# FINANCIAL SUPPORT FOR ENVIRONMENTAL POLICY AT THE LEVEL OF S.C. TURCENI ENERGY COMPLEX

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## Abstract

The environment protection at microeconomic level can be characterized by socio-economic and political situation relatively unstable, which puts serious mark on the output of Romanian companies. The long-term goal of any business is to get a sufficient return on invested capital and therefore the financial support for the establishment of financial resources for environmental spending.

The establishment of financial support of environmental expenditures requires some economic levers, whose purpose is to achieve environmental objectives at least cost. In this form, the optimal allocation of financial resources for the environment raises the optimal quantity of each resource use compared to prices of other economic factors of production and economic development of a framework to ensure protective nature of all environmental decisions by including the costs in the prices of goods and services.

Key words: environmental protection policy, environmental protection expenditure, environmental protection investments, financial suport of environmental protection policy,

# 1. Sources of financing of environmental policy at the micro level

Financial support for environmental protection at the micro level consists of own funds, raised, borrowed and special funds. Own sources are those financial resources owned by the unit and contributes most of the current activity and investment financing. Own resources for financing environmental investments consist of: depreciation of property, deductions from profits, sale by auction and capitalization of tangible parts and subassemblies from the dismantling of fixed assets.

Attracted sources have an insignificant share in the financial activity of economic agents to cover economic value means that it conveys. Attracted sources represents the source of origin of temporary working capital available to the operator as a result of the existence of differences between goods receipt and payment providers (credit providers), between the time of calculation of their wages and the various taxes and fees.

In addition to their own sources and attracted sources, economic agents appeal to borrowed sources, which include: loans from banks or other public specialized bodies, national and international bodies, bonds and loans.

The main sources are purchased borrowed from banks in the form of bank credit to be repaid on time, being interest accrues.

Special sources consist of funds allocated from the state budget and local budgets in the form of subsidies and budget allocations, the EU contribution through structural instruments, financial resources of the Environment Fund and other sources (sovereign funds, private funds profile investment, etc.).

Within the analyzed company, internal current environmental expenditures are supported from own sources and sometimes from those attracted, who have an insignificant holding under their financial support.

Current external expenditure and investment in the environment protection can be supported from own sources, borrowed and special sources (subsidies and budget allocations).

Each of these sources implies a specific cost for their production, cost that the manager needs to know, considering also indirect implications of choosing one or other financing arrangements.

When setting up financial support for environmental protection must be considered the following:
- Specifying the nature of investments to protect the natural environment (customizing investment in pollution treatment investment and investment for pollution control);

- Customize environmental costs (internal or external current expenditure for environmental protection); - Uncertainties encountered in valuation characterizing financial support of environmental policy (higher interest rates on loans, exchange rate change, environmental taxation, changing environmental standards, changing the conditions for accessing external grants).

The construction of financial support of environmental protection requires the aggregating of information to evaluate the cost and natural hazards and in particular to estimate the cost of externalities that s should be charged by the company.

The existence of a conceptual framework for environmental accounting and providing financial support to cover the costs of the environmental protection is necessary in the current economic context. This environmental accounting must collect reliable data on consumption of raw materials, water, energy, waste generated by business activity, environmental costs, gains due to the application went to environmental policy and reduce consumption of natural resources and ensuring adequate financial support to cover environmental costs.

Together with the development of guidelines on management accounting applied on natural environment under EU regulations, listed companies are required to submit information on the natural environment by using three indicators, according to table no. 1.

