EUROPEAN JOURNAL OF ACCOUNTING, FINANCE & BUSINESS
Volume **11** / 2023 ISSN 2344-102X
Issue 3 / **October** 2023 ISSN-L 2344-102X

THE ENVIRONMENT - BETWEEN PROTECTION AND DECISION

Gabriela-Liliana CIOBAN
Stefan cel Mare University of Suceava, 720229, Romania
gabriela.cioban@usm.ro

Abstract
The environment and its quality are complementary elements of life on Earth. This axiom leads us to evaluate the elements that construct the concept of environmental quality. It is an important theme both in terms of content and in terms of effects it has from a medical, socio-economic, cultural, and demographic point of view. We analyze the environment through synthetic indicators that highlight its positive and negative aspects. In this context, we consider the assessment of the environment in terms of human needs and anthropogenic impact on the environment. The Environmental Performance Index (EPI) allows us to obtain information that highlights the health of the environment, protects ecosystem vitality, and mitigates climate change. It records results for 180 countries and provides practical guidance for countries aspiring to move towards a sustainable future. We underline that EU policy is in line with the European Green Pact's goal of achieving a zero-pollution, competitive, and climate-neutral economy by 2050.

Keywords: *air quality; biodiversity; environmental health; environmental policies; pollution.*

JEL Classification: F64, K32, O13, O44, P48, Q51, R11

I. INTRODUCTION

Aware of the fact that environmental pollution leads implicitly to the degradation of our quality of life, we aim to identify results obtained on this issue. Therefore, this paper aims to analyze the indicators that highlight the state of environmental health and at the same time, we want to identify the interest of specialists/researchers in this topic. As a subsidiary, we propose the following objectives:

O_1. To identify how research has been carried out on reducing pollution, maintaining a clean environment, and the strategies developed and implemented by European institutions.

O_2. To obtain information on the interest - for the environment, for the protection of the vitality of the ecosystem, for the mitigation of climate change - shown by different specialists through the works published over time.

For example, we have the research carried out by the European Environment Agency which shows that reducing pollution to zero in Europe can prevent some cases of cancer and at the same time improve quality of life. In this regard, we point out that environmental policy is at the heart of EU policy-making, and the European Commission launched the European Green Pact in December 2019 as the main driver of its growth strategy. Historically, the foundations of EU environmental policy were laid in 1972 at the Paris European Council (when a Community environmental policy was called for); in 1987 the title "Environment" was introduced by the Single European Act - which aims to preserve the quality of the environment, protect human health and ensure the rational use of natural resources; in 1993 the Maastricht Treaty made the environment an official EU policy subject; in 1999 the Amsterdam Treaty established the obligation to integrate environmental protection into all EU sectoral policies to promote sustainable development; in 2009 the Lisbon Treaty made 'combating climate change' a specific objective. European environmental policy is underpinned by a series of action programs with the following main objectives presented in Figure 1 below.

The main objectives of the action program in the field of environmental policy:	➢ Prevention, limitation, and elimination of pollution; ➢ Maintaining the appropriate ecological balance and ensuring the protection of the biosphere; ➢ Rational use of natural resources; ➢ Improving working conditions; ➢ Taking into account environmental aspects in urbanization and land development; ➢ Cooperation with international organizations and other countries in the field of environmental protection.

Figure 1. The main objectives of the action program in the field of environmental policy
Source: own processing after Budnikowski (1997)

DOI: 10.4316/EJAFB.2023.11311

Volume **11** / 2023 ISSN 2344-102X
Issue 3 / **October** 2023 ISSN-L 2344-102X

Thus, in the period of 1973-1976, the First Program for Environmental Protection (OJEC, 1973) was carried out with the following tasks: identification of polluting substances, introduction of environmental, product and process quality standards, introduction of environmental control through standard emissions and quality criteria, improvement of environmental quality, taking action against the exploitation of natural resources and protection of the working environment (zielonasiec.pl, 2012). The strategic aim of this program was to establish and implement the following strategic goal presented in Figure 2 below.

The strategic goal of the First Millet Protection Program was to establish and implement:	➢ water quality standards for use:	- supply of water to people as drinking water, water for washing and recreation, and supply of water in agriculture, industry, fishing, and food industry;
	➢ air protection standards:	- mainly against pollution from car engines.

Figure 2. The strategic goal of the First Millet Protection Program
Source: own processing after Barcz & Prawo (2003)

This first program sets out the principles and objectives of environmental policy. Note that the Council (European Commission, 2022) exercised its coordinating powers under the Treaties, while requiring Member States to oversee the proper implementation of measures (Hey, 2005; Peisker, 2023): harmonizing activities and standards across the EU to create coherence between EU and Member States' policies. Many environmental measures were taken by Member States between 1973 and 1976: 148 draft regulations and 12 international agreements were notified to the Commission and all Member States (OJEC, 1977).

