

## OVERVIEW OF THE ENVIRONMENTAL ACCOUNTS IN EUROPE

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*Today, the potential environmental impacts of their decisions and the economic implications of changes is analyze in the academic and business circles. The economic accounts have been established to provide policymakers with key national economic indicator. To promote the principle of sustainable development, several international institutions have recommended that countries develop environmental accounts.*

*So, the European's challenges have been widely analyzed, the challenge of sustaining the European's natural resources and environmental assets for future generations has received far less attention.*

*The aim of this paper is to analyze the potential benefits of constructing environmental accounts for the European region and to determine which types of accounts would be most useful for policymakers in this Region.*

*Keywords: enviromental accounts, crisis, economy.*

*JEL: H21, H32.*

### **Introduction**

The year 1960 is considered the beginning of the environmental crisis when the environmental problems became of high priority as compared to other aspects of any other nature, be it political, economic or cultural. Thus, there has been developed worldwide a series of economic and fiscal key factors for the environment protection, with the purpose of facilitating the economic – environmental conflict solving process. The European Community whose member Romania is today has a very good environmental policy and other EU member can serve as a model as far as the environmental strategies are concerned. Many European countries began to formulate and implement environmental and resource accounting frameworks and as a result, today those countries have a fairly well established system of environmental and resource accounts that quantify the links between the environment and the economy. A growing number of developing European countries are also in the process of establishing environmental accounts. Most, if not all, of the environmental accounting systems are linked to some extent with the national accounts of their respective countries.

In the 1970s the national statistical offices began the formal development of environmental and resource accounts. Norway (Alfsen et al., 1987) and France (Weber, 1983) were the first to initiate the development of their accounts. In the late 1980s, the United Nations Statistics Division, European Union, OECD, World Bank, and country statistical offices initiated a coordinated effort to address a major part of the problem in analyzing natural wealth which was the omission of natural capital accounts from the asset accounts.

The internationally accepted set of guidelines for the preparation of national accounts is The System of National Accounts 1993 (SNA93) which represents the work of five international economic organizations to define the scope of the national accounts and provide guidance on the concepts and methods that should be used in their compilation.

The SNA93 explicitly discusses the incorporation of environmental information into the national accounts and presents two sets of environment-related guidelines. The first set deals with the incorporation of natural resources into balance sheet accounts. The second set, which is more far-reaching, describes the development of a “satellite system for integrated environmental and economic accounting” or System of Integrated Environmental and Economic Accounts (SEEA).

So, this effort resulted in a standardized framework and methodologies for constructing environmental accounts, called the System of Integrated Environmental and Economic Accounts, or SEEA (United Nations et al. 2003).

### **The concept of environmental accounts**

In the stage there are some important problems concerning the environment which has stimulated the initiative of others regarding the necessity of doing something to remediate them. So, the specialists have come to the solution how increasing quality of the people's lives and to find some strategies which offer the possibility to protect the resources of the natural environment in the process of social and economic development (a sustainable development). This concept has signaled people's concerns about the effort to incorporate environmental benefits and costs into economic decision making.

Environmental and resource accounts can be defined as any systematic compilation of stock, flow or state statistics relating to the environment or to natural resources.

The environmental and resource accounts of most European countries comprise three major components:

- The Natural Resource Stock Accounts measure quantities of natural resource stocks and the annual changes in these stocks due to natural and human processes;
- The Material and Energy Flow Accounts record in physical terms only the flows of materials and energy - in the form of natural resources and wastes - between the economy and the environment;
- The Environmental Protection Expenditure Accounts identify current and capital expenditures by business, government and households for the purpose of protecting the environment.

Environment accounting is also a managerial tool, with many goals: the control of environment costs; the realization of investments in less polluting or even in ecological technologies; the promotion of some production process and the promotion of some less polluting products, improving environment-related performance.

The concept of environmental accounting describes the following four components:

1. Natural resource asset accounts, which primarily include information on stocks of natural resources.
2. Pollution and material flow accounts, which provide information at the industry level about the use of energy and materials and the generation of pollutants and solid waste.
3. Environmental protection and resource management expenditure accounts, which identify expenditures made by industry, government, and households to protect the environment or manage resources.
4. Environmentally adjusted macroeconomic aggregates, which include indicators of sustainability, such as an environmentally adjusted net domestic product.

The assurance of the environment accountancy information quality, in the context of accountancy convergence, has on base the followings:

1. in the last period, there was manifested more and more less confidence into the financial measurements;
2. the need of the uniformization of the accountancy information, for the capability of answering to the requests of globalization;
3. the accountancy appears much more as a social game, in which the actors could be interpreted by the theory, norms and state- interests or by the tax liability at a given moment;
4. in most of the times the practice can't hold the rhythm with the accountancy rules.

However, the specialty literature doesn't present the evaluation of patrimonial elements in the real value, as sufficient source- information.

Sufficient, compatible, and reliable data must be available at a unique value to develop and populate environmental accounts.

