoński, 2023; Borkowski, 2021; Tkachuk, 2024; Fischer & Newell, 2008; Sultana et al., 2023). The implementation of EGD resulted in *the Higher Europe Climate Goals for 2030*, which set out intermediate guidelines for EU Member States to achieve climate neutrality in a sustainable and fair manner (Oberthür & Dupont, 2021; van Vuuren et al., 2018; Hauck et al. 2025; Hao & Dragomir, 2025).

EGD is not just a new version of climate policy. Its goal is to „deeply transform EU societies and economies”. 10 EGD priorities are indicated as a set of political strategies – Figure 1 (Ziemacki, 2021; Stankiewicz, 2023; https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_pl; https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_pl 3The European G; <https://visionsforeurope.eu/v4e-articles/the-european-green-deal-and-sustainable-business-growth/>; Rockström et al., 2009).

An overview of the literature

The European Green Deal (EGD) has been the subject of extensive academic discourse, with various scientific positions highlighting its potential and challenges. Two notable positions in the literature are presented by Adamowicz (2021) and Oberthür & Dupont (2021). Both Adamowicz (2021) and Oberthür & Dupont (2021) recognize the EGD's potential to drive significant environmental and climate benefits. However, they also highlight the challenges in implementation, including high costs, political negotiations, and the need for substantial changes in various sectors. These positions underscore the importance of addressing these challenges to ensure the successful implementation of the EGD.

In the face of growing climate and environmental threats, the European Green Deal (EGD) represents a comprehensive strategy for the economic and social transformation of the European Union towards climate neutrality. Although its goals are ambitious and multifaceted, the effectiveness of EGD implementation depends not only on political and technological instruments but also on the level of public awareness and citizen acceptance. It is society – as a user of information, beneficiary, and co-creator of change – that plays a key role in the success of this transformation.

To date, research on EGD has focused primarily on regulatory, economic, and environmental aspects, often omitting the social dimension, particularly the perception of health risks resulting from environmental pollution. A research gap, therefore, lies in the lack of in-depth analysis of public opinion on EGD in the context of awareness of the impact of environmental degradation on citizens' health and lives. However, risk perception – both individual and collective – may determine the level of public engagement, acceptance of the costs of transformation, and the effectiveness of implementing pro-environmental policies.

It is important to remember that the future of Europe depends on the condition of our planet. Human activity is causing an increase in the average temperature in the world, which in turn affects climate patterns. Increasingly frequent and severe extreme weather events have tragic consequences for society, human health and life, and the economy. Current economic and consumption patterns do not correspond to what the planet can offer and are harmful to the natural environment, nature,

1) More ambitious EU climate targets for 2030 and 2050

- reducing greenhouse gas emissions
- mechanism for setting fees for greenhouse gas emissions

2) Providing clean, affordable and safe energy

- changes in Member States' energy and climate plans
- the process of transitioning to clean energy with consumer engagement
- introducing measures to protect against energy poverty
- intelligent infrastructure

3) Industry sector for a clean and circular economy

- mobilization of industryenergy-intensive industries (steel, chemicals, cement production)
- sustainable products policy
- transformation of resource-intensive sectors (clothing industry, construction, electronics, plastics)
- waste reduction
- digital technologies

4) Building and renovating in a way that saves energy and resources

- renovation of public and private buildings
- energy performance of buildings

5) Accelerating the transition to sustainable and intelligent mobility

- multimodal transport
- production and introduction of alternative sustainable transport fuels
- reducing the level of pollution generated by transport, mainly in cities

6) From Farm to Fork: Creating a Fair, Healthy and Environmentally Friendly Food System

- food value chain
- agricultural policy
- reducing the use of chemical pesticides, fertilizers and antibiotics
- healthy food

7) Protection and restoration of ecosystems and biodiversity

- increasing the area of protected areas
- rebuilding Europe's natural capital
- improving the quality of forest areas in the EU
- new EU forest strategy
- biodiversity
- effective afforestation, protection and rehabilitation of forests in Europe

8) Zero pollution for a non-toxic environment

- elimination of air, water and soil pollution
- air quality monitoring and modeling
- restoring the natural functions of surface and ground waters
- reducing pollution from large industrial installations

Figure 1. A set of policies for a deep transformation of the EU economy towards sustainable development

Source: authors' work based on A Clean Planet for all – A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, COM (2018) 773, Consolidated text of Directive 2003/87/EC of the European Parliament and of the Council establishing, Regulation, 2018a; Regulation, 2018b; Adamowicz, 2021; Nowak, 2021; Orłowska & Zarzecka, 2024; Jordan & Lenschow, 2010; Schreurs, 2016; Smith & Stirling, 2010; Teijido-Murias et al., 2025; Scioșteanu & Criveanu, 2025; Nagy et al., 2025; Gobin & Uljee, 2025.

biodiversity. Both the economy and society, their well-being, are fully dependent on the good functioning of the environment and ecosystems.

