THE LINK BETWEEN ENVIRONMENTAL ACCOUNTING - ENVIRONMENTAL POLLUTION AND COVID-19

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Abstract*: In the current economic context, accounting must support sustainable development, providing important information about the impact that economic entities have on the environment and society. Achieving the goal of reducing emissions by at least 55% by 2030 in Romania is essential to minimize the direct social impact on citizens. Air pollution is one of the most serious environmental problems we face at the beginning of the third millennium. Environmental factors such as heat waves exacerbated by air pollution and climate change account for about 13% of all deaths in Europe. As a result, air pollution is the biggest health risk in Europe, causing more than 630,000 premature deaths each year. Long-term exposure to pollutants can cause diabetes, lung disease and cancer, and early evidence suggests that air pollution may be associated with increased mortality in patients with Covid-19. "Covid-19 is another wake-up call that requires a clear understanding of the relationship between our ecosystem, the economy and the health of all mankind".Reducing pollution to zero will help the EU to further separate prosperity from harmful levels of pollution, while increasing the EU's resilience and strategic autonomy. It will also be able to support a sustainable recovery after Covid-19, for example in the following ways: promoting adequate and timely information on the economic and health benefits of anti-pollution measures. Pollution disproportionately affects the most vulnerable people, so we try to further develop commercial practices that reduce pollution, create jobs and reduce social inequalities. In this regard, we set out to highlight in the content of this scientific approach the most important compatible practices, policies and actions to reduce pollution to zero. A coherent model for reporting information on environmental protection behavior and the possibility of using accounting information in making decisions that promote environmental protection. Another aspect that we set out to develop is the need for investments, new products and research and development activities, without which we cannot perform.*

Keywords: environmental accounting, pollution, ecological reporting, Covid-19, investments.

JEL Codes: M41, M21, B55, Q53

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Introduction

Environmental issues are becoming increasingly important for more and more entities and, in certain circumstances, can have a significant impact on their financial statements. Given the quality of products and the degree of pollution due to overused natural resources and production technologies, issues of growing interest not only for users of financial statements, but also for consumers of products offered by entities, which have serious health consequences, immediate measures to reduce pollution are needed. The recognition, assessment and presentation of these aspects is the responsibility of those who manage and control the activities carried out by each entity. These environmental aspects are complex and therefore require some additional considerations in the annual financial statements. Environmental financial information is requested by the authorities or voluntarily submitted by the entity. The presentation of environmental information in financial statements is required either by national public authorities or by various standardization bodies,and accounting firms and other non-governmental organizations also play a key role in supporting and promoting sustainable development through environmental reporting analyzes and proposes useful and relevant sustainability reporting criteria (Stănescu et.al., 2018).

For example, the IAS / IFRS General Framework recommends that an environmental report or a management report be prepared that captures key performance characteristics and uncertainties facing the entity. In fact, entities that have adopted IAS / IFRS are required to provide more detailed and extensive environmental information in the notes to their annual financial statements.

At the global level, environmental information reports are as follows:
in the US, all entities with more than 10 employees using or emitting certain toxic substances established by the US Environmental Protection Agency are required to report these emissions (TRI - Toxic Release Inventory), and the SEC (Securities and Exchange Commission) requires publication of information on compliance and environmental liabilities in document 10 - K;
in Canada, the Canadian Institute of Chartered Accountants developed in 1993 Environmental Costs and Liabilities: Accounting and Financial Reporting Issues, and the CMA published the Management Accounting Guideline: Writing and Evaluating Sustainable Development and Environmental Reports;
in Germany, the Standardization Institute has produced a guide to environmental reports for external users;
in the United Kingdom, the Institute of Chartered Accountants of England and the Institute of Chartered Accountants of England and Wales published Environmental Issues in Financial Reporting in 1996, and since 2005 the law on entities has provided for the publication of environmental, social and community information. Also, in 2006, the Department of Environment, Food and Rural Affairs (DEFRA) published Environmental Reporting Guidelines - Key Performance Indicators.
Directive 2014/95 / EU of the European Parliament and of the Council of 22 October 2014 amending Directive 34/2013 / EU as regards the submission of non-financial and diversity information by certain companies and groups applies in the EU large, which in Romania was transposed According to par. 8 of the Order of the Minister of Public Finance 1802/2014 for the approval of the Accounting Regulations on individual annual financial statements and consolidated annual financial statements, public interest entities are defined as "national companies / companies, companies with full or majority state capital and autonomous utilities" . However, in Romanian legislation, the European Directive was adopted by Order of the Minister of Public Finance 1938/2016 and 2844/2016, which bring additions *OMFP 1802/2014, for the approval of accounting regulations in accordance with International Financial Reporting Standards (IFRS), and which apply to companies of whose securities are listed on the Bucharest Stock Exchange.*

Figure no.1 Environmental information reports

Source: own editing by Alciatore et. al., 2004, pp. 295-304.

In Romania, however, the law does not require entities to provide environmental information in financial statements. Disclosure of such information is usually only visible to multinational corporations, and in terms of voluntary environmental submission by entities, it takes the form of environmental reports or sustainable development reports.

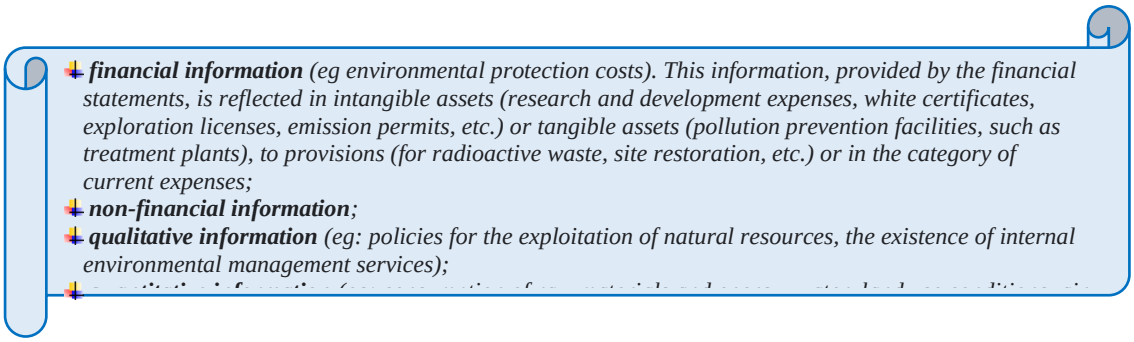

Figure no. 2 The content of the environmental reports
Source: own editing by Alciatore et. al., 2004, pp. 305-307.

