

Some Aspects Regarding the Financing of the Environment Fund in Romania

Teodor Hada

"Bogdan Vodă" University of Cluj-Napoca, Romania

teohada@yahoo.com

Iulia Iuga

Dorin Wainberg

"1st of December 2018" University of Alba Iulia, Romania

iuga_iulia@uab.ro

dwainberg@uab.ro

Abstract

The Environmental Fund is an economic and financial instrument designed to support and implement projects and programs for environmental protection. There is an ongoing debate on the criteria for allocating environmental funding, in particular the adjustment of funding. The specialized literature focused mainly on the optimal tax rate, on investments and expenditures with environmental protection at macroeconomic level. In the specialized literature in Romania there are no case studies presented at enterprise level (microeconomic). According to O.U.G. no. 196/2005 on the Environmental Fund, with subsequent amendments and completions, constitutes an income to the Environmental Fund a contribution of 2% of the revenues from the sale of waste obtained by the owner of the waste. The amounts are withheld at source by the economic operators who have the obligation to calculate and transfer the amounts. Thus, we will study the way of recording by companies (at microeconomic level) the contribution of 2% that constitutes income to the Environmental Fund.

Key words: finance, ecology, environmental fund, accounting monograph.

J.E.L. classification: Q58, H32.

1. Introduction

The Environment Fund is an economic and financial instrument intended to support and implement projects and programs for environmental protection and for achieving the objectives of the European Union in the field of environment and climate change, in accordance with the legal provisions. The revenues of the Environmental Fund consist of percentage contribution from the income from the sale of waste, obtained by the owner of the waste, natural or legal person; taxes for emissions of pollutants into the air, due by economic operators; contributions to the circular economy collected from the owners or the administrators of landfills for municipal waste. Hence, the contributions due by:

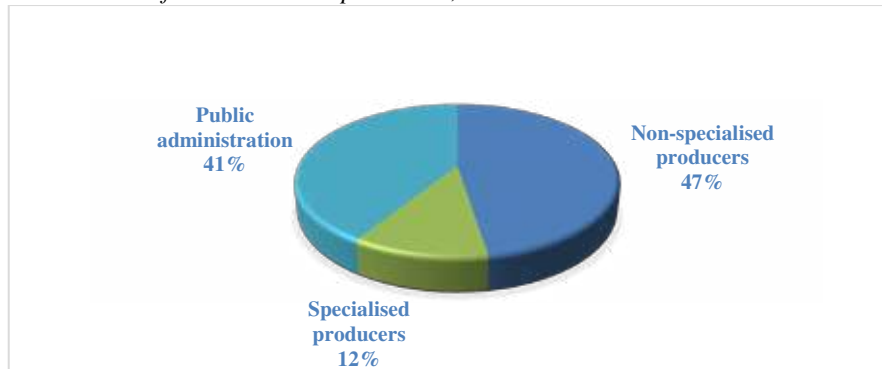
- Economic operators that introduce on the national market packaged goods, which distribute for the first time on the national market sales packages;
- Economic operators who introduce on the national market new and/or used tires intended for reuse, for the difference between the quantities of tires corresponding to the annual management obligations provided in the legislation in force and the quantities actually managed;
- The administrative-territorial units or, as the case may be, the administrative-territorial subdivisions of the municipalities, in case of not fulfilling the annual objective of reducing the quantities of waste disposed of by municipal waste;
- The economic operators authorized to take over the annual obligations for capitalization of packaging waste, respectively for the management of used tires;

- Economic operators that carry out collection / recovery / sanitation activities;
- Economic operators that introduce on the national market electrical and electronic equipment;
- Economic operators that introduce portable batteries and accumulators on the national market, etc.

The Environmental Fund sustains pilot and existing projects and programs for environmental protection: reducing the impact on the atmosphere, water and soil, including air quality monitoring; noise reduction; waste management; protection of water resources, integrated water supply systems, treatment plants, sewers and treatment plants; conservation of biodiversity and management of protected natural areas etc.

At the level of 2018, out of the 3,493,222 thousand lei, 12% represented the investments of the specialized producers, 47% the investments of the non-specialized producers and 41% the investments of the public administration (Figure no. 1).