In the set of political strategies for the deep transformation of the EU economy with a view to sustainable development, attention is drawn to environmental pollution, which can pose a threat to the health and life of citizens and cause specific diseases, such as cancer, ischemic heart disease, chronic lung disease, strokes, mental disorders, neurological disorders, including Alzheimer's and Parkinson's disease, diabetes, kidney disease, hypertension, asthma. It is very important for society to be able to assess the opportunities and threats and the strengths and weaknesses of the EGD.

Research methods

The main objective of this study is to assess the level of public awareness of environmental threats and their perceived impact on the health and lives of citizens, in the context of implementing the European Green Deal (EGD). The study focuses on analyzing the opinions of users of information on environmental pollution, its health effects, and the perceived opportunities and barriers related to implementing the EGD. Specific objectives include: (1) identifying public opinions on selected diseases related to environmental degradation; (2) assessing the perceived benefits and risks of implementing the EGD; and (3) analyzing the relationship between demographic characteristics and the level of acceptance for pro-environmental activities.

When it comes to data types and sources:

- Quantitative data were collected via a structured questionnaire distributed nationally and internationally. These include closed-ended responses measured on Likert scales, enabling statistical analysis of public opinion on environmental risks and EGD-related benefits.
- Qualitative insights were derived from open-ended responses and literature review, providing contextual depth to the statistical findings and supporting the SWOT framework.

Moving to analytical methods, the following were used:

- Descriptive statistics (frequency distributions, percentages) were used to summarize respondent opinions across key categories (e.g., perceived health risks, expected EGD outcomes).
- Inferential statistics, specifically Pearson's χ^2 test of independence, were applied to examine relationships between demographic variables (e.g., education, gender, country of origin) and response patterns. Statistical significance was defined as $p < 0.05$.
- SWOT analysis was employed as a structured interpretive tool to synthesize survey results and literature findings. Strengths, Weaknesses, Opportunities, and Threats were identified based on aggregated public perceptions and contextualized within the broader EGD policy framework.

The primary instrument used for data collection was a structured questionnaire. The questionnaire was validated through a pilot study involving a small sample of respondents to ensure its reliability and validity. Feedback from the pilot study was used to refine the questionnaire, ensuring that the questions were clear, relevant, and capable of capturing the necessary data.

The information resulting from direct research (survey studies, i.e. questionnaires) was considered an important source of analytical research. The aim of the study was to learn the opinions of information users (stakeholders) about the concept, assumptions, and initiatives of the EGD. In accordance with the study assumptions, the survey was prepared in the MS Teams program and redistributed in the country and abroad. Using the snowball method, the survey was initially sent to scientists from the Jan Kochanowski University in Kielce, the University of Economics in Krakow, the Pomeranian University in Słupsk, the University of Szczecin in Szczecin, and the Rzeszów University of Technology in Rzeszów. In the second stage of data collection, the survey was sent to scientists from abroad representing such universities as: (1) Liberec University of Technology, Faculty of Economics, Department of Finance and Accounting, Liberec, Czech Republic; (2) West Ukrainian National University, Ternopil, Ukraine; (3) Faculty of Social Sciences, Panevezys University of Applied Sciences, Laisves a. 23, Lithuania; (4) Institute of Chemical Technology Volodymyr Dahl East Ukrainian Rubizhne National University, Luhansk, Ukraine; (5) European University Viadrina in Frankfurt

(Oder); (6) University of Oslo, Norway; (7) University of Gothenburg, Sweden; (8) Others, mainly citizens of other countries, including Erasmus students.

Table 1 presents the number of completed survey questionnaires, including those already rejected on the basis of formal and substantive verification. During the survey, formal verification was carried out on an ongoing basis, consisting in checking the completeness of the answers provided. As a result, three surveys were rejected, in which the respondents did not provide answers to all the research questions. In the course of substantive verification, two surveys were rejected, in which the respondents provided answers indicating a lack of understanding of individual questions included in the survey questionnaire. Ultimately, 127 surveys were accepted for the study. The study was conducted in 2024.

It also worth noting, that the questionnaire was designed to capture a comprehensive range of data, with questions structured to elicit both quantitative and qualitative responses. To ensure reliability, the questionnaire underwent a pilot study, and feedback was incorporated to refine the questions. Validity was addressed through expert reviews and iterative testing, ensuring that the instrument accurately measured the intended constructs.

Table 1. Number of completed surveys by country

No.	Country	Number of completed surveys Number of respondents
1	Poland	41
2	Ukraine	7
3	Slovakia	3
4	Czech Republic	65
5	Lithuania	1
6	Germany	0
7	Norway	0
8	Sweden	0
9	Other (Erasmus)	10
Sum		127

Source: authors' work based on primary survey research, n=127.

The group of respondents was diverse, 62% were women and 38% were men. The diversity of information users participating in the survey in terms of education, place of residence and average monthly salary is presented in Table 2.

While the study aimed to gather a diverse range of responses, there are inherent limitations in the sample. The sample size, though adequate for statistical analysis, may not fully represent the entire population. Additionally, the study relied on self-reported data, which can be subject to biases such as social desirability bias and recall bias. Efforts were made to mitigate these biases through anonymous data collection and careful questionnaire design.