These situations require full reporting by the economic entity, which must also capture economic, social and environmental aspects. However, the disclosure of environmental information has sparked much debate at the domestic level, and especially at the international level, about the perception, classification and quantification of environmental behaviors that generate costs, risks and liabilities, but no agreement has yet been reached. common. A characteristic of an economic agent is that it presents the general performance, taking into account not only the financial, economic and social aspects, but also the environmental aspects. This is an approach that involves duplication and even convergence between sustainable reporting and funding in the near future.

Research methodology

This study was conducted using existing information in the field, which refers to the link between accounting-environment-environmental pollution and the Covid-19 pandemic situation, but also the impact that economic entities have on the environment and society, culminating in the need to use economic and financial instruments in order to apply a sustainable ecological behavior. In carrying out this paper we relied on the study of literature, practical experience, analysis and statistics of specialists in the field explored, we identified the policy tools used for environmental protection and we presented the risks and benefits of measures to combat air pollution.

The methodology used combined qualitative research with quantitative research, through various and complementary methods: historiography, comparison, documentary analysis and observation.

In substantiating the decisions on the relevance of the instruments used in the national sustainable development process, we conducted an analysis on the impact of pollution levels on the number of Covid-19 effects per thousand inhabitants for October-November 2021 in Romanian cities. Also, according to the statistics underlying the analysis, environmental efficiency to reduce environmental pollution could be established as the main economic tool for environmental protection, taking as a benchmark the amount of investments obtained from European Development and Recovery Funds.

Promoting adequate and timely information on the economic and health benefits of anti-pollution measures

Sustainable economic intelligence, as a superior manifestation of a knowledge and innovation economy requires the management, quantification, monitoring and reporting of non-financial information by economic entities (environmental, social and personnel issues). These elements, combined in the non-financial situations of economic entities, are decisive in making the transition to a sustainable global economy, combining profitability with social responsibility and environmental protection (Stănescuet.al., 2020).

Adoption of the Law on the Protection of Atmospheric Air(Law no.104, 2011), Commission Communication of 14 October 2020 entitled "Strategy for Promoting Sustainability in the Environment of Toxic Substances" (COM/2020/0667) and European Parliament resolution of 10 July 2020 on the Strategy for to promote sustainability in the field of chemicals (P9_TA/2020/0201),the forward-looking opinion of the Committee of the Regions of 2 July 2020 entitled "The future of EU clean air policy in the context of the goal of zero pollution" (JO C 324, 2020)requires the development and implementation of regulations that would benefit European practices and experience, in particular as regards atmospheric air quality standards and deposition levels. The gradual implementation of a national monitoring program should start with the development of a necessary investment program and lead to the installation of measuring and sampling equipment, especially in urban areas.Air pollution, on the other hand, has significant human and economic costs, including short life expectancy, high medical costs, low labor productivity and degraded ecosystems, leading to biodiversity loss and climate change, the cost of air pollution for social work, European economic and health sector is between € 330 billion and € 940 billion a year, but the cost of all measures to improve air quality is € 70-80 billion a year(EU policy on air quality: implementation of selected EU legislation", 2021) and the cost of inaction, including the negative impact of air pollution on citizens' health, economy and society, far outweighs the cost of action, although this requires different policies, according to Commission estimates, the full implementation of existing EU clean air legislation could lead to net benefits of up to € 42 billion a year by 2030, especially due to lower mortality and morbidity(Amann et al., 2020).

Risks and Benefits of Air Pollution Control Measures

Climate change, environmental pollution (Directive 2010/75/UE, Article 3, para. 2), declining biodiversity and unsustainable exploitation of natural resources pose multiple risks to human, animal and ecosystem health. These include infectious diseases, lung diseases, chronic bronchitis, worsening of asthma episodes, lung and respiratory tract cancer, allergies, cardiovascular and non-communicable diseases, antimicrobial resistance and water deficiency (UNEP, 2021), causing more than 630.000 deaths each year. premature birth in Europe, and in Romania due to air pollution with certain particles, 23.000 deaths occur annually and it is extremely important to combat this problem. To build a healthy planet for all through the European Green Pact (COM, 2019, 640 final) the EU calls for better monitoring, notification, prevention and remediation of air, water, soil and consumer pollution.

The ambitious goal of zero pollution (COM 2020, 667), is a cross-cutting goal that contributes to the UN's 2030 Agenda for Sustainable Development (ODD 3, 6, 11, 12, 14, 15) and by synergizing with the goals of the green economy and the circular economy and restoring biodiversity, we will achieve our climate goal by 2050, which is an integral part of the European Green Pact (Climate Change Adaptation Strategy, 2030) as well as other initiatives, and the Commission will continue to include the ambitious goal of zero pollution in future strategies.

The main aim of this action plan is to include pollution control in all relevant EU policies, to maximize synergies effectively and proportionately, to accelerate implementation

and to assess possible gaps or trade-offs. To guide the EU towards the 2050 vision of a healthy planet for all, this action plan sets out key targets for 2030 to accelerate pollution reduction.