The second Environmental Protection Program ran from 1977-1981 and was designed to continue the objectives of the first program whose purpose is presented in Figure 3 below.

The purpose of the second Environmental Protection Program:	➢ reducing pollution; ➢ rational use of the environment and its resources; ➢ reducing environmental pollution; ➢ rational management of natural resources; ➢ protection of wildlife and the biodiversity.

Figure 3. The purpose of the second Environmental Protection Program
Source: own processing after OJEC (1977)

This program has developed various projects on environmental issues in the field such as:

- water (water quality and protection, waste prevention);
- air (air quality and protection).

The second Environmental Protection Program highlighted the following issues presented in Figure 4.

Aspects highlighted by the second Environmental Protection Program:	➢ the notion of preventive action; ➢ "polluter pays" principle; ➢ introduction of standards for polluting substances; ➢ increased support for scientific and technical research; ➢ policy harmonization in member states; ➢ the need for community involvement in international organizations.

Figure 4. Aspects highlighted by the second Environmental Protection Program
Source: own processing after OJEC (1977)

This program has been criticized for defining the importance of preventive measures too broadly, without introducing specific actions to this end, and therefore failing to address the shortcomings proposed in the first program (Lavrysen, 1999; Rehbinder & Stewart, 1985). It should be noted that extensive legislative work is taking place during this program, mainly concerning limiting pollution by introducing minimum standards. At the same time, several directives were adopted:

- in 1976: Directive on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community;
- in 1978: Water Directive on the protection of fish life;

DOI: 10.4316/EJAFB.2023.11311

Volume **11** / 2023 ISSN 2344-102X
Issue 3 / **October** 2023 ISSN-L 2344-102X

- 1980: Directive on the protection of groundwater against pollution caused by dangerous substances.

These directives provide for waste management, noise reduction, protection of natural resources (such as air and water), and nature conservation.

From 1982 to 1986 (OJEC, 1983), the third Environmental Action Program (EAP 3) was carried out, which promoted policies to support pollution control and reduction. This one focused on the implementation of an environmental policy that aimed to protect the Mediterranean Sea, reduce noise, and regulate transboundary emissions, hazardous substances, and transboundary transport of hazardous substances. Therefore, EAP 3 adopted an objective related to the sustainable use of natural resources (EU, 2012) initiated the harmonization of environmental regulations, introduced common rules for reducing environmental emissions to avoid distortion of industrial competitiveness, as well as control and prevention of pollution using best available techniques, promoting the integration of environmental considerations in all policy areas (Papadakis & Grant, 2004). In other words, competencies in the field of environmental protection have been delegated to the European Community by the the 3rd EAP adopted the Environmental Impact Assessment (EIA) Directive - Directive 85/337/EC (Pakulska & Rutkowska, 2000).

II. METHODOLOGY

This paper is based on information taken from the Official Journal of the European Communities, the Declaration of the Council of the European Communities and the Representatives of the Governments of the Member States, the World Bank, and the Potsdam Institute for Climate Impact Research. Statistical data are taken from the epi.yale.edu website which provides assessments of the indicators that make up the Environmental Performance Index. Bibliometric analysis was used for research purposes and to identify information to help assess trends in the proposed research area. To this end, we propose to select bibliographic data (articles) from the Web of Science Core Collection using various syntaxes (ambient environment, air quality, biodiversity, etc.) and filters (years of publication, etc.) which will result in documents necessary for our analysis/research. Using information extracted from articles found in the Web of Science Core Collection allows us to carry out the proposed research.

III. ENVIRONMENTAL SUSTAINABILITY

The 2022 Environmental Performance Index (EPI) - composite index has 40 performance indicators in 11 categories of issues and 3 policy objectives (focus on climate change; work contributing to climate change alongside the environment; mental health and ecosystem vitality) (Wolf et al., 2022). These indicators assess environmental health, ecosystem vitality, and climate change mitigation for 180 countries. The values/scores of these indicators range from 0 (worst performance) to 100 (best performance), and a perfect score of 100 indicates that the country has achieved its climate sustainability target. The results help government officials refine their policy agendas, facilitate communication with stakeholders, and maximize the return on environmental investments. Four new air quality indicators (exposure to sulfur dioxide, nitrogen oxides, carbon monoxide, and volatile organic substances) and a pilot indicator on sustainable pesticides used in agriculture have been introduced in 2022 in the Environmental Performance Index assessment. For 2020, 32 indicators from 180 countries have been assessed. The methodology used by EPI in 2020 reflects the latest advances in environmental science and has included for the first time indicators on CO_2 emissions from land cover change, indicators looking at air quality, biodiversity and habitat, fisheries, ecosystem services, and climate change. These indicators are analyzed to show how a country has progressed and/or the critical issues a country is facing and allow scores to be compared between countries - information that can help address environmental problems. Analysis of this index helps government officials refine their policy agenda, facilitate communication with stakeholders, and maximize return on environmental investment. (Table 1)