What is more, the choice of the snowball sampling method, while effective in reaching a specific academic network, introduces a bias that limits the generalizability of the findings

Table 2. Diversification of information users participating in the survey based on education, place of residence and average monthly salary

No.	Category	specification	%
AND.	Education	- basic	0
		- professional	0
		- medium	39
		- higher	61
II.	Domicile	- village	30
		- city up to 50 thousand inhabitants	23
		- city from 50 thousand to 150 thousand inhabitants	34
		- city from 150 thousand to 500 thousand inhabitants	8
		- a city of over 500 thousand inhabitants	6
III.	Average monthly salary	- up to 1500 euros	71
		- 1500 – 2500 euro	20
		- 2500 – 4000 euros	7
		- over 4000 euro	2

Source: authors' work based on primary survey research, n=127.

Results of the research

First, respondents were asked whether they agreed with the statement that „environmental pollution can pose a threat to the health and life of citizens and cause diseases. The appropriate answer should be marked in the research survey, where 1 – I strongly disagree, 2 – I rather disagree, 3 – I don't know, it's hard to say, 4 – I rather agree, 5 – I strongly agree. The opinions of respondents in this regard are presented in Table 3.

Table 3. Respondents' opinions on environmental pollution and its correlation with the health and life of citizens

Category	1	2	3	4	5
Respondents' answers [%]					
• cancer /tumors	7.9	5.5	21.3	36.2	29.1
• diseases ischemic hearts / ischemic heart disease	3.9	15.7	22.0	34.6	23.6
• chronic lung diseases/ chronic lung diseases	3.9	6.3	15.0	30.7	44.1
• strokes / strokes	5.5	14.2	36.2	26.8	17.3
• diseases mental illnesses	12.6	19.7	26.8	19.7	21.3
• diseases neurological , including disease Alzheimer's and Parkinson's / neurological diseases, including Alzheimer's and Parkinson's disease	10.2	18.1	38.6	18.9	14.2
• diabetes	11.0	25.2	29.9	23.6	10.2
• kidney disease diseases	7.1	15.0	31.5	29.9	16.5
• hypertension	4.7	19.7	33.1	29.9	12.6
• asthma	4.7	5.5	9.4	33.1	47.2

Source: authors' work based on primary survey research, n=127.

According to the respondents, environmental pollution may pose a threat to the health and life of citizens and cause diseases, mainly asthma (47.2%), chronic lung diseases (44.1%) and cancer (36.2%).

Detailed results of empirical research on the opinions expressed by respondents on the impact of environmental pollution and its correlation with the health and life of citizens are presented below (Figures 2, 3, 4, 5).

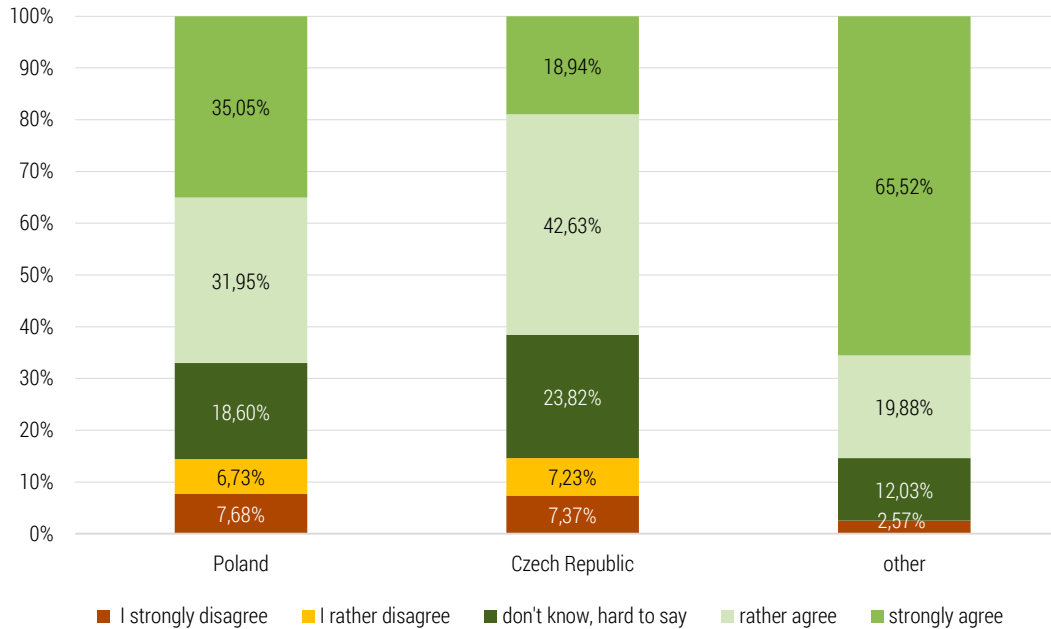


Figure 2. Respondents' opinions on environmental pollution (tumors)

Source: authors' work based on primary survey research, n=127.