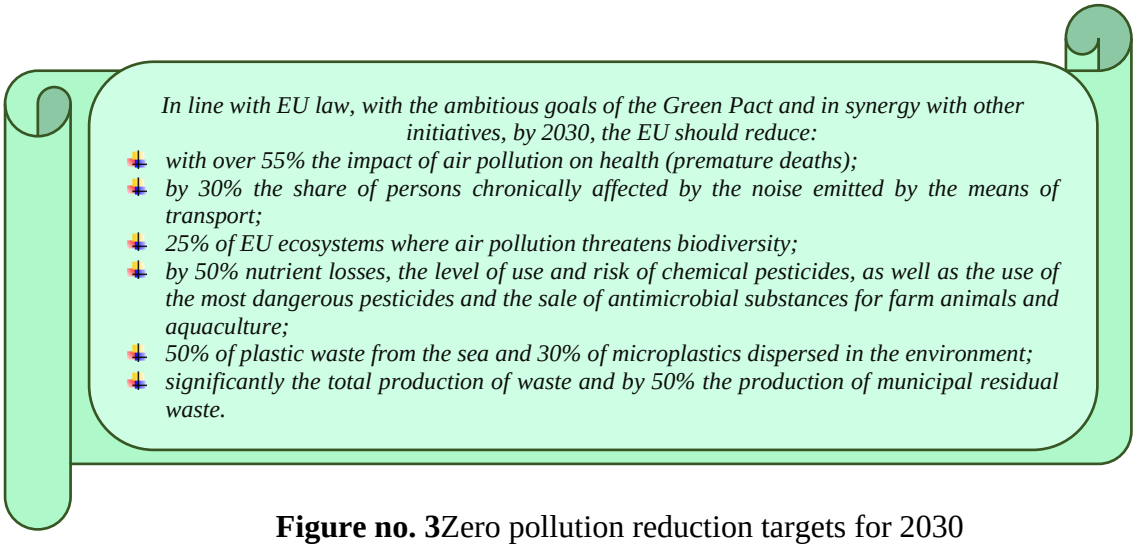

Figure no. 3 Zero pollution reduction targets for 2030
Source: own editing

The action plan also covers the period 2021-2024, to complement many relevant actions under other European Environment Pact initiatives, including strategies to promote chemical sustainability, defines the main actions.

Measures to limit human movements to counter the Covid-19 pandemic have temporarily cleaned the air and water and reduced noise in many places, slowing down all economic activity is the EU's own vision of the global direction to achieve zero pollution. Instead, the EU can transform production and consumption patterns and direct investment towards zero pollution and profits, while maintaining prosperity.

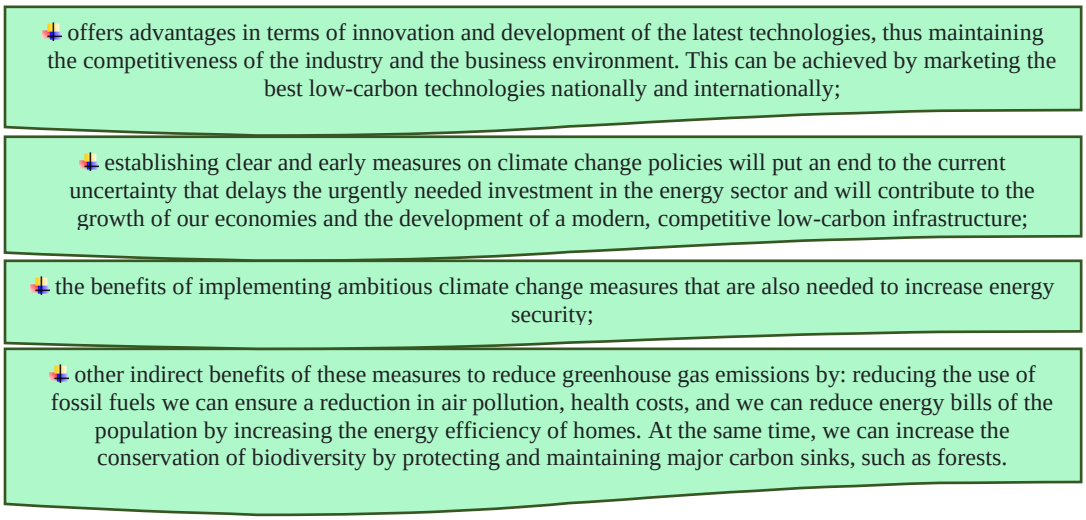

Figure no.4 Benefits of pollution control measures
Source: own editing

Consequently, these benefits of pollution control measures represent a great opportunity for all already modern and innovative economies to continue to grow and contribute to the creation of new green jobs. These ambitious actions to combat climate

change can give all entities a leading role in increasing the demand for low-carbon green goods and services, a global market for low-carbon green goods and services of more than 4 trillion. euro, and a continuous increase of over 4%. At the same time, there are declines in fossil fuel resources, making us one of the areas most dependent on imports of these fuels. Europe currently imports over 80% of its oil needs and over 60% of its natural gas needs. The forecasts of the International Energy Agency show that by 2035 they will increase to 95% for oil and 80% for natural gas. Moreover, global demand for energy is growing, leaving Europe exposed to volatile and rising energy prices due to the instability of parts of the globe. Through climate change policies we can develop clean energy sources domestically and use this energy more efficiently, thus increasing energy security and new jobs.

All this will make investments in green and sustainable design, business models of the circular economy, cleaner transport and mobility, low-emission technologies, nature-based solutions, research-development-innovation in each field, based on information, analysis, real assessments and sustainable digitization to provide solid opportunities to strengthen the EU's leadership in green growth, while reducing inequalities, creating jobs, increasing the productivity of entities, their performance and collective resilience. All these are research and development innovations in areas based on green and sustainable design, business models of the circular economy, cleaner transport and mobility, low-emission technologies, nature-based solutions, information, analysis and practical evaluation. Sustainable digitalisation strengthens the EU's leadership in green growth, while providing a solid opportunity to reduce inequality, create jobs and increase the entity's productivity, performance and collective resilience.

Analysis of the level of air pollution and Covid-19 infections versus the impact of pollution on the increasing number of infections

In today's economic climate, accounting must support sustainable development, providing important information about the impact that business has on the environment and society as a whole. Environmental accounting is an integrated set of data that connects economic and social issues that may affect long-term political, economic, social and environmental decisions. Environmental accounting arose from the need to address the integration of the environment in economic analysis both at national level and at the level of individual and corporate entities, by including environmental elements in accounting.

Legislation is being developed around the world to regulate this area in order to inform the general public about environmental activities. In particular, in compliance with the ISO 26000 International Social Responsibility Standard, entities must be vigilant, which, in the context of social responsibility, involves a proactive and comprehensive process of identifying the negative social, environmental and economic impact of the entity's decisions and activities. avoid and minimize this impact (ISO 26000).