Table 1. Environmental Performance Index

Rank 2020	Rank 2022	Country	Score 2020	Score 2022	Region 2020	Region 2022
1	1	Denmark	82,5	77,9	1	1
2	6	Luxembourg	82,3	72,3	2	6
3	9	Switzerland	81,5	65,9	3	8
4	2	United Kingdom	81,3	77,7	4	2
5	12	France	80,0	62,5	5	11
6	8	Austria	79,6	66,5	6	7
7	3	Finland	78,9	76,5	7	3
8	5	Sweden	78,7	72,7	8	5
9	20	Norway	77,7	59,3	9	14
10	13	Germany	77,2	62,4	10	12

DOI: 10.4316/EJAFB.2023.11311

EUROPEAN JOURNAL OF ACCOUNTING, FINANCE & BUSINESS
Volume 11 / 2023 ISSN 2344-102X
Issue 3 / October 2023 ISSN-L 2344-102X

11	11	Netherlands	75,3	62,6	11	10
12	25	Japan	75,1	57,2	1	1
13	17	Australia	74,9	60,1	12	13
14	27	Spain	74,3	56,6	13	19
15	21	Belgium	73,3	58,2	14	15
32	30	Romania	63,1	56,0	7	9

Source: own processing after Wolf et al., (2022)

The scores underline that many large developed countries need to rapidly reduce their greenhouse gas emissions to avoid the devastating effects of climate change. According to the Environmental Performance Index (Dangelico et al., 2020), the scores show a strong correlation with a country's wealth, environmental health, and to a lesser extent ecosystem vitality. In the same context, countries that best address the environmental challenges facing each nation stand out.

We performed a quantitative analysis of the EPI 2022 results (environmental performance indicators) of the 11 categories of issues and 3 policy goals for the countries of the Eastern European region:

a. based on their environmental performance, we used data from 2022 and calculated how the scores have changed over the past decade, results that are presented in Figure 5 below.

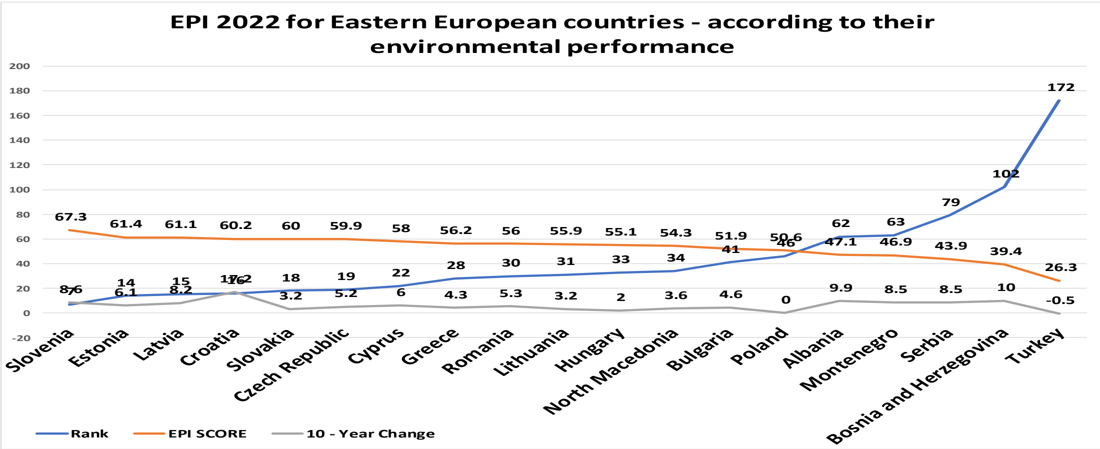

Figure 5. EPI 2022 for Eastern European countries – according to their environmental performance
Source: own processing after Wolf et al., (2022)

The results show that high-scoring countries are continually making long-term investments in environmental health, biodiversity and habitat conservation, natural resource conservation, and the decoupling of greenhouse gas emissions. The results for Eastern European countries put Slovenia in first place (with a score of 67.3), while Romania ranks 10th (with a score of 56 points) out of the 19 assessed countries. Among the 180 countries (EPI assessed), Denmark ranks first and performs well on almost all EPI issues, promoting a clean energy future and sustainable agriculture. The UK and Finland rank 2nd and 3rd and score highly on greenhouse gas reduction. The US ranks 20th out of 22 rich democracies in the Global West and 43rd globally given the reduced investment in environmental protection under the Trump administration. India ranks last with low scores on several critical issues like deteriorating air quality and rapidly rising greenhouse gas emissions. At the bottom of the rankings are countries facing a variety of situations like war, other sources of unrest, and a lack of financial resources to invest in the environment and infrastructure.

b. according to air quality and the direct impact of air pollution on human health in each Eastern European country, the following indicators are analyzed and presented in Figure 6 below: exposure to PN 2.5, household solid fuels, exposure to ozone, exposure to nitrogen oxides, exposure to sulfur dioxide, exposure to carbon monoxide and exposure to volatile organic compounds.