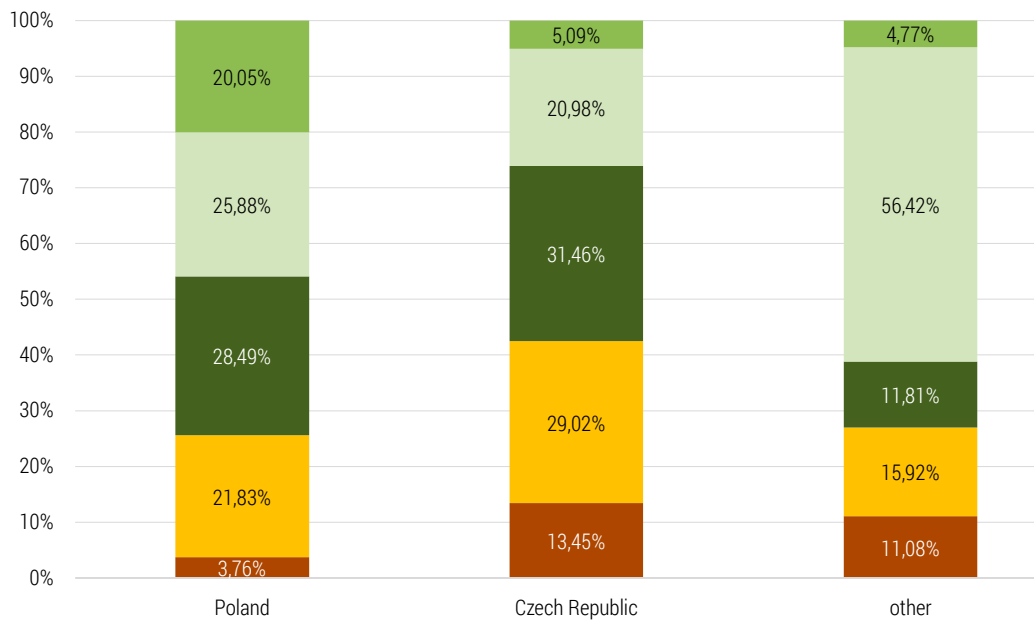


Figure 3. Respondents' opinions on environmental pollution (diabetes)

Source: authors' work based on primary survey research, n=127.

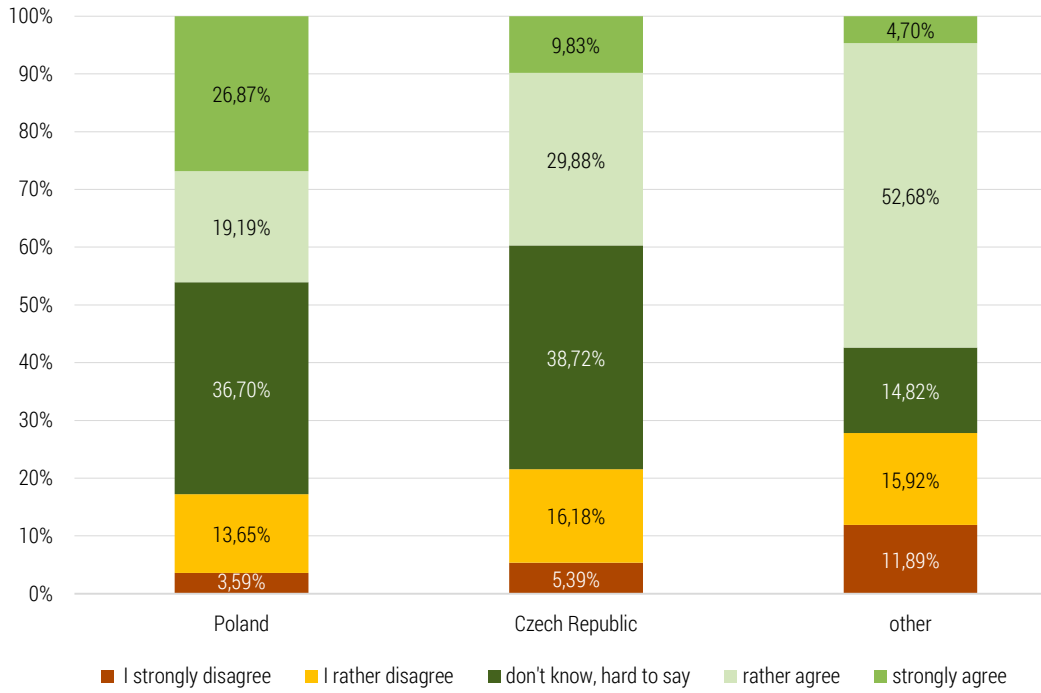


Figure 4. Respondents' opinions on environmental pollution (kidney disease/ kidney diseases)

Source: authors' work based on primary survey research, n=127.