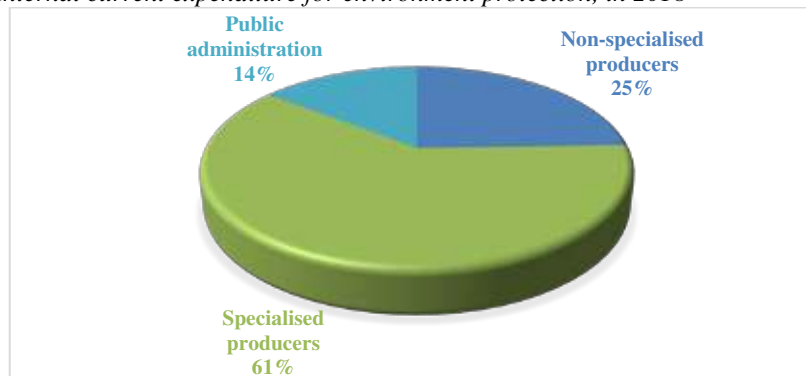
Figure no. 1. Investments for environment protection, in 2018



Source: Romanian Statistical Yearbook, 2019

The current internal costs for environmental protection in 2018 amounted to 7,929,032 thousand lei; the largest share (61%) is registered by specialized producers (Figure no. 2.).

Figure no. 2. Internal current expenditure for environment protection, in 2018



Source: Romanian Statistical Yearbook, 2019

2. Literature review

Compared to developed countries, capital markets and financial systems in developing countries are often considered underdeveloped. Firms need funds to operate and invest to reduce pollution (Tian, 2017). From a dynamic perspective, fine-tuning the tensions between environmental commitments in relation to various stakeholders and tracking profitability can become increasingly complex and costly (Pekovic, 2018). Environmental protection policy measures can be classified into two groups: command and control standards and market-based measures. Most economists support the latter, such as pollution taxes. Pollution taxes are a market-based measure that can

reduce environmental damage and make markets highly efficient (Lee, 2017). Azadegan's study (2018) develops a series of hypotheses about the effects of consumer pressure, community pressure and resource availability on managers' environmental investment decisions. First, under the emissions taxation system, private firms adopt clean technologies, even if they incur additional costs to reduce the production process if the environmental damage caused by their production process is high (Lee, 2017). The results of Mori's (2019) study suggest that a country's level of vulnerability may affect accessibility and the volume of funding for the environment.

There is an ongoing debate on the criteria for allocating environmental funding, in particular the adjustment of funding. The specialized literature focused mainly on the optimal tax rate, on investments and expenditures with environmental protection at macroeconomic level. In the specialized literature in Romania there are no case studies presented at enterprise level, microeconomic. According to O.U.G. no. 196/2005 on the Environmental Fund, with subsequent amendments and completions, constitutes an income to the Environmental Fund a contribution of 2% of the revenues from the sale of waste, obtained by the holder of the waste. The economic operators who have the obligation to calculate and transfer the amounts withhold these amounts at source. Thus, we will study the way of recording in accounting by companies (at micro level) the 2% contribution that constitutes income to the Environmental Fund.

3. Research methodology. Findings

According to art. 9, par. (1). a) of the O.U.G. no. 196/2005 regarding the Environmental Fund approved by Law no. 105/2006, with the subsequent amendments and completions, constitutes an income to the Environmental Fund *a contribution of 2% of the revenues realized from the sale of waste, obtained by the owner of the waste. The economic operators having the activity of waste collection and/or recovery, having the obligation to transfer them to the Environmental Fund, shall withhold the amounts at source.*

Economic operators must complete and submit the Statements of obligations to the Environmental Fund. The obligation to calculate and transfer the amounts belongs to the legal entities both for their own activity, as well as for the branches and working points. Below we present three case studies, as follows: the first two cases refer to companies that invoice or do not invoice the environmental fund and the last study refers to the accounting records of the company that withholds 2% of benefit.

Case study 1. Company that does not invoice environmental fund

Step 1. The company withholds 2% for all categories of waste:

Figure no. 3.

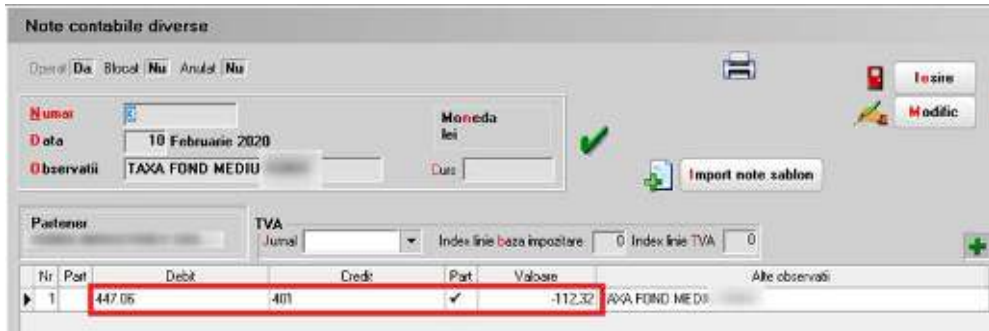
Articole	Observatii articole	Date suplimentare	Destinatia	Exped
DESEJ INDC				