Due to the fact that today at the beginning of the third millennium, the world economy is in one of the worst economic crises since the Great Depression (1929-1933), and the forecasts of economic experts have placed it beyond the magnitude of what was recorded in during the Great Depression.

Given its dependence on global economic mechanisms and its integration into European and global value chains, the Romanian economy cannot be immune to this impact. In addition, its structure makes the Romanian economy more vulnerable to Covid-19. The major areas that contribute to GDP formation, primary resource processing and car manufacturing are the hardest hit by the recession, and the services sector is exposed to pandemic restrictions.

Romania's economy registered 12.3% (according to Eurostat), one of the largest economic contractions in Europe, being surpassed only in countries based on tourism (Spain, Croatia, Greece, Hungary, Portugal, France, Italy), during this period Covid-19 pandemic

crisis, with a widespread global impact on economies, markets, entities and populations around the world, causing significant volatility and considerable uncertainty. In these unforeseen circumstances, experts in this field need to focus on the potential impact of this vola tility and uncertainty when analyzing accounting estimates.

The link between environmental accounting, pollution and the Covid 19 pandemic is air pollution. This is one of the worst environmental problems that can have a huge impact on a pandemic. Previous epidemiological studies by experts in this field have shown that fine particles emitted into the atmosphere cause air pollution, can prolong the life of infectious viruses and can help infect more people, shorten their lifespan and last but not least. destruction of the entire ecosystem "particles are likely to play an extreme role in promoting virus transmission," said professor Lelieveld (Prof. Dr. Johannes Lelieveld).

They performed an analysis combining information with satellite data showing the overall impact of fine particles in suspension - PM 2.5 (measured in micrograms per cubic meter /day or year), atmospheric conditions and soil pollution monitoring networks.

This created a model for calculating the fatal fraction of coronavirus that can be attributed to long-term exposure to PM 2.5.

The particles appear to increase the activity of a cell surface receptor called angiotensin converting enzyme (ACE-2), which is known to be involved in how Covid-19 infects cells. In other words, it is a "double blow". Air pollution damages the lungs and increases the activity of ACE-2. This increases the absorption of the virus by the lungs, possibly the blood vessels and heart.

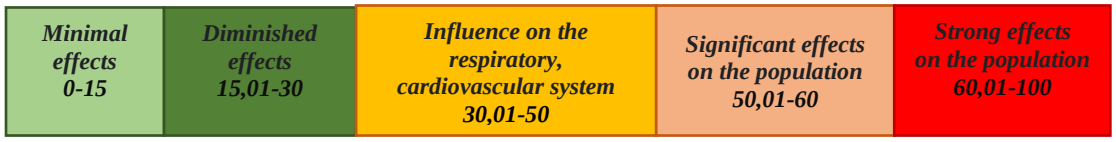

Figure no. 5 Interpretation grid for air quality values (NO2 and PM10; PM2.5 and CO)
Source: own editing, adaptation by: www.calitateaer.ro

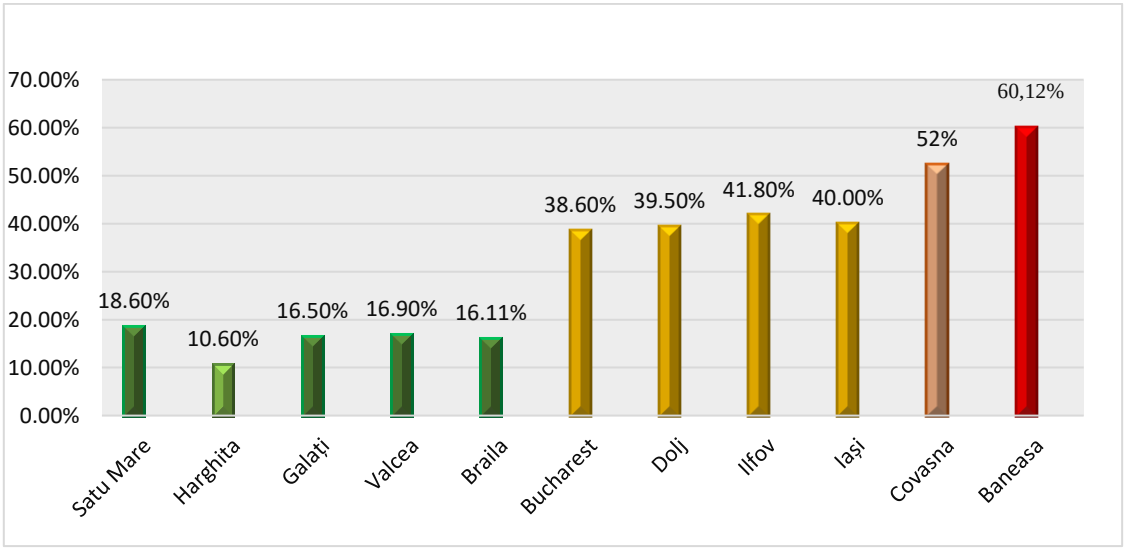

Chart no.1 The level of pollution indices of Romanian cities during October-November 2021
Source: authors' processing, adapted from a study conducted by Airly in Romania.

The air quality index can be used to assess the degree of air pollution. One of the most widely used internationally is the Air Quality Index (AQI). There are different calculation methods for this in different states. This indicator allows you to assess the level of air pollution, the health of the population and its impact on natural ecosystems. Air quality, from very low to very high, depends on the degree of pollution. The methodology for determining the Air Quality Index (CAQI Air Quality Index) was developed by the Regional Department of European Funds, through the Citeair II project(https://www.airqualitynow). According to it, the air quality index is given by the worst value of the pollutants included in the determination based on the concentrations of pollutants CO, NO_2, O_3, SO_2, $PM_{2.5}$ and PM_{10} recorded by the traffic and urban stations. They provide information that is used in the calculation of the air quality index for traffic and includes the main pollutants (NO_2 and PM_{10}), to which are added the auxiliary pollutants ($PM_{2.5}$, CO).