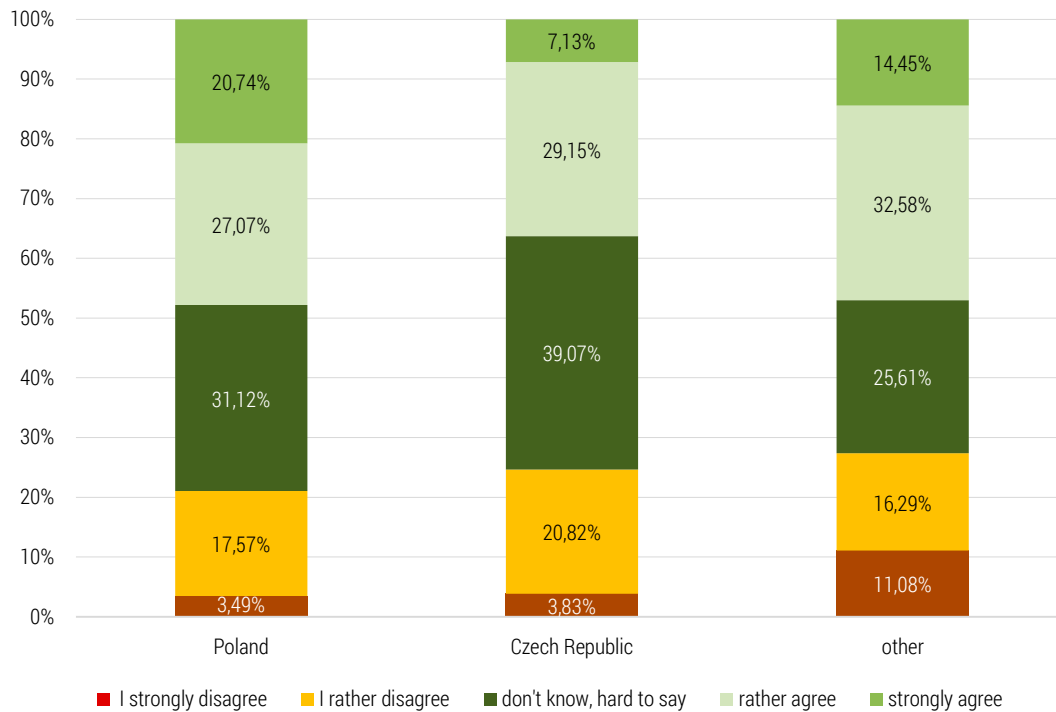


Figure 5. Respondents' opinions on environmental pollution (hypertension)

Source: authors' work based on primary survey research, n=127.

The expressed opinions on the impact of environmental pollution and its correlation with the health and life of citizens differed in a statistically significant way, depending on the respondent's country of origin, only in the case of diseases such as: cancer (p- value =4.05E-02), diabetes (p- value =3.46E-03), kidney diseases (p- value =4.697E-02) and diseases related to hypertension (p- value =2.28E-02).

The influence of environmental pollution on cancer was indicated as completely insignificant by over 7% of respondents from Poland and the Czech Republic and only less than 3% from the other countries, while a very large influence was indicated by 19% of respondents from the Czech Republic, 35% of respondents from Poland and almost 66% from the other countries.

The lack of impact of environmental pollution on diseases related to diabetes was indicated by less than 4% of respondents from Poland and about 12% from other countries, while 20% of respondents from Poland and about 5% from other countries indicated a very large impact. In the case of kidney diseases, the lack of impact of environmental pollution was indicated by about 5% of respondents from Poland and the Czech Republic and almost 12% from other countries, while a very large impact was indicated by 27% of respondents from Poland, almost 10% from the Czech Republic and about 5% from other countries, while a large impact was indicated by an additional 19% of respondents from Poland, 30% from the Czech Republic and almost 53% from other countries. In the case of hypertension, the lack of impact of the environment was indicated by less than 4% of respondents from Poland and the Czech Republic and over 11% from other countries.

The education of the respondents also had a significant impact on the opinions on the impact of environmental pollution on the health and life of citizens. In the case of cancer, the impact of environmental pollution was indicated by 74% of people with higher education and 56% with secondary education (p- value =1.22E-02), in the case of ischemic heart diseases, the indications were 62% and 53%, respectively (p- value =4.93E-02), in the case of neurological diseases 36% and 28% (p- value =2.35E-02), diabetes 42% and 34% (p- value =1.32E-03), kidney diseases 49% and 37% (p- value =2.36E-02), and hypertension 47% and 34%, respectively (p- value =2.25E-02).

The gender of the respondent also had a significant impact on the opinions expressed regarding the impact of environmental pollution on the health and life of citizens. In the case of strokes, a positive correlation was indicated by 51% of women and 38% of men (p- value =4.49E-02), in the case of mental illnesses, the indications were 49% for women and 33% for men (p- value =4.01E-02), the impact of environmental pollution on diabetes was indicated by 38% of women and 45% of men (p- value =6.73E-03), while in the case of kidney diseases, such a correlation was indicated by 60% of women and 26% of men (p- value =3.16E-02). At the same time, a negative opinion regarding the impact of environmental pollution on neurological diseases was expressed by 23% of women and 39% of men (p- value =2.12E-02).

Table 4. Respondents' answers to the question: "What do you think we will gain by implementing EGD?"