In the Glasgow Climate Pact of 2021, a total reduction of greenhouse gas emissions by the middle of the 21st century (2050) was agreed. At the moment, only a few countries (Denmark and the UK) have taken measures to achieve greenhouse gas neutrality by 2050. At the other end of the spectrum, China, India, and Russia are all experiencing rapid growth in greenhouse gas emissions. The EPI score for Eastern Europe puts Estonia in first place (with a score of 74.6 points), while Romania ranks 12th (with a score of 39.2 points), the last place being occupied by Northern Macedonia (with a score of 22.6 points).

DOI: 10.4316/EJAFB.2023.11311

Volume 11 / 2023
Issue 3 / October 2023
ISSN 2344-102X
ISSN-L 2344-102X

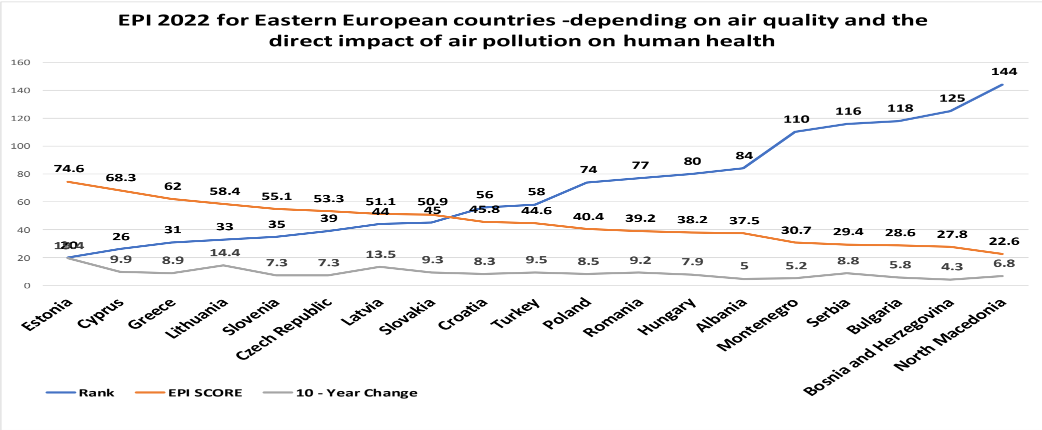

Figure 6. EPI 2022 for Eastern European countries – depending on air quality and the direct impact of air pollution on human health
Source: own processing after Wolf et al., (2022)

c. Ecosystem vitality - records data showing how well the ecosystems and services of the assessed countries are protected and enhanced. Six categories of issues are included in this index/policy objective: biodiversity and habitat, ecosystem services, fisheries, acid rain, agriculture, and water resources which are presented in Figure 7 below.

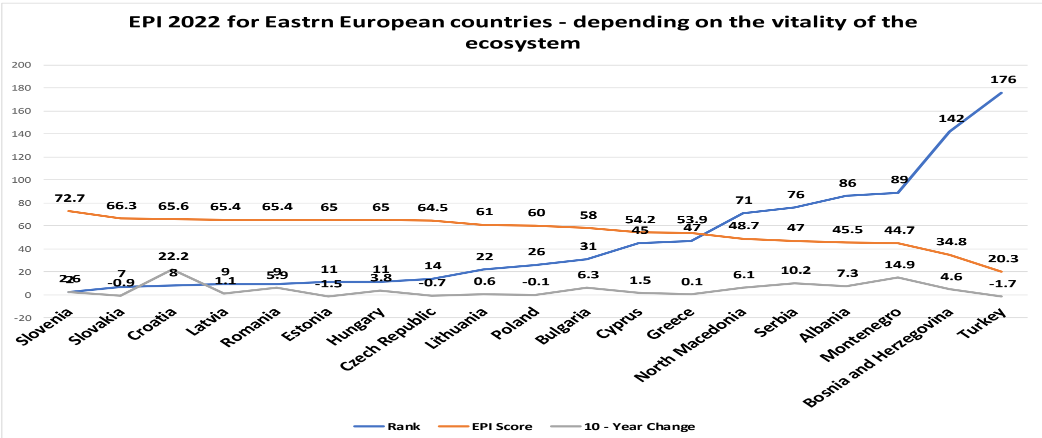

Figure 7. EPI 2022 for Eastern European countries – depending on the vitality of the ecosystem
Source: own processing after Wolf et al., (2022)

The vitality of the ecosystem is an important theme and the EPI score highlights the increased interest shown by many Eastern European countries. Figure 7 shows that Slovenia ranks first (with a score of 72.7 points), while Romania ranks the 5th (with a score of 65.4 points). At the bottom are Bosnia and Herzegovina (with a score of 34.8 points) and Turkey (with a score of 20.3 points). Projections for 2050 show that four countries (China, India, the United States, and Russia) will account for more than 50% of global residual greenhouse gas emissions in 2050 if no action is taken. A total of 24 countries will be responsible for almost 80% of emissions in 2050.