Information content of natural environmental indicators

Table no. 1

mulcators	information content		
Amount of claims paid during the year following	The cost of natural environmental law		
the execution of a judicial decision concerning the	infringements		
natural environment			
Expenses incurred to prevent the consequences	Budgetary effort for the natural environment		
of the company's activity on the natural environment	(capitalized costs or not)		
Amount of provisions and guarantees for risks	Natural environmental degradation and the		
related to natural environment	amount of future repairs		

Source: I. Jianu, Evaluarea, prezentarea și analiza performanțelor întreprinderii, Editura CECCAR, București, 2007, pag.397

Moreover, in order to comply with European regulations in this area, the natural environment and the amount of expenditure on provisions related will be presented separately in the income statement and balance sheet. French companies are encouraged to present and other indicators on the natural environment indicators proposed by the GRI<sup>1</sup>, according to Table. 2

Content information concerning environmental expenditure indicators

Table no. 2

Indicators	Information content	
Donations and other voluntary contributions to environmental protection	Measure of voluntary effort concerning natural environment	
Eco-efficiency indicators	Indicators of progress in terms of efficiency. At the same workload were consumed fewer natural resources?	
External costs	Costs imposed on business community as a result of pollution emitted	

Source: I. Jianu, Evaluarea, prezentarea si analiza performantelor întreprinderii, Editura CECCAR, Bucuresti, 2007, pag. 397

In The report of the European Parliament on 30 April 2002 concerning recommendation for the Member States are exposed the following concerns and proposals that highlight financial side of natural environment: - In the IV Directive is regulated provision requiring companies to disclose social and environmental reports; - Obligation to publish reports on the social environment and ecologic for any enterprise that wants to be listed on the Stock Exchange;

- Auditing social and environmental reports;
- Obligation to publish social and environmental reports for all companies regardless of their size. Currently, businesses that publish such reports have the opportunity to select the indicators they consider to be most relevant. The lack of standardization of information to be published make it difficult to compare between companies and sometimes also from one year to another for the same company. Using the GRI directorate lines permitted to solve only a part of the problem.

## 2. Financing of environmental protection policy at the level of Turceni Energy Complex

A strategic plan for financing environmental protection investments helps determine realistic and tolerable level of environmental protection expenditures, demonstrating the role of each source of financing. An essential part of

<sup>1</sup> Global Reporting Initiative (GRI - Global Reporting Initiative) is an international institution that establishes some guidelines for publication of qualitative information (non-financial) concerning sustainable development.

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environmental protection strategy at SC Turceni Energy Complex should relate to issues of supply and demand for financing environmental investments.

At SC Turceni Energy Complex level, for the coordination of funding the environmental protection activities was established "The Strategic plan for financing investment for environmental protection," which is designed to achieve the general objectives relating to profitability and improving environmental conditions. Strategic plan for financing environmental protection activities at SC Turceni Energy Complex includes the following directions:

- Realization of flue gas desulphurisation installations;
- Reduction of carbon dioxide emissions and other types of pollutants;
- Removal of waste from burning coal in boilers energy blocks.

After identifying the lines of action is necessary to set targets to achieve, in the case of SC Turceni Energy Complex, they refer to the establishment of maximum limits on emissions of carbon dioxide, sulfur dioxide, nitrogen oxides, particulates, reducing the amount of waste.

To achieve these goals, SC Turceni Energy Complex identified priority projects for environmental investments and their financing sources required for the period 2013 - 2018, the total value of investment projects and their funding sources. Those are presented in table no.3:

Total sources of financing environmental investments during 2013 - 2018 at SC Turceni Energy Complex

Table no. 3

**National**  $IPO^2$ Structural Funds / TOTAL Year Own Loans **Environmental** resources **Investment** Plan **Fund** 2013 202.387,74 0 0 0 171.315,20 373.702,94 2014 30.157,40 0 78.320,00 225.000,00 333.477,10 2015 104.506,86 0 0 78.320,0 225.000,00 407.826,86 2016 182.178,45 75.375,00 84.598,55 53.684,80 395.836,80 0 78.750,0 91.847,39 2017 355.652,00 185.054,61 0 0 2018 195.652,00 45.000.0 0 0 0 240.652,00

Source: Strategic Plan for financing environmental protection activities at SC Turceni Energy Complex

From the dates related in Table no. 3, I can conclude the following:

- the annual prediction of own sources for financing investment projects for environmental protection, which have a high share of total resources in 2013, ie 54.15%, accounting for 9.04% in 2014, increasing towards the end range to 81.31% in 2018;
- forecasting contraction of borrowed sources during 2013 2016, covering their own lack of resources and special, these accounting for 67.47% of all sources in 2014, finding not appeal to them in the years 2017 and 2018.
- forecasting special funding sources for environmental investments during 2014 2017, with weights ranging from 23.48% in 2014 and 25.82% in 2017;

For the consideration of the establishment of financial support of environmental protection investment policy at SC Turceni Energy Complex, I consider that it necessary to establish the weights of each source in the projected financial support, according to Table no. 4.