Category	1	2	3	4	5
Respondents' answers [%]					
• clean air , water , soil / clean air, water, soil	11.8	15.0	15.7	34.6	22.8
• cleaner energy/ cleaner energy	7.1	13.4	17.3	42.5	19.7
• less waste/ less waste	7.9	10.2	19.7	34.6	27.6
• healthier food / healthy food	11.0	16.5	20.5	34.6	17.3
• less Pesticides and fertilizers / less pesticides and fertilizers	5.5	17.3	26.0	32.3	18.9
• modernized buildings residential , schools , hospitals / Modernized residential buildings, schools, hospitals	9.4	21.3	32.3	22.8	14.2
• better public transport / better public transport	7.9	23.6	37.0	18.1	13.4
• more charging stations for electric cars (more Charging stations for electric cars)	12.6	20.5	29.9	22.0	15.0
• better health for present and future generations / Better health for present and future generations /	7.1	13.4	22.0	27.6	29.9

Source: authors' work based on primary survey research, n=127.

The next question was: „What do you think? What will we gain by implementing EGD? Please mark the appropriate answer, where 1 – I strongly disagree, 2 – I rather disagree, 3 – I don't know, it's hard to say, 4 – I rather agree, 5 – I strongly agree”. The results of the study in this area are presented in Table 4.

According to respondents, by implementing EGD we will gain mainly cleaner energy and less waste. This is the opinion of 62.2% of people taking part in the survey.

The opinions expressed on “What will we gain by implementing the EGD” and their correlations due to the diversity of information users taking part in the study; due to education, place of residence and average monthly salary allow for the construction of specific conclusions. Significant differences in the assessment of the effects of implementing the EGD concerned issues related to clean energy (p- value = 3.47E-02), the use of pesticides and fertilizers (p- value = 4.48E-02), the modernization of residential buildings, schools and hospitals (p- value = 1.91E-02), better public transport (p- value = 3.57E-02) or the possible emergence of more charging stations for electric cars (p- value = 1.22E-02). The positive impact of the implementation of the EGD on clean energy issues was indicated by less than 45% of respondents from Poland, almost 70% of respondents from the Czech Republic and over 80% from other countries, in the case of reducing the use of pesticides and fertilizers, the indications were at the level of 49%, 59% and 61%, respectively, in the field of modernization of residential buildings, schools and hospitals at the level of 37%, 31% and 45%, respectively, while the positive impact of the EGD on improving public transport was noticed by 38% of respondents from Poland, 26% from the Czech Republic and 44% from other countries. In the case of the number of charging stations for electric cars, a very large impact of the EGD was noticed by almost 24% of respondents from Poland, 13% from the Czech Republic and less than 2% from other countries, on the other hand, a complete lack of impact was indicated by about 14% of respondents from Poland and the Czech Republic and less than 4% from other countries.

The complete lack of impact of the EGD on clean air, water or soil was indicated by 5% of people with higher education and 21% with secondary education (p- value =1.69E-02), while a positive impact on modernised residential buildings, schools and hospitals was indicated by 42% of people with higher education and 25% with secondary education (p- value =3.79E-02), on better public transport by 38% and 26%, respectively (p- value =1.54E-02), and on the emergence of more charging stations for electric cars by 42% of people with higher education and 23% with secondary education (p- value =7.57E-03).

The gender of the respondents had a significant impact on the opinion on the benefits of implementing the EGD only in the case of two aspects. A complete lack of impact on the improvement of public transport was indicated by 11% of women and 8% of men, and a very large impact was indicated by 17% of women and 9% of men (p- value = 5.67E-03), while in the case of the number of charging stations for electric cars, no impact was indicated by 14% of women and 10% of men, and a very large impact by 11% of women and 22% of men (p- value = 4.52E-02).

Detailed results are presented in tables: 5-13.

Table 5. Respondents' answers to the question: „What do you think we will gain by implementing EGD?” (cleaner energy / cleaner energy)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
Poland	16.82%	16.82%	21.79%	23.21%	21.36%
Czech Republic	5.79%	8.39%	16.26%	54.23%	15.33%
the remaining	0.00%	11.59%	8.22%	47.47%	32.72%
total	14.65%	22.86%	35.93%	11.43%	15.13%

Source: authors' work based on primary survey research, n=127.

Table 6. Respondents' answers to the question: „What do you think we will gain by implementing EGD?” (less pesticides and fertilizers)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
Poland	9.40%	17.90%	23.84%	18.13%	30.73%
Czech Republic	5.76%	14.04%	20.82%	46.78%	12.59%
the remaining	0.00%	12.84%	25.83%	36.61%	24.72%
total	14.65%	22.86%	35.93%	11.43%	15.13%

Source: authors' work based on primary survey research, n=127.

Table 7. Respondents' answers to the question: “What do you think we will gain by implementing EGD”? (modernized residential buildings , schools , hospitals)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
Poland	17.28%	13.91%	31.72%	14.57%	22.52%
Czech Republic	9.51%	28.54%	30.95%	21.49%	9.51%
the remaining	12.91%	19.08%	22.74%	18.20%	27.07%
total	12.98%	21.49%	29.86%	18.36%	17.31%

Source: authors' work based on primary survey research, n=127.

Table 8. Respondents' answers to the question: „What do you think we will gain by implementing EGD?” (better public transport)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
Poland	13.32%	25.02%	23.84%	20.51%	17.31%
Czech Republic	11.52%	24.30%	38.45%	16.26%	9.46%
the remaining	0.00%	27.37%	28.61%	26.19%	17.83%
total	10.26%	25.09%	31.35%	19.51%	13.79%

Source: authors' work based on primary survey research, n=127.