Knowledge of the Environmental Performance Index (EPI) is important for decisions to be taken at local, national, regional, and global levels (Adeel-Farooq et al., 2023). General objectives include the minimization of greenhouse gas emissions (from machinery, buildings, agriculture, services, etc.), circular and resource-efficient material life cycles (optimization of materials and resources, reduction of waste, and introduction of circularity principles in design and material choice), efficient use of water resources (combining efficiency measures to minimize water consumption and reuse of domestic wastewater designed to use alternative resources), adaptation and resilience to climate change, optimization of costs and value to improve long-term performance.

We conclude by saying that each iteration of the EPI incorporates the best available data, and the results are reported as indicators that place countries on a scale of 0 to 100 and are found on the epi.yale.edu website. In this context, we note that the EPI provides an opportunity for policymakers, researchers, interested citizens, business leaders, NGO officials, and the media to track sustainability trends and improve environmental decision-making.

DOI: 10.4316/EJAFB.2023.11311

Volume **11** / 2023 ISSN 2344-102X
Issue 3 / **October** 2023 ISSN-L 2344-102X

IV. Bibliometric Analysis

For the bibliometric analysis, we propose a search scheme based on the Web of Science database collection, whose methodology is presented in Figure 8 below.

Database: Web of Science → Core Collection	Theme span 2000-2023 →	Document type ↓	Web of Science Category → ↓	- Economy - Ecology - Chemistry - Multidisciplinary
		Articles, Proceeding papers, Book chapters, Editorial Materials	TOPIC →	- Environment - Air quality - Biodiversity

Figure 8. Research map on Web of Science Core Collection
Source: own processing

Bibliometric analysis helps us to sketch the results existing in the literature regarding the subject of interest addressed in this research. For this purpose, we have selected papers published between 1974 and 2023 (and some of the accepted papers for 2024). We selected papers that were of research interest and the analysis carried out focused on several topics, due to the importance and complexity of the concepts at the center of the research: environment, air quality, and biodiversity. I believe that these concepts are closely interdependent with each other, and the research is aimed at papers that address the topics analyzed in the fields of economics, ecology, etc. The results obtained for the three topics "environment", "air quality" and "biodiversity" present the interest shown in these topics since the second half of the 20th century by researchers, specialists, scientists, policy-makers, etc., the structure of which is presented in Figure 9 below (Appendix A).

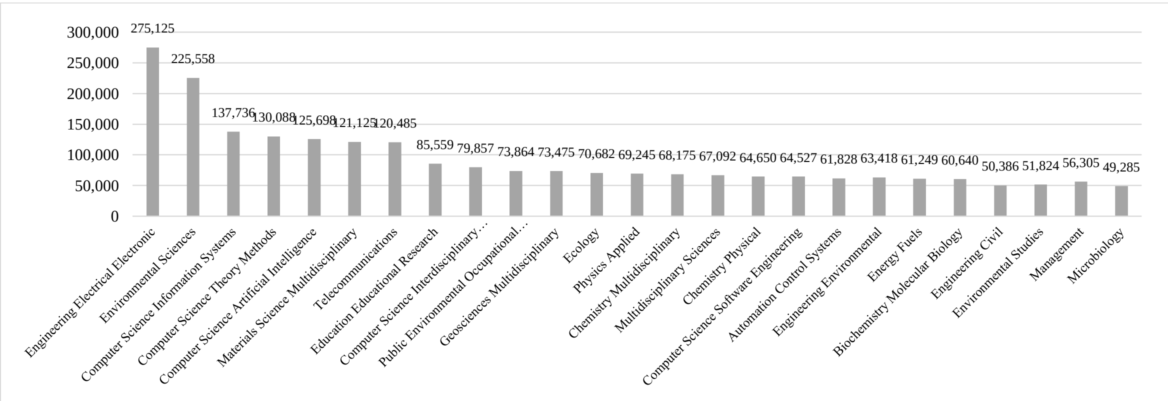

Figure 9. The study of the environment in articles registered in Web of Science from 1978 to 2023
Source: own processing after the publications selected from Web of Science Core Collection, from www.webofscience.com/wos/woscc/analyze-results/

From Figure 9, it can be seen that the Engineering Electrical Electronic research area publishes the most articles on this topic, more than 275,00. At the same time, we can see that the high number of research areas covering this topic is very varied.

