

ENVIRONMENTAL FUND IN ROMANIA: ANALISYS OF SOME CURRENT PROGRAMS FOR ENVIRONMENT PROTECTION

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Abstract

Environmental challenges are increasing the pressure on governments to find ways to reduce environmental damage. In Romania, all these challenges are faced by managing the Environment Fund and by using public expenditures for environmental protection as a key tool. The present paper presents a brief analysis of some on-going programs funded by Romanian public authorities in 2020. Specifically, the paper presents how public money is used to make waste management more efficient, to expand the national water and sewerage network, but also to improve the environmental knowledge of the population.

Keywords: *Environment Fund, Public Expenses, Public Budget, Environmental Costs*

JEL classification: *H23, H61*

1. Introduction

A system for financing environmental protection is an integral part of the state financial system. Public authorities are responsible for managing public money to increase environment protection. Water supply, waste deposits and environment monitoring are three particular actions in protecting the environment.

The public service of water supply and sewage of the localities is under the leadership, coordination and responsibility of the local public administration, whose purpose is to provide water, sewage and wastewater treatment to users from localities. The public systems of water supply and

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sewage constitute integrated technological and functional assemblies that cover the entire technological circuit, from the source capture of the raw water to the emission discharge of the purified water waste. [Law no. 241/2006, art 2] According to the press release no. 246/2019 of INS, in 2018 the population served by the public water supply system was 13,515,626 persons, representing 69.4% of the resident population of Romania, with 285,927 persons more than in 2017. In the urban area there were 10,342,627 persons served by the public water supply system, representing 98.7% of the urban resident population, and in the rural area 3,172,999 persons, representing 35.3% of the country's rural resident population. [INSEE, 2019] Under these circumstances, the expansion of the national water distribution network is a prime objective for authorities.

The issue of negative impact on the environment and human health, as a result of waste disposal through the use of inappropriate methods and technologies, remains topical especially in the context of the sustained trend of increasing the quantities of waste generated. The Romanian national policy in the field of waste management must subscribe to the objectives of the European policy on the prevention of waste generation and aim to reduce the consumption of resources and the practical application of the waste hierarchy.

Climate change is already taking place: temperatures are rising, precipitation patterns are changing, glaciers and snow are melting, and the average sea level across the globe is rising. As the reduction of greenhouse gas emissions in short term does not imply a reduction in the global warming phenomenon, adaptation to the effects of climate change must be taken into account at national level. Environmental monitoring is absolutely necessary, but also expensive. Environmental monitoring is a complex activity based on obtaining data on the state of environmental quality, obtained after systematic measurements and long and systematic environmental parameters with spatial and temporal coverage.

The first part of the paper presents some general and introductory aspects about three environmental challenges. The second part contains details about: 1. Water resource protection program, integrated water supply systems, treatment, sewerage and wastewater treatment plants, 2. the program on closure of non-compliant municipal landfills, 3. the program for monitoring, studies, research and development in the field of climate change. The paper contains also an analysis of the numerical data related to these public programs. The final part presents some conclusions.

The Environmental Fund is a public fund, its revenues are public revenues. This fund is part of the general consolidated budget of Romania. Administration of the Environment Fund (AEF) is the main institution that provides the financial support for the implementation of projects and programs for environmental protection, it is established according to the European principles "polluter pays" and "producer responsibility".

Program financing guides are the source of documentation. The financing guide constitutes a complex informative support, having the role of providing to the financing applicant from the Environment Fund essential information regarding the running of a program. The only official information on how the analyzed programs is carried out are those transmitted in the media as press releases from the Ministry of Environment and Forests and the Administration of the Environment Fund, as well as those published on the websites www.mmediu.ro and www.afm.ro.

The research methods used in the paper are observation, analysis, rationing, synthesis, correlation.

2. Current public programs for environment's protection

2.1. Water supply and sewerage [Water resource protection program, integrated water supply systems, treatment, sewerage and wastewater treatment plants]

The object of the Program is non-reimbursable financing from the Environmental Fund for projects aimed at the protection of water resources, integrated water supply systems, treatment stations, sewage and sewage treatment plants. The purpose of the Program is: a) to ensure that the flows of water distributed through the supply networks comply with the provisions of the regulations in force and of the regulatory acts issued by the authorities; b) ensuring that the wastewater discharges from the wastewater treatment plants and the management of the resulting sludge from the wastewater treatment plants fall within the provisions of the regulations in force; c) protecting and improving the quality of the environment; d) increasing the number of persons connected to a water supply network. [Order no. 1450 / 10.09.2010, art 2] The program is addressed to the administrative-territorial units, including the subdivisions of the municipalities, as well as the association of inter-community development. The program is financed by the following types of projects: a) arranging for the water supply of the local communities; b) water

treatment stations; c) water supply networks; d) treatment plants; e) sewerage networks.