Table 9. Respondents' answers to the question: „What do you think we will gain by implementing the EGD?” (more charging stations for electric cars/ more Charging stations for electric cars)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
Poland	13.88%	17.18%	31.68%	13.55%	23.71%
Czech Republic	14.52%	25.27%	25.03%	22.24%	12.94%
the remaining	3.82%	33.90%	30.30%	30.23%	1.76%
total	12.49%	23.70%	28.40%	20.34%	15.08%

Source: authors' work based on primary survey research, n=127.

Table 10. Respondents' answers to the question: „What do you think we will gain by implementing EGD?“
(clean air, water, soil/ clean air , water , soil)

Education	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
higher	5.46%	18.66%	16.75%	31.98%	27.14%
medium	21.46%	9.72%	16.10%	32.74%	19.98%
total	11.29%	15.40%	16.51%	32.26%	24.53%

Source: authors' work based on primary survey research, n=127.

Table 11. Respondents' answers to the question: „What do you think we will gain by implementing the EGD?“
(modernized residential buildings , schools , hospitals)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
higher	10.28%	19.50%	28.65%	23.25%	18.32%
medium	17.68%	24.97%	31.96%	9.82%	15.56%
total	12.98%	21.49%	29.86%	18.36%	17.31%

Source: author's work based on primary survey research, n=127.

Table 12. Respondents' answers to the question: „What do you think we will gain by implementing EGD?“
(better public transport)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
higher	7.03%	25.07%	30.16%	23.60%	14.13%
medium	15.90%	25.11%	33.41%	12.39%	13.20%
total	10.26%	25.09%	31.35%	19.51%	13.79%

Source: authors' work based on primary survey research, n=127.

Table 13. Respondents' answers to the question: „What do you think we will gain by implementing the EGD?“
more charging stations for electric cars/ more Charging stations for electric cars)

	I strongly disagree	I rather disagree	I don't know, it's hard to say	I rather agree	I definitely agree
higher	11.50%	22.46%	23.70%	26.97%	15.37%
medium	14.21%	25.85%	36.58%	8.77%	14.58%
total	12.49%	23.70%	28.40%	20.34%	15.08%

Source: authors' work based on primary survey research, n=127.

While statistical significance was assessed using Pearson's χ^2 test, it is important to note that no formal hypotheses were pre-specified and no corrections for multiple comparisons were applied. Thus, p-values should be interpreted as exploratory indicators rather than confirmatory evidence. The size of the centre in which a given respondent lived and his or her remuneration level did not statistically significantly differentiate the structure of the answers provided to individual survey questions.

To contextualize these results, a SWOT framework was applied as an interpretive tool, integrating survey responses with literature insights (Table 14).

Table 14. SWOT analysis of EGD based on the results of the empirical study

SWOT Analysis EGD	
STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • stable electricity supply, • improving the natural environment, less waste, clean production, • broader actions in the field of climate protection and renewable energy sources, • sustainable agriculture, circular economy, creating new jobs, • a comprehensive approach to sustainable development, promoting green innovation and investment, commitment to a just transition, global leadership in climate action and mechanisms for accountability and improvement, • protection of biodiversity. 	<ul style="list-style-type: none"> • high costs of implementing initiatives, • lack of social acceptance and social involvement, • time-consuming political negotiations, • too many regulations and formalities, • administrative costs are too high. Limits and quotas may cause problems for small and very populated countries – they may have little chance and resources to meet EU requirements for EGD, • Weaknesses of the European Green Deal may include challenges in implementation due to differing interests and capabilities of Member States, potential economic disruptions in hard-hit industries, gaps in financing and investment, resistance from certain sectors and difficulties in reaching consensus on regulatory measures, • conflicts of interest.
CHANCES	THREATS
<ul style="list-style-type: none"> • a chance for future generations to live in a better environment, • research on new therapeutic interventions and biomarkers for early disease detection, • Collaboration between clinicians, researchers and industry partners can drive innovation and facilitate the development of new technologies and treatments, • cooperation with experts, finding solutions faster using artificial intelligence and other tools, • green jobs, • multidisciplinary cooperation, • better mental health of the inhabitants of modern cities, • creating markets for clean technologies and products, • education of the youngest generation, • highly specialized jobs, • sustainable finance. 	<ul style="list-style-type: none"> • limiting traditional agriculture, which will exclude many farmers, • Nuclear safety risks, such as those in Chernobyl, • resistance of people, changes in political decisions, • the risk is that none of us knows how badly damaged the planet is, or whether and how it can be helped, so it is uncertain whether the planned interventions will actually improve anything, • incompatibility with the laws of member states, misunderstandings, inefficient use of resources, • potential economic disruption to high-emission industries and regions, job losses in transitioning sectors, affordability concerns for consumers facing higher costs of green technologies and energy, • Implementing Green Deal policies could lead to short-term disruptions in some industries and sectors heavily dependent on fossil fuels, potentially leading to job losses, economic slowdown and social unrest, especially in regions heavily dependent on traditional energy sources.

Source: authors' work based on primary survey research, n=127.