Table no. 4
Share of funding sources for environmental investment projects in the Strategic plan for financing environmental protection activities at SC Turceni Energy Complex for the 2013 – 2018 period

Year	Share of own	Share of special	Share of borowed
	sources	sources	sources
2013	54,1	0	45,9
2014	9,04	23,4	67,56
2015	25,5	19,20	55,3
2016	46,0	40,41	13,59
2017	52,14	47,96	-
2018	81,31	18,69	-

Source: Strategic Plan for financing environmental protection activities at SC Turceni Energy Complex
Based on data included in the table. 4, I can say that the main source of establishment of financial support for the

environmental protection investment financing is the own sources, followed by the borrowed and special sources.

<sup>2</sup> Initial Public Offering. It is expected that in 2014, a stake of of SC Turceni Energy Complex will be listed on stock exchanges

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It can be seen that the failure of own sources in the years 2014 and 2015 is offset by borrowing sources and the lack of borrowed sources in the years 2017 and 2018 from special sources.

To streamline the support for environmental protection at the level of SC Turceni Energy Complex, I think it is necessary:

- voluntary publication of information concerning the natural environment, can be considered an element of the economic policy of the company as if the choice of methods of presenting the information in the financial statements;
- establishment of a fund to cover the cost of retained earnings environment of the 7 destinations listed in the income and expenses and "Retained Earnings of use prescribed in paragraph 7.1 shall be allocated to other reserves and is its own source of funding (paragraph 8 of BVC) ";
- in determining investment spending should be defined investment for environmental protection and pollution remediation investment;
- inclusion of allowances in intangible assets in the case of SC Turceni Energy Complex, having as main activity the production of electricity;
- reflection concerning the natural environment and the amount of expenses related provisions, separately in the income statement and the balance sheet in order to comply with European regulations in this area;
- environmental information should be presented separately in the statement of financial performance of SC Turceni Energy Complex.

Construction and commissioning of environmental investment objectives are determined by the existence of sources. In practice, SC Turceni Energy Complex policy for financing environmental investment is made on long term and covers all the objectives set in the strategic plan for financing environmental activities. I believe the funding decision making at the level of SC Turceni Energy Complex should be given to provide certain financial resources needed to achieve the investment objectives of environmental protection, in compliance with the financial balance between short-term funding resources and medium and long term financing.

## 3. Conclusion

Within the instruments for environmental performance assessment is required expenditure for environmental protection (environmental accounting), total cost assessment which identifies four types of costs for a product, process or project: direct costs, hidden costs, potential costs and cost less tangible. In the effort to ensure environmental quality an important role is to allocate funds to address environmental issues in a significant percentage of businesses budget and environmental issues, the environmental protection should become a routine component of the overall management of the company.

The Strategy for establishment of financial support for environmental protection should be based on identification with a maximum precision of environmental objectives and prioritize them according to importance and posed acuity in relation to each other. I appreciate that this step is crucial in ensuring a solid financial support as prioritizing targets would ensure that the most pressing environmental problems will receive the necessary funding. In this respect, I believe that we need to develop institutional capacity at central and local level, able to lead an activity of investigation and identification of environmental issues, translate them into environmental policy objectives and identify both typological and quantitatively the principal measures need to be implemented. I also believe that for the establishment of funding sources for environmental policy, it is useful to estimate the current and future benefits induced by the environmental objectives to be funded, and a delineation of a temporal framework for the efficient use of limited financial resources.

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