The financing is granted in a maximum amount of 95% of the total eligible value of the project and without exceeding the maximum amount that can be granted to a beneficiary during the financing session. [Order no. 1450 / 10.09.2010, art 20]

The maximum amount that can be granted is between 4 and 15 million lei for each project, according to the following table:

Table 1: Maximum amount of financing Water Supply and Sewerage Program

No.	Type of town	Maximum amount of financing (lei)	
		New investment	Extended/modernized investment
1	Below 3.000 inhabitants	7.000.000	4.000.000
2	3.000 – 10.000 inhabitants	9.000.000	6.000.000
3	10.001 – 20.000 inhabitants	13.000.000	8.000.000
4	Over 20.000 inhabitants	15.000.000	10.000.000

Source: art. 20 of Order No. 1450 / 10.09.2010

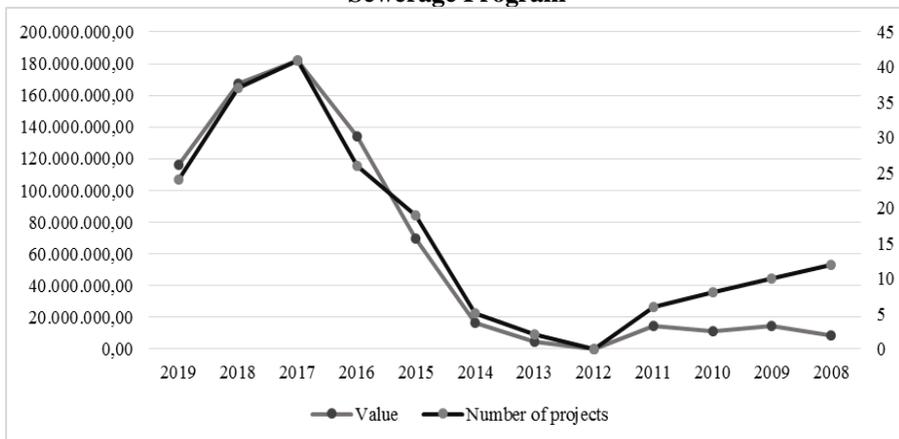
By the disposition of the AEF president, no. 481 / 05.10.2010, the amount initially allocated to this program was 98,115,000 lei. Subsequently, it was increased successively three times to the value of 1,438,453,000 lei, through the disposition of the AEF president, no. 636/22.12/2011. The submission session of projects under this program was held between October 2010 and November 2011, and the allocated amount was 1,372,000,000 lei, less than the amount initially transferred. According to the AEF Press Release dated 30.09.2011, out of the more than 900 projects were submitted, of which 248 projects were selected, totaling 1,371,552,668 lei. Subsequently, by 2017, the number of approved projects has increased to 257 projects.

In the period 2008-2019, 190 projects were completed and their total value was over 740 million lei. All these projects related to the Water Supply and Sewerage Program were signed between 2006 and 2015. Most projects were completed in 2017, respectively 41 projects. The total value of the projects completed in 2017 is 182,268,140.12 lei. The analyzed period can be divided into two parts, namely: the period 2008 - 2014 being characterized by a very small number of finalized contracts compared to the number of signed contracts, with values below 20 million lei, and the period 2015-2019

characterized by a large number of contracts with values exceeding 100 million lei. On average, the value of a funded contract is around 3.9 million lei. From the point of view of the financed value, a project carried out by the commune Nicolae Balcescu (Bacau county) is noted because it worth 10.4 million lei, as being the project with the highest funded value. At the opposite pole is positioned a financing contract made by SC Ecolat CO SA, worth 104,000 lei. It can be observed that 14 of the 190 projects have values of 7-8 million lei, and 19 projects have values below 1 million lei.

From the regional perspective, it is observed that most completed projects were carried out on the surface of Maramures county, 11 projects with a total value financed of 53.9 million lei, and Neamt county, respectively 11 projects with a total value financed by 43,1 million lei. On the next position are the counties of Harghita and Mures, each with 9 projects with total values exceeding 30 million lei. On the third position, Iasi and Olt counties are positioned with 8 completed projects. The counties of Dolj, Galati, Giurgiu, Mehedinti, Vrancea and Bucharest have completed a single water supply / sewerage project with financing values below 2 million lei. To the ones listed above, there are 4 other counties (Bistrita-Nasaud, Botosani, Buzau and Teleorman), each with 2 projects completed in this program, but with financed values that reach 7 million lei.