Given the information previously presented in the content of our research, we conclude that contamination aggravates Covid-19, causing serious respiratory diseases, non-communicable diseases that interact and aggravate the reciprocal effects, as shown by a Harvard analysis. Their analysis seems to confirm this hypothesis. So, for cities like the ones shown in Table 1, the news is not good at all. Romanians from various cities woke up for several days, especially in the early hours of the morning, smelling of smoke and burning. The pollution was caused by several fires that broke out in various cities and towns, but also by the uncontrolled burning of all waste. For example, Ilfov County has faced a fire of devastating proportions in an economic entity.

As can be seen in Chart 1, among the most polluted areas in Romania are: Dolj, Iasi, Covasna and Bucharest, which is one of the most polluted cities in Europe, and this raises an additional concern about the duration of the epidemic, according to warnings made by various researchers.

A team of Harvard researchers led by Xiao Wu and Rachel C. Nethery (Xiao Wu et.al., 2020), analyzed the correlation of the level of air pollution with the mortality rate caused by Covid-19. The team analyzed pollution data from 3.000 different areas of the United States, the equivalent of 98% of the country's population. The researchers then compared the mortality rate caused by Covid-19 in these areas with the level of contamination. The results show that a 1 microgram increase in $PM_{2.5}$ per cubic meter is associated with a 15% increase in the death rate caused by Covid-19. $PM_{2.5}$ is an extremely fine particulate matter with a maximum diameter of 2.5 microns.

The World Health Organization (WHO) recommended, before the pandemic, that no city exceed an annual average of 10 micrograms per cubic meter. In the EU, the maximum legal annual average is 25 micrograms. In December 2020, several pollution sensors in Bucharest showed 10 times higher values, all due to illegal waste incineration.

The increased risk is relative, not absolute. In other words, at a rate of 1% (taken as an example only), an additional gram of $PM_{2.5}$ would raise the risk to 1,15%. Going further and analyzing all the data processed by new authors of this demerfs regarding the “Level of pollution indices of Romanian cities during October-November 2021”, graph no. 1 and “Effects of Covid-19 per thousand inhabitants in Romania during October -November 2021 ”, graph no. 2 we can see: the higher the level of contamination, the higher the percentage of Covid-19 infection per thousand inhabitants in the analyzed cities, we find that it has reached a level that shakes us on all, which caused the disaster that Romania is facing today.

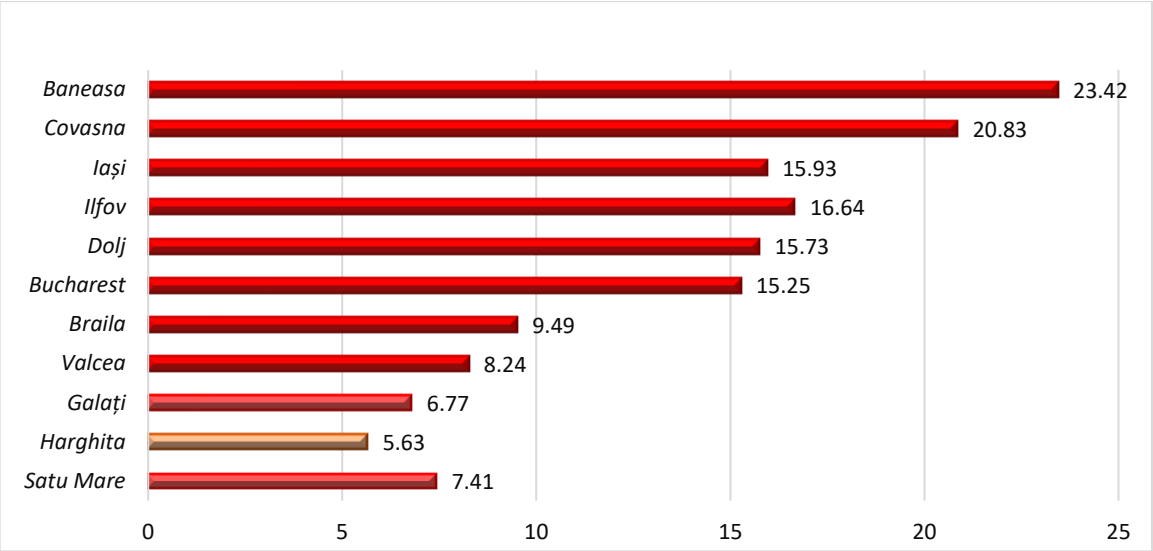

Chart no. 2 COVID-19 effects per thousand inhabitants in Romania during October-November 2021
Source: authors' processing, adaptation by: Strategic Communication Group

It is time to take urgent action and rethink how products and services are designed, produced and delivered, executed and / or used and disposed of the products, as appropriate.

This means that contamination must be avoided primarily at source. If complete prevention of early contamination is not yet possible, contamination must be minimized. Finally, when the contamination has taken place, it must be remedied and the related damage compensated.

In this situation, the role of accounting specialists must be of utmost importance, as they have a key role in research-development-innovation, strategies, techniques, methods and development of new indicators of analysis and evaluation on the close relationship of all economic entities with the environment. , on the resources used in the activities carried out by each of them, employee-employer relationships that include ensuring the health of employees at work by reducing pollution inside-outside the entity, to protect them from exposure to the highest cumulative risk generated in this moment in the fight against the Covid-19 pandemic.

EU environmental policy is based on the precautionary and awareness-raising principle, the principle of giving priority to repairing environmental damage, and damage where "the polluter pays".

Participation, Transparency, Responsibility, Reliability	***It protected health and the environment***	***Encouraging and supporting innovation***
Prevention	*Pollution prevention at all stages of an ecological / green and circular economy, from natural resource extraction to production, service provision and end-of-life consumption.*	*The promotion of environmentally friendly production processes that aim to minimize zero pollution, safe and sustainable products and services are part of the design phase, innovative tools and technologies, as well as behavior change.*
Minimize and control	*Minimize emissions and exposure of people by managing emissions through information measures and information.*	*Promoting the production of smart and modern products, the use of safe and sustainable products, services and business models, as well as diligent solutions for tracking and reducing pollution.*
Discharge and remedial	*Eliminate and remedy, as far as possible, existing water and soil pollution and apply measures to restore them to good condition.*	*Promoting recycling, waste management and decontamination to reduce pollution to zero.*

Table no.1 Order of actions to reduce pollution and prioritize approaches to combating it
Source: own editing, adaptation by: The road to a healthy planet for all EU Action Plan: "Towards zero air, water and soil pollution", {SWD (2021) 140 final} - {SWD (2021) 141 final}.