Debit	Credit	Valoare	Document	Observatii	Jurnal/Nota
371.41	401	5.616.08	F.105/10.02.2020		J1 / M.C3
442.05	442.87	1.067.04	F.105/10.02.2020		J1 / M.C3
Total		6.683.04			

Source: Authors' processing

Step 2. The 2% tax-withholding note is made through the following accounting note related to the partner:

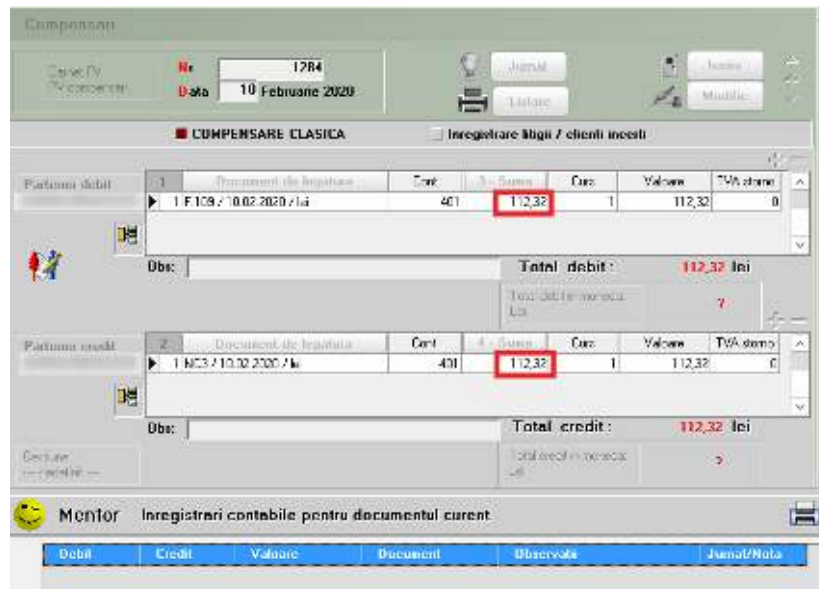
Figure no. 4.



Source: Authors' processing

Step 3. The amount of 112.32 lei is deducted by compensation from the value of the supplier's invoice:

Figure no. 5.



Source: Authors' processing

Step 4. At the end of the month an account statement is generated for account 4476 Environmental Fund and for the total amount a statement will be submitted and the entity will then pay that amount.

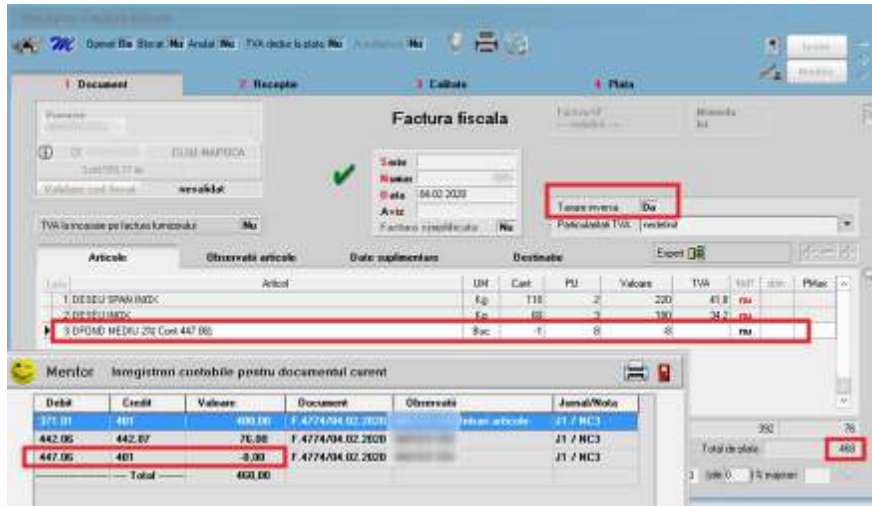
Accounting note:

$$447.06 = 5121 \text{ the cumulated amount from } n \text{ invoices}$$

Case study 2. The company that invoices the environmental fund

The supplier invoices with a position of Environmental Fund 2% and decreases the value of the invoice. This amount will be declared and paid by our company at the end of the month.

Figure no. 6.