Figure 1: Evolution of the completed projects related to the Water Supply and Sewerage Program



Source: Centralized data by author from the AEF website

At the beginning of 2020 there are still 83 on-going projects with a contracting value of 478,915,589 lei, projects signed between 2012-2015, except for two projects contracted in 2007 and 2008 and not finalized until January 2020. [AEF website, sewerage section] Out of the 83 on-going projects, 18 projects have values exceeding 7 millions lei, the highest contracted value belonging to the commune of Sacueni, Bihor county, of 11.8 million lei, followed by 9.5 million lei carried out through a project managed by the Lugoj Local Council. Projects with small values, under 2 million lei, are managed in the rural area of 4 counties. Most projects are in progress in Bihor (56.9 million lei) and Prahova (6.8 million lei) counties, and in 9 counties there is just one on-going project in this program, with contracted values between 1.4 million lei in Bistrita-Nasaud and 6.7 mil lei in Covasna.

2.2. Closure of non-compliant municipal landfills [Program on closure of non-compliant municipal landfills]

The EU approach to waste management is based on three major principles: prevention of waste generation, recycling and reuse, improvement of final waste disposal and monitoring. All these principles have been transposed into the following documents in Romania: National Strategy for Waste Management, National Plan for Waste Management. Romania is part of the category of EU Member States where most of the collected municipal waste quantities are disposed of by landfill, the recycling and recovery operations being used to a very small extent. Over 90% of municipal waste collected is disposed of by landfill. Romania is one of the most non-performing member states in terms of solid municipal waste management. In 2015, it registered the highest rate of waste in landfills in the EU, namely 72%, well above the EU average of 25.6%.

Starting with 2015, out of 109 non-compliant landfills, at that time, it was possible to close 41 landfills. The storage activity was stopped on these deposits, but they were not closed according to European law. The European Commission (EC) decided, on February 15, 2017, to sue Romania at the European Court of Justice because the authorities failed to close 68 municipal non-compliant landfills, which pose a serious risk to human health and environment. Deposits had to be closed by July 16, 2009.

The need to carry out this program comes from the lack of financial resources at the local level for the closure of landfills and the urgency of the requests in order to comply with the provisions of the European *acquis* and the

commitments undertaken by the environmental sector. The objective of the Program is financing the closure of municipal non-compliant landfills, in application of the provisions of The Court of Justice of the European Union Decision, pronounced in File C-301/17. The purpose of the Program is to reduce the negative effects of waste on the populations' health and the environment. [Order no. 233 / 7.03.2019] The program has a multiannual character and is carried out at national level. The duration of the project may not exceed 36 months, calculated from the date of entry into force of the grant agreement.

Eligible applicants for the Program are the territorial-administrative units at local and county level. The list of non-compliant municipal landfills in Romania comprises 12 landfills, divided into 6 counties, as follows: Constanta (South Eforie - Tuzla), Brasov (Brasov, Zarnesti, Rasnov, Fagaras, Sacele, Victoria, Codlea), Suceava (Buliceni - Vatra Dornei), Hunedoara (Uricani), Mehedinti (Orsova), Vaslui (Husi). [AEF website, section for closure of deposits] The amount allocated to the financing session of the Program regarding the closure of non-compliant municipal landfills is 100,000,000 lei. According to the AEF Press Release dated 04/04/2019, the financing is granted up to 100% of the eligible expenses.

The Administration of Environment Fund approved for the first time the organization of a financing session within the Program regarding the closure of non-compliant municipal landfills, from April 10 to June 10, 2019, subsequently extended 3 times until the end of November. The authority initially approved 3 financing submissions. The first approved projects were for the following localities in Brasov county: Râșnov 4,974,043.35 lei, Săcele 8,924,931.73 lei and Făgăraș 7,997,129.10 lei. In July 2019, the AEF approved another 2 financing projects, submitted by other localities from Brasov county: Victoria 4,477,280.65 lei and Zărnești 2,822,487.71 lei. In August 2019, the project submitted by the municipality of Codlea, Brașov county, with a value of 10,095,393.55 lei was approved. The end of 2019 brings two more funded projects, respectively in October for Vatra Dornei (Suceava county) with a value of 2,396,446.03 lei and in November for the Hunedoara County Council with a value of 3,680,027.42 lei. [AEF website, warehouse closure section]

In conclusion, for 8 of the 12 non-compliant landfills on the Romanian territory, in 2019 were initiated requests for their closure, the total amount approved was exceeding 45,000,000 lei.