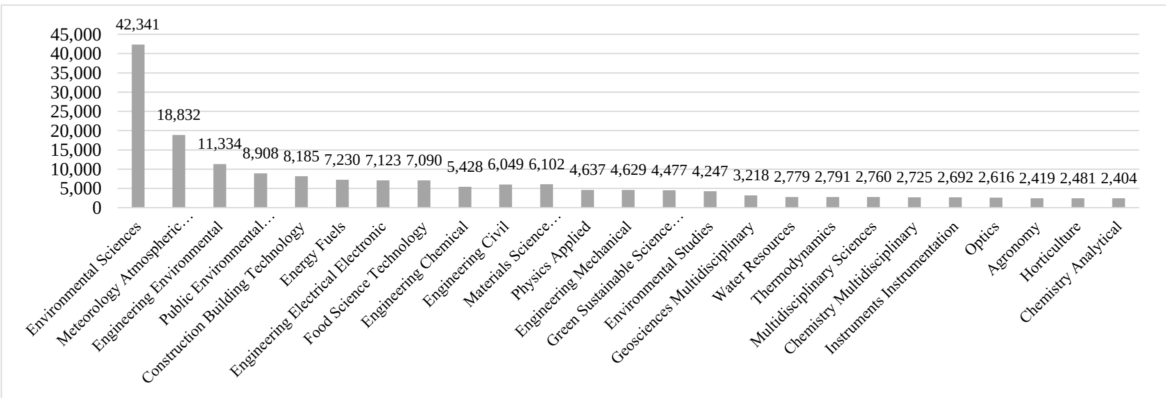

Figure 10. The study of the air quality in articles registered in Web of Science from 1975 - 2023
Source: own processing after the publications selected from Web of Science Core Collection

DOI: 10.4316/EJAFB.2023.11311

Volume 11 / 2023
Issue 3 / October 2023
ISSN 2344-102X
ISSN-L 2344-102X

In terms of research areas, we can see from the Figure 10 that most articles on air quality are published in Environmental Science, almost 43,000. Even though there are fewer articles published on this topic than on the environmental topic, the research areas are equally varied.

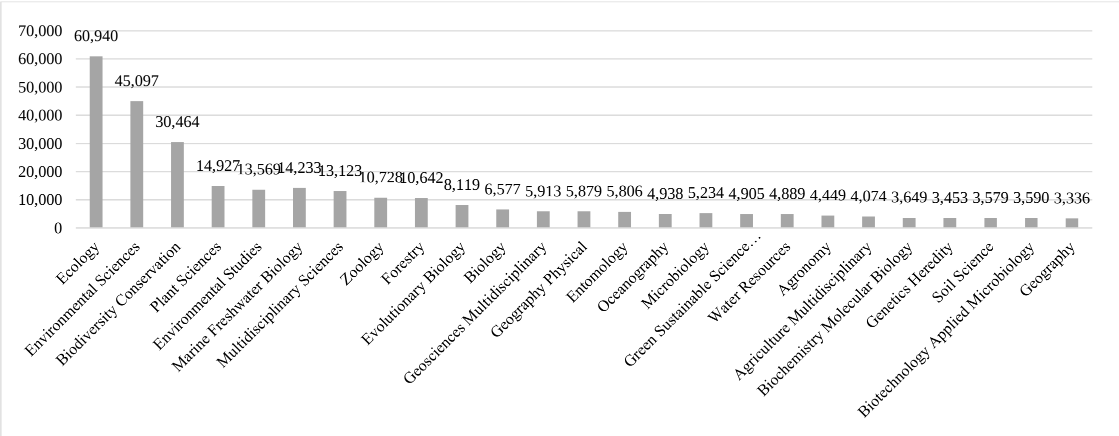

Figure 11. The study of the biodiversity in articles registered in Web of Science between 1985 - 2023
Source: own processing after the publications selected from Web of Science Core Collection

We note that interest in these three topics has grown since the 1980s, a fact that can be explained by the high impact of the environment, climate, and biodiversity on human beings, and on all forms of life on Earth. Since the 1990s, we have seen an increase in studies on air quality and biodiversity. Figures 9, 10 and 11 give an overview of the work published on these topics and suggest the importance of these elements for life.

V. CONCLUSIONS

Our paper highlights that interest in environmental policies emerged in the second half of the 20th century at the European level when the need to protect the environment and combat climate change became a priority. Support for these policies is based on a series of programs through which environmental projects and extensive legislative activities have been and are being carried out. Therefore, during its six decades of activity, the environmental protection programs have carried out projects on air quality protection, water quality protection, aquatic environment protection, fish life protection, groundwater protection, noise reduction, natural resources protection, waste management, pollution reduction, Mediterranean Sea protection, transboundary emissions regulation, etc.