Air quality is essential for human life and health, as well as for the existence of ecosystems. Ensuring everyone's right to a quality environment is achieved by regulating activities that affect or may affect the quality of the environment, directly or indirectly, carried out by individuals or legal entities and by the national strategy in this area.

Environmental policy must be an integral part of all economic development strategies at international, national, regional and local levels. The sustainable development of society must take into account an approach that integrates political, economic, social and environmental objectives at all levels (Petrescu-Mag et.al., 2011).

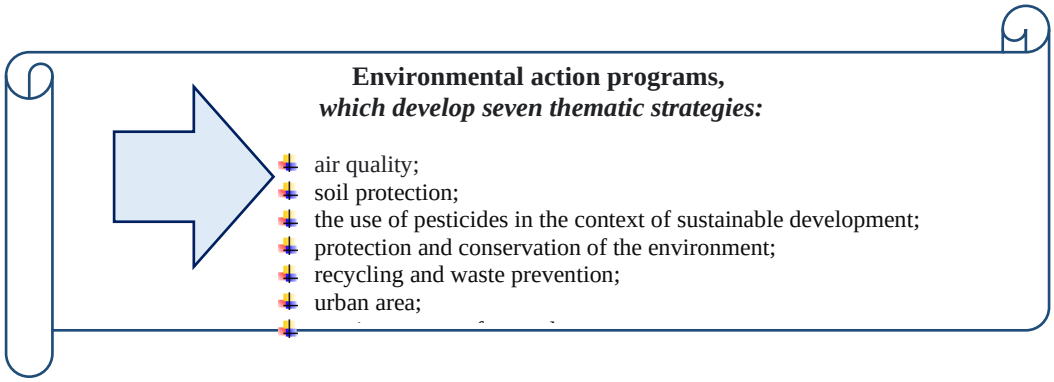

Figure no.6 Environmental action programs
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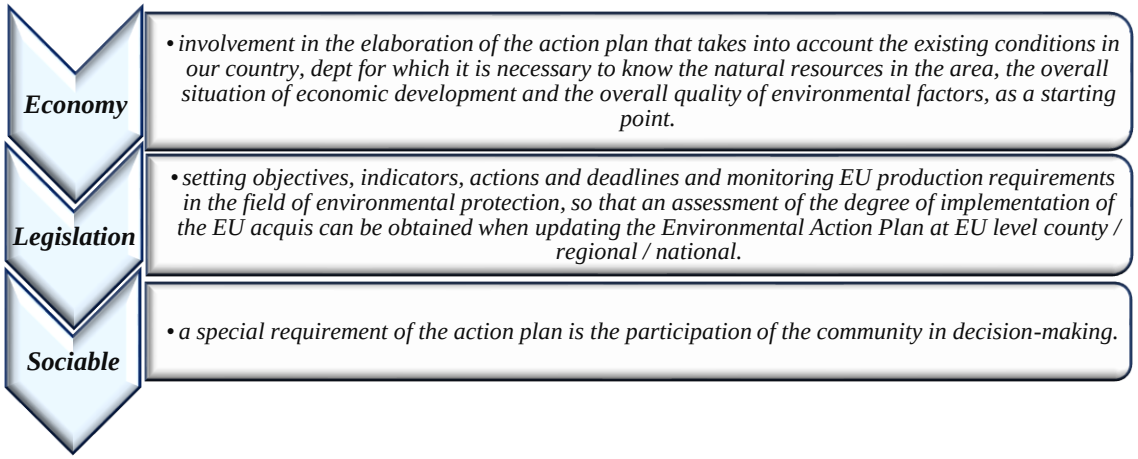

Figure no.7 The considerations that require the implementation of an environmental action plan
Source: own editing

The Environmental Action Plan aims to identify actions and policies that develop community awareness of the environment and promote a proactive attitude towards the environment. The elaboration and efficient application of the environmental policies in Romania imposed a correct basis of substantiation, taking into account several aspects:

- *development and implementation of environmental policies based on temporal and spatial characteristics;*
- *defining the role of technology and research-development-innovation policies;*
- *international coordination and competitiveness;*
- *national and international equity;*
- *price formation and monetary policy;*
- *establishing the instruments of interference in the implementation of environmental policies;*

Environmental policy instruments can be defined as the basic mechanisms at the disposal of democratic governments, international structures, through which the attitude and behavior of the population and economic agents can be influenced in the direction favorable to achieving the objectives and achieving the proposed goals. We can talk about the development of three types of instruments: legislative, technical and economic-financial, to which is added a set of "support tools" that respond to new trends and strategies for environmental protection. Since the 8th EU Environment Action Program, a combination of instruments has been promoted: legal requirements ('command' and 'control' measures), technology transfer, market-based instruments, liability provisions environment, research-development-innovation, voluntary agreements and schemes (Ambassadors of EU Member States, 2021).

- *Legislative instruments* provide a legal framework for environmental protection policies, represented by laws, directives, regulations and decisions adopted in this field.
- *The technical instruments* ensure compliance with environmental quality standards and the use of the best available technologies: standards and emission limits that are contained in special legislation and are intended to limit the level of environmental pollution and identify the main pollutants, the criteria applicable to environmental inspections, integrated pollution prevention and control using the best available techniques for activities with a significant impact on the environment.

- *Economic and financial instruments*, supported by various programs, such as the environmental fund, which is the economic and financial instrument intended to support and implement priority projects for environmental protection and which aims to improve environmental performance on: reducing the impact on the atmosphere, preventing water pollution and soil, waste management, education and public awareness on environmental protection, etc. However, the use and effectiveness of environmental tools in Romania is still limited.