The importance of deriving indicators from the accounting system and provides policy makers are reflecting from 1) indicators and descriptive statistics to monitor the interaction between the environment and the economy, and progress toward meeting environmental goals, and 2) a database for strategic planning and policy analysis to identify more sustainable development paths and the appropriate policy instruments for achieving these paths.

A number of organizations are working to establish international comparability in environmental and resource accounts through the promotion of standard methods and concepts. One such organization is the so-called London Group on Resource and Environmental Accounting. The London Group is an informal group of approximately 30 statisticians representing 14 countries and 5 international organizations. The London Group meets annually and the papers and proceedings are published by a participating agency on behalf of the group.

According with this group Norway was selected as a sample because it highlights the complexities of maintaining many accounts and provides the rational for initially limiting the European's environmental accounts to Natural Resource Accounts and Water Accounts. Also Norway has the longest experience with environmental and resource accounting because began to develop its environmental and resource accounts in the mid 1970s in response to increasing conflicts between conservationists and politicians. The primary objective was to provide information that would improve the management of natural resources. During 1978-1986, accounts for energy, fish, land use, forests, and minerals were developed. The approach initially taken by Norway separated natural resources into two broad classes: material and environmental. Material resources were further subdivided into mineral resources (crude, natural gas and other non-renewables), biotic (living) resources (such as forests and fish) and inflowing resources (solar radiation, ocean currents).

The initial Norwegian accounts served decision makes well during the oil price shocks of the 1970s and 1980s. The reduced resource use that accompanied the oil price increases attracted the interest of decision makers and prompted a change in the focus of the Norwegian accounts.

Decision makers thus began to examine more closely the linkages between the physical resource accounts and economic information in the national accounts.

The vast effort needed to develop and maintain a comprehensive accounting system led to a narrowing of the focus of account development in the late 1980s and early 1990s. A few economically and politically import resource issues – energy resource management in particular – and important environmental issues such as air pollution became the focus. Land-use accounting was discontinued but forests, fish, and mineral accounts were maintained.

In recent years, Norway has revised its objectives to focus on consistency between economic analysis and analysis of important environmental and resource issues. For example, the energy account has become an important and necessary foundation for emission inventories. The emission data are used in conjunction with economic data to forecast the consequences of economic development and the associated demand for energy.

Regarding the reflection of environmental accounting is still very difficult to do because that can be used in different context and with different meanings (national, financial and managerial accounting).

In practice, it was observed, that the advantages of using the real value are growing up, because of the positive influence for the quality of the accountancy information, as following:

1. the superior accuracy for the result and for the cash-flow of the company;
2. relevance, transparency and utility of the presented information into the financial measurements.

But the process doesn't stop here. After getting the accountancy information it must be furnished to the interested one and has to be interpreted in the scope to take decisions. Look, there is obtained accountancy information, based on the concept of real value, with the destination of evaluating the interest and solvability of a patrimonial entity. Although many of the authors are

presenting the advantages of the real value, there are voices which contest this concept, because of its volatility and the tendency of subjectivism, of the manipulation of used models for the evaluation.

Among the advantages of the real value there can be named: Utility, relevance, transparency and superior accuracy of the results and cash-flow of the company, it brings more clearance to the financial statements, it does a total accounting of the comparable value and it gives more liability to the manager. The credibility regards a reasonable evaluation, the using of market information in all possible situations for evaluating and justifying the subjective arguments. The neutrality presumes evaluations that were done in an adequate context and without a selective presentation. So, the data must be presentation at the faire value.

On the other hand, the definition of fair value in IFRS has remained unchanged for almost twenty-five years. It is therefore surprising that there is some uncertainty about its meaning and some confusion about what amounts are, and what are not, fair values.

## **Conclusions**

The environment is a present problem of high priority that needs immediate solutions. The preeminence of economics in the social and political life of the last decade, the concentration of activities for an immediate profit, has led to the ignorance of environmental aspects.

According to some specialists environment accounting represents a process of identification, calculation, control, analysis and reporting of the costs generated by the enterprise-environment relation, resulting from the prevention, the limitation and the elimination of the effects of ecological disasters with a favorable impact over the company and the environment.

One of the primary challenges in establishing environmental accounts in Europe is the availability of statistical data necessary to establish the accounts. Sufficient, compatible, and reliable data must be available to develop and populate environmental accounts. Many government agencies and entities in this region collect relevant data and it is unclear at this stage of the research whether the data is sufficiently available to construct the Natural Resource Accounts and Water Accounts. Moreover, environmental accounting is a long-term investment and developing accounts requires a sustained effort over an extended period.

Despite these challenges, however, the benefits of establishing environmental accounts in Europe are significant and can contribute to better policy and resource management at all levels of governance.

In the 21st century environmental accounts must provide the answering the following questions: What units of measure are to be used? ; How often measurement is to be undertaken? How much resource is recovered through taxes and non-tax instruments?

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