This approach does not imply statistical inference but serves to organize public perceptions into thematic categories. Strengths included environmental improvements and job creation; weaknesses centered on cost and regulatory complexity; opportunities involved intergenerational health gains and innovation; threats included resistance to change and economic disruption in high-emission sectors.

It is essential to acknowledge the limitations of the sample. The use of snowball sampling, while effective in reaching academic networks, resulted in a relatively small and non-representative group. Therefore, generalizations about “society” should be treated with caution. Moreover, while the survey captures subjective perceptions of health risks, these should not be interpreted as causal claims. The study does not provide epidemiological evidence but rather reflects public sentiment and awareness. Overall, the results offer valuable insights into how different groups perceive environmental threats and the EGD's potential impact. These perceptions are crucial for understanding societal readiness and acceptance, which are key to the success of climate policy implementation.

Conclusions

The main objective of the study was to analyze the collected research material (data) on the importance of the European Green Deal in the opinion of society as an information user. The results of the empirical study confirmed that society is interested in implementing activities in the field of the European Green Deal and has specific knowledge on the planned achievements of the EU in the field of climate protection.

The specific objective was to assess public awareness of environmental pollution, its impact on human health and life, and the strengths and weaknesses of the EGD. The research problem was presented in the form of research questions. The respondents in the study emphasized that environmental pollution can negatively affect the health and life of citizens and cause diseases such as: mainly asthma, chronic lung diseases and cancer (36.2%). This finding aligns with the research aim of assessing public awareness of environmental pollution and its health impacts. The high level of awareness indicates that the public recognizes the severity of environmental issues and their direct correlation with health problems.

The respondents are able to determine the strengths and weaknesses of the EGD and indicate the opportunities and threats of this concept. The strengths include primarily stable electricity supplies, improvement of the natural environment, less waste, clean production. The participants in the study of the opportunities of the EGD see the fact that future generations will live in a better environment, but also that research will be conducted on new therapeutic interventions and biomarkers for early disease detection. The weaknesses of the EGD include, above all, the high costs of implementing initiatives and the lack of social acceptance and social involvement of some initiatives implemented within the EGD. These weaknesses underscore the challenges in implementing the EGD, which is crucial for understanding the feasibility and potential obstacles in achieving its goals.

The study also concluded that no one knows how badly damaged the planet is or whether and how it can be helped, so it is uncertain whether the planned interventions will actually improve anything.

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Each author has an equal share in the work.

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EUROPEJSKI ZIELONY ŁAD (EZŁ) W OPINII SPOŁECZEŃSTWA – OCENA ŚWIADOMOŚCI ZANIECZYSZCZEŃ ŚRODOWISKOWYCH I ZAGROZEŃ DLA ZDROWIA I ŻYCIA

STRESZCZENIE: Celem głównym opracowania jest analiza zebranego materiału badawczego (danych) na temat znaczenia Europejskiego Zielonego Ładu w opinii społeczeństwa jako użytkownika informacji. Celem szczegółowym jest ocena świadomości społeczeństwa w zakresie zanieczyszczeń środowiskowych, ich wpływu na zdrowie i życie ludzi oraz mocnych i słabych stron EZŁ. Problem badawczy przedstawiono w postaci pytań badawczych, tj.: (1) Jaka jest opinia użytkowników informacji na temat obecnych zanieczyszczeń środowiskowych, które mogą powodować zagrożenie dla zdrowia i życia obywateli oraz wywołać choroby; (2) Jakie są szanse oraz zagrożenia, mocne i słabe strony koncepcji EZŁ; (3) Jakie są perspektywy realizacji działań związanych z wdrażaniem poszczególnych programów związanych z EZŁ, czyli co zyskamy jako społeczeństwo, planeta, świat? W opracowaniu posłużono się metodą triangulacji, przede wszystkim wykorzystano: krytyczną analizę literatury krajowej oraz zagranicznej, metodę analizy, analizę współzależności wchodzące w skład statystyki opisowej oraz testowanie hipotez statystycznych w ramach wnioskowania statystycznego. W analizie zebranego materiału statystycznego wykorzystano narzędzia należące do analizy jedno- i dwuwymiarowej. W obszarze analizy jednowymiarowej zastosowano klasyczne metody statystyki opisowej, szczególną uwagę zwracając na częstość występowania poszczególnych odpowiedzi respondentów na pytania ankiety. W analizie dwuwymiarowej przeprowadzono badanie wpływu zmiennych demograficznych, takich jak kraj pochodzenia, płeć, wykształcenie i miejsce zamieszkania, na opinie respondentów dotyczące EZŁ. Ocena statystycznej istotności tych zależności została wykonana przy użyciu testu niezależności χ^2 Pearsona, z podaniem otrzymanych wartości p-value. Za istotną statystycznie uznawano zależność przy p-value < 0,05. Prowadzono badania ankietowe pierwotne (metoda ankietowa), w wyniku analizy zaobserwowanych zjawisk dokonano syntezy wyników. Wykorzystano techniki graficznej prezentacji danych.

SŁOWA KLUCZOWE: European Green Deal, świadomość społeczna, zanieczyszczenie środowiska