Among the contributing factors are: poor implementation and monitoring, poor social acceptance and / or poor understanding of the economy and integration of environmental policy, lack of institutional capacity and tax policies and insufficient political will to determine what taxes to increase the level of investment (Stanescu (Mărgărit) et.al., 2011),leads to the development of an environmental protection strategy. The environmental protection strategy is defined as "the totality of actions and measures aimed at conserving natural resources and maintaining the quality of environmental factors at an acceptable level" (Minea, 2008). The environmental protection strategy includes a series of measures that must be taken to achieve the performance required by Romanian legislation in this field, which is in a continuous process of rapid alignment with the relevant legislation of the European Union.

- improving the environmental management system, by appropriately adopting one of the best performing international systems;
- improving the monitoring system, both in terms of the structure and methodology of the observations made by experts in the field, and in terms of equipping with the necessary equipment and apparatus and hiring qualified staff;
- correct assessment of the state of environmental pollution and development of a remedial program for everyone;
- developing emergency response plans;
- reducing polluting volatile emissions;
- improvement of technologies and equipment for gas purification and volatile hydrocarbon vapor recovery;
- efficient management of waste, in order to capitalize on it in order to obtain fractions of economic importance;
- developing a coherent model for reporting information on environmental protection behavior and using accounting information in making decisions that promote environmental protection.

Figure no. 8 Measures included in the enviromental protection strategy
Source: own editing

Therefore, these strategies are a kind of "support tool" that complements standard measures and serves as incentives for the adoption of environmental protection measures or underlines the trend towards approaches based on environmental development, economic and social development that require the development of an effective model. environmental behavior reporting and the ability to use accounting information in environmental decision making.

International accounting organizations offer several opportunities to report on environmental issues, most of which propose their presentation through explanatory notes to the financial statements. However, at national level there is no legal regulation that requires entities to present environmental information responsibly; the form and content of these reports are at the discretion of the organization. This information is intended to present the real impact of the business on the environment. Such a model financial statement should be regulated and have the same form and content for all entities that need to prepare the statement (Stănescu (Mărgărit) et.al.,2012).

The need to invest in new products and research and development activities to eliminate pollution in order to obtain economic and health benefits

Combating pollution requires investment in modern and innovative methods of monitoring air quality to know exactly how we stand and how we fight. Romania has revised its entire air quality monitoring network, but there are still many gaps in the number and types of sampling points for measuring air quality. Therefore, we believe that in order to improve the quality of life, production capacity and increase the competitiveness of economic operators in our country, the Government must demonstrate that it supports investments in developing and using the best technologies, regardless of field / sector of economy and operator activity. Air pollution in Romania and the signing of financial contracts by government agencies that can do this by modernizing the national air quality monitoring network should be the main topics of discussion on reducing pollution.

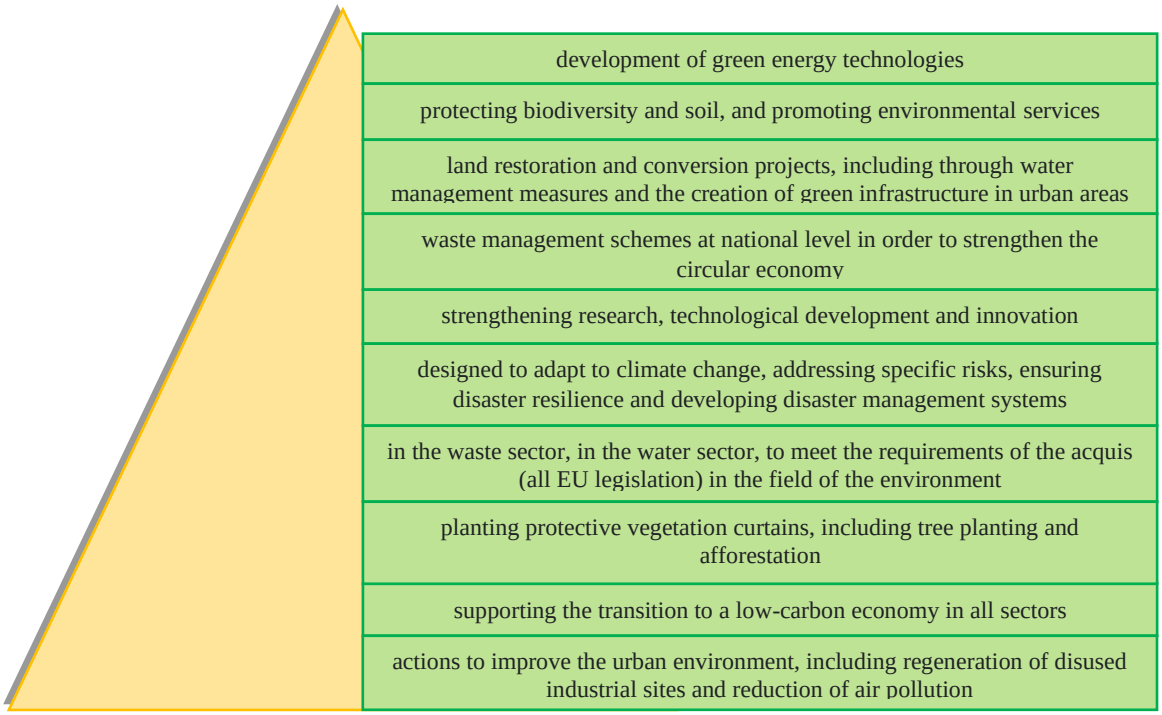

Figure no.9 Areas for investment
Source: own editing

So, there is a need for a strong partnership between government-state agencies-private environment and expert groups in this field to increase institutional capacity and provide, strengthen and evaluate effective and clear legislative frameworks and applicable rules. Synergistic effect with politics. In the areas of climate and energy, including those in line with the approach of the Green Pact / European Green Pact (European Green Pact, 2020). Now is the time to change things. Investing in cleaner air means investing in citizens' health and climate protection. This is exactly the impetus needed for our economy to recover.