2.3. Studies [Program for monitoring, studies, research and development in the field of climate change]

The program aims to carry out research in the field of environmental protection, funded from the budget of the Environmental Fund. Since 2011 and so far, AEF has funded 20 research projects with a total value of 9.2 million lei, all the studies being carried out under the aegis of the Ministry of Environment, Waters and Forests. [AEF website, studies section] The implementation of the program had a timid start, starting with the signing of 4 research contracts in 2011, one of which was finalized in the same year and the other in 2014. Then 2013 brings the signing and finalization of a single study worth 669,600 lei. Then there is a boom in 2015, when 27 research contracts worth 26.2 million lei were signed, out of which only 9 projects were completed by 2019, the finalized projects having a value of 1.8 million lei. It can be seen that on December 30 and 31, 2015, 15 of the 27 contracts were quickly signed, the others being signed on October 12 and 13, in the last budget quarter. In 2016, 1.09 million lei were allocated to the studies specific to the field, in the form of 6 financing contracts, fully completed in 2016 and 2017. In 2017, 5 studies with a value of 6.33 million lei were started, and in 2018 3 studies with a value of 7.5 million lei, no study being completed by the end of 2019. [AEF website, studies section]

Table 2: The situation of studies between 2011 and 2019

Year of signing contracts	Value of signed contracts	Of which, value of completed contracts	Degree of achievement (%)	Number of signed contracts	Of which, number of completed contracts
2011	5.616.404	5.616.404	100	4	4
2013	669.600	669.600	100	1	1
2015	26.237.297	1.817.297	7	27	9
2016	4.290.562	1.090.562	25	7	6
2017	6.330.000	0	0	5	0
2018	7.528.000	0	0	3	0
Total	50.671.862	9.193.862	18	47	20

Source: Data processed by the author from AEF publications

The on-going programs in 2020 are counted to 27 and they have a total value of 41,478,000 lei, the majority being under the coordination of the Ministry of Environment, Waters and Forests. The on-going programs refer to

research contracts signed with the preponderance in 2015 (18 financing contracts amounting to 24,420,000 lei). The subject of studies started in 2015 covers topics such as nitrogen, the EU eco-label, the air quality assessment, the Romanian hunting fund, protection against floods. To these studies is added a study of monitoring of the Black Sea ecosystem funded in 2016 with 3.2 million lei. The year 2017 foresees the start of 5 other studies with a total value of 6.33 million lei, which aims, among other things, to manage waste electrical and electronic equipment or to identify virgin and quasi-virgin forests in Romania. 7.528 million lei were allocated in 2018 for three studies. One study aims at elaboration of the National Strategy for prevention and control of desertification and land degradation 2019-2030, one aims at national implementation plan of the Minamata Convention on mercury, and the latter study evaluates the state of impermeability of the settling ponds from mining activities. The basic idea is that more than half of the research projects are still in progress, and it results a 18% realization for the whole analyzed period (2011-2020).

Individuals and companies, resident or non-resident, who carry out studies in favor of the Ministry of the Environment, must be registered in the National Register of studies for the protection of the environment and hold a valid registration certificate. This register is published and updated by the Ministry of the Environment. As of May 4, 2019, there were 788 resident individuals and companies registered in this register, plus 4 non-resident entities registered for the same purpose.

3. Conclusions

The present paper does not question the Administration of Environmental Fund's activity in Romania nor the importance of protecting the environment, presented many times and in all forms, on all communication channels, national and international. The paper questions if public money is efficiently spent for protecting the environment.

A negative aspect arises from the fact that the AEF provides abundant information about the approved files and / or signed contracts, but without quantifying and reporting how many of them were completed within the terms provided in the contracts or how many were extended and how many applicants were sanctioned. There is no information about applicants who have not fulfilled their obligations and about sanctions applied as a result of

their actions, but it remains only the general idea that they still have projects in progress.

The state and public money are not the only option to protect environment. It is a moral obligation for humans to protect the environment from pollution and other activities that lead to environmental degradation. Air and water pollution, global warming, smog, acid rain, deforestation, wildfires are just few of the environmental issues that we are facing right now. One does not need to put lot of money to go green, neither private money, nor public money, but simple changes in daily lifestyle is all what is needed.

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