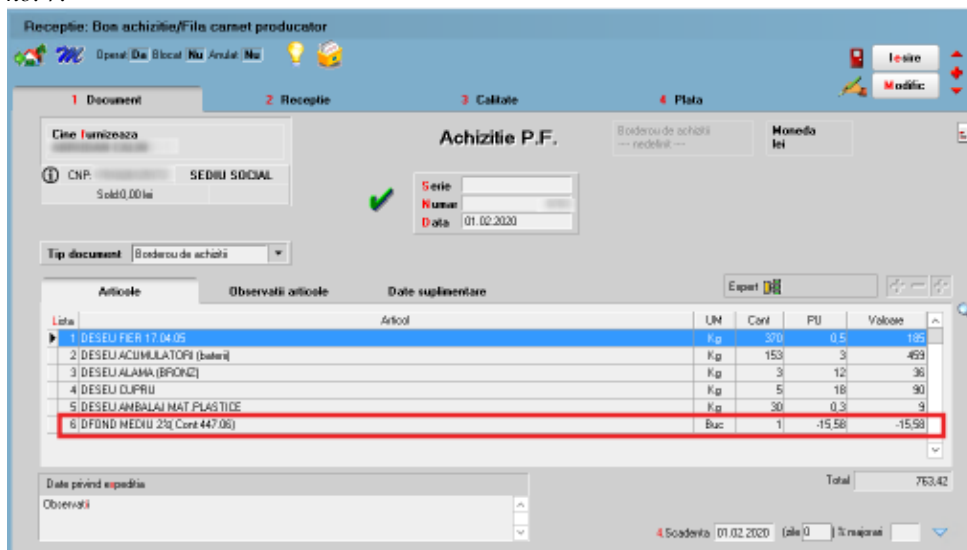
Source: Authors' processing

Case Study 3. The company that withholds 2% of benefit.

The company is required for 2% of benefit, as follows:

Step 1. Border reception of the purchase. The tally-sheet is made and a payment amount results. At that value, a position with average fund waste is placed, also on account 4476. The partner account in the case of individuals is 462

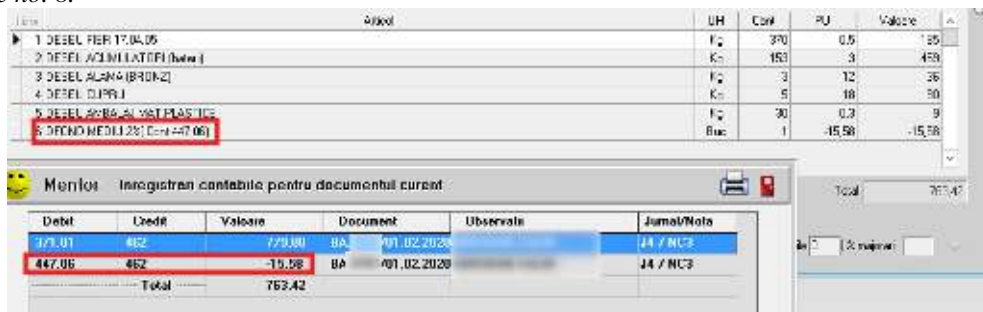
Figure no. 7.



Source: Authors' processing

Accounting note:

Figure no. 8.



Source: Authors' processing

Step. 2. The total monthly amount of liability account 4476 shall be declared and paid at the end of the month.

In accordance with the provisions of Emergency Ordinance No. 74/2018 amending and supplementing Law No. 211/2011 on the waste regime, Law No. 249/2015 on the management of packaging waste and the Emergency Ordinance no. 510/2018, starting with 01.01.2019 by introducing the tax on the contribution to the economy, the household waste collection tariff for individuals, legal entities and tenants' associations will increase. The contribution for the circular economy is 28 lei without VAT price applied to the amount of garbage having the unit of measurement in cubic meters. Below are the accounting records of the contribution to the circular economy.

Invoice example (invoice issued - customer) February 2020.

VAT rate 19%

Table no. 1.

No	Action	Quantity	MU	Unit Price (no VAT)	Price (no VAT)	VAT
1	Collected	2.08	CM	125.86	261.79	49.74
2	Stored	2.08	CM	30.33	63.09	11.99
3	Circular economy	2.08	CM	28.00	58.24	11.07
Total (no VAT)					383.12	72.80
Total					455.92lei	

Source: Authors' processing

Accounting note, February 2020:

Table no. 2.