Globally, we see that scientists have provided new evidence of environmental 'attacks'. They have shown that air pollution, improperly managed waste, chemical emissions, and greenhouse gas emissions damage human health and ecosystems. In the same context, Environmental Indicators have been constructed to assess trends, identify emerging pollution problems, evaluate the success of policy interventions, and obtain confirmation that investments in environmental protection offer the highest possible returns. The obtained data implies taking action to steer the world towards a more sustainable future. In this sense, Environmental Indicators demonstrate that financial resources, good governance, human development, and the quality of regulation matter for increasing a country's sustainability. The Glasgow decision of 2021, which set a target of a total reduction of greenhouse emissions by 2050, is also linked to this.

In the last part of the paper, we have analyzed the concerns of specialists for this important area of our society. The results confirm that the topic is of interest and obliges decision-makers, institutions in the field, economic agents, and every person on this planet to contribute to preserving and maintaining a healthy environment.

VI. APPENDIX A

Table 2. The study of the environment in articles registered in Web of Science between 1978 – 2023

Field: Web of Science Categories	Record Count	% of 2,739,582
Engineering Electrical Electronic	275,125	10.043%
Environmental Sciences	225,558	8.233%
Computer Science Information Systems	137,736	5.028%
Computer Science Theory Methods	130,088	4.748%

DOI: 10.4316/EJAFB.2023.11311

Volume **11** / 2023 ISSN 2344-102X
Issue 3 / **October** 2023 ISSN-L 2344-102X

Computer Science Artificial Intelligence	125,698	4.588%
Materials Science Multidisciplinary	121,125	4.421%
Telecommunications	120,485	4.398%
Education Educational Research	85,559	3.123%
Computer Science Interdisciplinary Applications	79,857	2.915%
Public Environmental Occupational Health	73,864	2.696%
Geosciences Multidisciplinary	73,475	2.682%
Ecology	70,682	2.580%
Physics Applied	69,245	2.528%
Chemistry Multidisciplinary	68,175	2.489%
Multidisciplinary Sciences	67,092	2.449%
Chemistry Physical	64,650	2.360%
Computer Science Software Engineering	64,527	2.355%
Automation Control Systems	61,828	2.257%
Engineering Environmental	63,418	2.315%
Energy Fuels	61,249	2.236%
Biochemistry Molecular Biology	60,640	2.213%
Engineering Civil	50,386	1.839%
Environmental Studies	51,824	1.892%
Management	56,305	2.055%
Microbiology	49,285	1.799%

Source: Publications selected from Web of Science Core Collection

Table 3. The study of the air quality in articles registered in Web of Science between 1975 – 2023

Field: Web of Science Categories	**Record Count**	**% of 138,667**
Environmental Sciences	42,341	30.534%
Meteorology Atmospheric Sciences	18,832	13.581%
Engineering Environmental	11,334	8.174%
Public Environmental Occupational Health	8,908	6.424%
Construction Building Technology	8,185	5.903%
Energy Fuels	7,230	5.214%
Engineering Electrical Electronic	7,123	5.137%
Food Science Technology	7,090	5.113%
Engineering Chemical	5,428	3.914%
Engineering Civil	6,049	4.362%
Materials Science Multidisciplinary	6,102	4.400%
Physics Applied	4,637	3.344%
Engineering Mechanical	4,629	3.338%
Green Sustainable Science Technology	4,477	3.229%
Environmental Studies	4,247	3.063%
Geosciences Multidisciplinary	3,218	2.321%
Water Resources	2,779	2.004%
Thermodynamics	2,791	2.013%
Multidisciplinary Sciences	2,760	1.990%
Chemistry Multidisciplinary	2,725	1.965%
Instruments Instrumentation	2,692	1.941%
Optics	2,616	1.887%
Agronomy	2,419	1.744%
Horticulture	2,481	1.789%
Chemistry Analytical	2,404	1.734%

Source: Publications selected from Web of Science Core Collection

Table 4. The study of the biodiversity in articles registered in Web of Science between 1985 – 2023

Field: Web of Science Categories	**Record Count**	**% of 202,563**
Ecology	60,940	30.084%
Environmental Sciences	45,097	22.263%
Biodiversity Conservation	30,464	15.039%
Plant Sciences	14,927	7.369%
Environmental Studies	13,569	6.699%
Marine Freshwater Biology	14,233	7.026%
Multidisciplinary Sciences	13,123	6.478%