Conclusions and recommendations

Following the research, we can see that pollution has a major negative impact on the Covid-19 pandemic, especially on the health of populations worldwide, which has led to an unprecedented economic crisis in the EU, a union that includes Romania. Our planet faces unprecedented environmental and climate challenges, and combined with these poses a threat to our well-being.In order to ensure our long-term sustainability, it is necessary to perceive the environment, climate, economy and society as inseparable parts of the same whole and

therefore we need to join forces, to find secure ways of communication between the legislature, economic entities, society and last but not least the establishment of groups of specialists from all fields involved in solving the problems we face on pollution: environmental experts, health (biologists, epidemiologists), economic specialists, experts in analysis and financial-accounting evaluations , for conducting analyzes and evaluations that require the combination of strategies covering all areas, the development of new tools for common analysis, evaluation and control.

It is also necessary to develop a rigorous plan specific to our country and environmental issues, a Strategic Instrument for Research-Development-Innovation through a partnership Government-Ministry of Education and Research, with leading researchers in all fields involving the solution of these problems, based on appropriate legislation, with clear and precise implementing rules. At the same time, we need efficient public administrations, by strengthening the institutional capacity and the efficiency of the administrations and public services related to the implementation of the European Grants for Development and Recovery. As a final conclusion, based on the information in this paper we can say that this pandemic is largely caused by environmental pollution, so we try to draw the attention of all authorities able to act through relevant measures, correct and as urgent as possible for stopping the disaster we are facing at the beginning of the Third Millennium.

References:

1. Alciatore, M., Callaway Dee, C., Easton, P. 2004. *Changes in environmental regulation and reporting: the case of the petroleum industry from 1989 to 1998*, in „Journal of Accounting and Public Policy", vol. 23, issue 4, pp. 295 – 304 & pp. 305-307.
2. Amann, M. et al. 2020. *Support to the development of the Second Clean Air Outlook – Specific Contract 6 under Framework Contract* ENV.C.3/FRA/2017/0012 (Final Report), The European Comission, Bruxelles.
3. Article 3 (2) of Directive 2010/75 / EU: " *pollution 'means the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into the air, water or soil, which may have harmful effect on human health or the quality of the environment, which may lead to harmful effects on material property or alter or affect the environment and other legitimate uses of the environment.*
4. *As set out in this Action Plan and in the Strategy for Promoting Sustainability in the Field of Chemicals* (COM (2020) 667).COM(2019) 640 final.
5. Evaluation of the implementation at European level of 18 January 2021 of the European Parliament's Research Service entitled "*EU policy on air quality: implementation of selected EU legislation*", pp. 26.
6. https://www.airqualitynow.eu/download/CITEAIR,Comparing_Urban_Air_Quality_across_Borders.pdf.
7. International standard ISO 26000. Guidance on social responsibility (http://www.cnis.gov.cn/wzgg/201405/P020140512224950899020.pdf).
8. JO C 324, 1.10.2020, p. 35.
9. Law no. 104 from June 15 2011on ambient air quality, Published in the Official Gazette no. 452 of June 28, 2011.
10. Minea E.M., *Protectia mediului*. 2008. Editura Accent, Cluj Napoca.
11. ODD 3, 6, 11, 12, 14, 15.
12. Official Journal of the European Union (2014), Directive 2014/95 / EU amending Directive 2013/34 / EU as regards the submission of non-financial and diversity information by certain enterprises and large groups, L330, available online: https: //eur-

lex.europa.eu/legalcontent/RO/TXT/PDF/?uriCELEX:32014L0095&qid=1558022431060&from = RO.
13. On 17 March 2021, the Ambassadors of the EU Member States approved a mandate for the start of negotiations between the Council and the European Parliament with a view to reaching an agreement on the 8th Environment Action Program. WFP 8 will serve as a guide for the development and implementation of environment and climate policies by 2030.
14. Order of the Minister of Public Finance 1802/2014, published in: Official Gazette no. 963 of December 30, 2014.
15. Order of the Minister of Public Finance 1938/2016, published in: Official Gazette no. 680 of September 2, 2016.
16. Order of the Minister of Public Finance 2844/2016, published in: Official Gazette no. 1020 of December 19, 2016.
17. P9_TA(2020)0201.
18. Petrescu-Mag R.M.2011.*Protectia mediului în contextul dezvoltării durabile. Legislație și instituții,* Editura Bioflux, Cluj Napoca.
19. Prof. Dr. Johannes Lelieveld - Study: *The fraction of air pollution from COVID-19 deaths is 15% globally.*
20. Stănescu S.G., Ionescu C.A., Coman M.D., Paschia L., Gudănescu Nicolau N.L.2020. *Sustainable Economic Intelligence: A New Dimension of Information Provided by Non-Financial Indicators*, Editor IGI Global.
21. Stănescu (Mărgărit) S.G., Bran (Stan) N.C.2011.*Relevance of Economic Instruments Used in Sustainable Developmend Process*, Annals of the University of Petroşani, Economics, 11(3), pp.155-166.
22. Stănescu (Mărgărit) S.G., Bran (Stan) N.C., Ionescu (Eftene) N., Boca (Rakos) I.S.2012.*Coverage of Environmental Information in Annual Financial Statements in a Responsible Manner*.Procedia - Social and Behavioral Sciences 62, pp.526 – 530.
23. Stănescu S.G., Păduraru (Horaicu) A., Comândaru (Andrei) A.M.2018. *The Role of the Accounting Pofession in Achieving the Objectives of Sustainable Development*, Annals of 'Constantin Brancusi' University of Targu-Jiu. Economy Series.
24. Such as the ambitious 2030 climate goal, the Climate Change Adaptation Strategy, the Climate Pact, Clean Energy Initiatives, the Building Renovation Wave Strategy, the Sustainable and Smart Mobility Strategy, the Economic Action Plan circular, the biodiversity strategy and the 'Farm to Consumer' strategy, the new industrial strategy for Europe and the EU pharmaceutical strategy, the European action plan for cancer and the new agenda.
25. The European Green Pact was launched on 14 January 2020 by the European Commission Communication on the Investment Plan for a Sustainable Europe and the Establishment of the Fair Transition Mechanism.
26. UNEP (2021): *Making Peace with Nature.*
27. Xiao Wu, doctoral student, and Rachel Nethery, Assistant Professor of Biostatistics, Harvard T.H. Chan School Of Public Health**.** *Air Pollution & Coronavirus*, 26.05.2020.