4111	=	704.M	58,24	Circular economy
4111	=	704.01	324,88	Services
4111	=	4427	11,07	VAT Circular economy
4111	=	4427	61,72	VAT Services
TOTAL			455,92	

Source: Authors' processing

Invoice example (invoice received - supplier) February 2020

VAT rate 19%

Table no. 3.

No	Action	Quantity	MU	Unit Price (no VAT)	Price (no VAT)	VAT
1	Circular economy contracts	200	tons	30	6000	1140
2	Waste storage	200	tons	40	8000	1520
Total (no VAT)					14000	2660
Total					16660	

Source: Authors' processing

Accounting note, February 2020

Table no. 4.

628	=	401	8000	Waste storage services
635	=	401	6000	Circular economy contracts
4426	=	401	2660	VAT
TOTAL		401	16660 lei	

Source: Authors' processing

4. Conclusions

In the Official Gazette no. 543 of July 2, 2019, was published O.U. 50/25 June 2019. It amends and completes two important normative acts: GEO 196/2005 on the Environmental Fund and Law 249/2015 on the management of packaging waste. The normative act has a special impact on several categories of economic agents (waste generators / holders, sanitation operators, waste collectors and recovers, but also public authorities), as a result of new provisions, among which we mention:

- The obligation to declare and pay to AFMO a contribution of 3% of the sale of ferrous / non-ferrous scrap metal is transformed, by the new normative act, into a Contribution of 2% for all categories of traded waste. The obligation to declare and pay to the AFM belongs to the, but the contribution is withheld at source from the waste holder. Interestingly, the O.U. calls this mechanism *contribution*, but, because it is the responsibility of the waste holder, acts as a fee (unless somehow in the implementation methodology - Order 578/2006 - will not be established otherwise).
- It modifies the calculation method of the tax of 50 lei/ton that must be declared / paid by the local public authorities for not reaching the objective provided by law to reduce the quantities of municipal waste permanently deposited, being affected by these provisions especially those who did not organize the sanitation service.
- Increases the value of the ecotax, applicable to all plastic transport bags, from 0.1 lei / piece to 0.15 lei / piece. The ecotax does not apply to bags made of materials that meet the standard SR EN 13432/2002. The tax is declared/paid by those who introduce the plastic transport bags on the national market, with the distinct highlighting on the sales invoice.
- A new contribution to AFM (Environment Fund Administration) of 2 lei/kg is introduced for collectors and operators who report packaging waste. The declaration of the quantities managed/reported will be made every six months at AFM by collectors/operators, as the case may be.
- Waste traceability (understood as packaging only) will be followed through the ŞIATD IT application, provided by AFM, mandatory for use/implementation for packaging waste collection/recovery operators who report and receive a bonus. Failure to use the application is punishable: 80,000 lei-100,000 lei by AFM.
- Economic agents holding packaging waste from trade and industry will have the option to manage them, i.e. to return them to the suppliers or economic operators designated by them by contract.

5. References

- Scholtens, L., 2017. Why Finance Should Care about Ecology. *Trends in Ecology & Evolution*, 32(7), 500-505. <https://doi.org/10.1016/j.tree.2017.03>.
- Brooks, C. and Oikonomou, I., 2018. The effects of environmental, social and governance disclosures and performance on firm value: a review of the literature in accounting and finance. *The British Accounting Review*, 50 (1). pp. 1–15. ISSN 0890-8389 doi: <https://doi.org/10.1016/j.bar.2017.11.005>

[online] Available at <http://centaur.reading.ac.uk/74071/>

- Mori, A., Rahman, S.M., Uddin, M.N., 2019. Climate Financing Through the Adaptation Fund: What Determines Fund Allocation? *The Journal of Environment & Development*, <https://doi.org/10.1177/1070496519877483>
- Lee, W., Naito, T., Ki-Dong Lee, K.D., 2017. Effects of Mixed Oligopoly and Emission Taxes on the Market and Environment. *The Korean Economic Review*, 33(2), pp. 267-294.
- Pekovic, S., Grolleau, G., Mzoughi, N., 2018. Environmental investments: Too much of a good thing? *International Journal of Production Economics*, 197, 297-302, <https://doi.org/10.1016/j.ijpe.2018.01.012>
- Azadegan, A., Golar, S., Kach, A., Mousavi, N., 2018. Corporate environmental investments: A cross-national study on managerial decision making. *International Journal of Production Economics*, 199, pp. 47-64
- Tian, P., Lin, B., 2019. Impact of financing constraints on firm's environmental performance: Evidence from China with survey data. *Journal of Cleaner Production*, 217, pp. 432-439, <https://doi.org/10.1016/j.jclepro.2019.01.209>