DOI: 10.4316/EJAFB.2023.11311

Volume **11** / 2023 ISSN 2344-102X
Issue 3 / **October** 2023 ISSN-L 2344-102X

Zoology	10,728	5.296%
Forestry	10,642	5.254%
Evolutionary Biology	8,119	4.008%
Biology	6,577	3.247%
Geosciences Multidisciplinary	5,913	2.919%
Geography Physical	5,879	2.902%
Entomology	5,806	2.866%
Oceanography	4,938	2.438%
Microbiology	5,234	2.584%
Green Sustainable Science Technology	4,905	2.421%
Water Resources	4,889	2.414%
Agronomy	4,449	2.196%
Agriculture Multidisciplinary	4,074	2.011%
Biochemistry Molecular Biology	3,649	1.801%
Genetics Heredity	3,453	1.705%
Soil Science	3,579	1.767%
Biotechnology Applied Microbiology	3,590	1.772%
Geography	3,336	1.647%

Source: Publications selected from Web of Science Core Collection

REFERENCES

1. Adeel-Farooq, R.M., Raji, J.O., & Qamri, G.M. (2023). Does financial development influence the overall natural environment? An environmental performance index (EPI) based insight from the ASEAN countries. *Environment Development and Sustainability*, 25, 5123–5139. https://doi.org/10.1007/s10668-022-02258-x.
2. Association's factual report for the year (2012). Retrieved from August 31, 2023 from: www.zielonasiec.pl/wp-content/uploads/PZS-sprawozdanie-merytoryczne-2012.pdf.
3. Barcz J., & Prawo, A. (2003). European Union. Substantive Law and Policies, Publishers of Law and Economic Practice, Warsaw.
4. Budnikowski, A. (1997). *Adaptation of environmental policy in Poland to the requirements of the European Union*. SGH, Warsaw.
5. Dangelico, RM., Fraccascia, L., & Nastasi, A. (2020). National culture's influence on environmental performance of countries: A study of direct and indirect effects. *Sustainable Development,* 28, 1773–1786. https://doi.org/10.1002/sd.2123.
6. EU. (2012). Official Journal of the European Union, C 191, 29 June 2012. Retrieved September 1, 2023 from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AC%3A2012%3A191%3ATOC.
7. European Commission. Environment action programme to 2030. (2022). Retrieved from August 31, 2023 from: www.ec.europa.eu/environment/action-programme/pdf/7EAP_Issue_paper_2_evolution_6_to_7_EAP_final.pdf.
8. Hey, E. (2005). EU Environmental Policies: A Short History of the Policy Strategies. EU Environmental Policy Handbook. Retrieved August 28, 2023 from: https://aei.pitt.edu/98675/.
9. Lavrysen, L. (1999). Good intentions and less good results: The five environmental action programmes and their transposition into secondary legislation. *Law & European Affaires*, (3–4), 298–326.
10. Official Journal of the European Communities. (1973). Declaration by the Council of the European Communities and the Representatives of the Governments of the Member States, meeting within the Council on 22 November 1973, on the programme of action of the European Communities in the field of the environment, O.J. 1973, C112. Retrieved from August 31, 2023 from: https://op.europa.eu/en/publication-detail/-/publication/02180f30-458f-46f2-b615-970afb11c8d2/language-en
11. Official Journal of the European Communities. (1977). Resolution of the Council of the European Communities and of the Representatives of the Governments of the Member States meeting within the Council of 17 May 1977 on the continuation and implementation of a European Community policy and action programme on the environment. Retrieved from August 31, 2023 from: https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=OJ:C:1977:057:TOC.
12. Official Journal of the European Communities. (1983). Resolution of the Council and of the Representatives of the Governments of the Member States of 16 September 1983. Retrieved from August 31, 2023 from: www.op.europa.eu/en/publication-detail/-/publication/6785c5c3-0960-40b5-b57a-750448ee70a5.
13. Pakulska J., & Rutkowska, M. (2000). Objectives and principles of ecological policy in Poland and the European Union. In Burchard- Dziubińska, M. (ed.): *Integration of Poland with the European Union in the field of environmental protection - problems, benefits, threats*, Library Publishing House, Łódź.
14. Papadakis, E., & Grant, R. (2004). Challenges for Global Environmental Diplomacy in Australia and the European Union. *Australian Journal of International Affairs,* 58. https://doi.org/10.1080/10357710420002200123.
15. Peisker, J. (2023). The drivers of environmental concern in European regions. *Global Environmental Change*, 79. https://doi.org/10.1016/j.gloenvcha.2023.102636.
16. Rehbinder, E., & Stewart, R. (1985). E*nvironmental Protection Policy, Integration Through Law. Europe and the American Experience*. Volume 2, Walter De Gruyter, Berlin - New York.
17. Wolf, M. J, Emerson, J. W., Esty, D. C., de Sherbinin, A., Wendling, Z. A., et al. (2022). *2022 Environmental Performance Index*. New Haven, CT: Yale Center for Environmental Law & Policy. Retrieved from September 1, 2023 from: www.epi.yale.edu/downloads/epi2022report06062022.pdf
18. Web of Science Collection. Retrieved from September 1, 2023 from: www.webofscience.com/wos/woscc/analyze-results/ .

DOI: 10.4316/EJAFB.2023.11311