

## ENVIRONMENTAL PROTECTION FINANCIAL INSTRUMENTS

### INSTRUMENTE FINANCIARE DE PROTECȚIE A MEDIULUI ÎNCONJURĂTOR

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**Abstract:** Nowadays, the environmental protection issue able to assure a sustainable future development is an acute one. Managers must invest in sustainable technologies which require also a modern set for financial instruments able to assure a high efficiency of the business and a high environmental protection.

**Rezumat:** În perioada contemporană, problematica conservării și protejării mediului ambiant astfel încât să se asigure o dezvoltare sustenabilă viitoare a acestuia este din ce în ce mai acută. Pentru a obliga practic agenții economici să investească în tehnologii durabile, în țările dezvoltate deja s-au propus și implementat un set de instrumente financiare care să fie avantajoase atât eficienței afacerii, cât și protejării mediului

**Key words:** sustainable development, environmental protection financial instruments, environmental adjusted net domestic product

**Cuvinte Cheie:** dezvoltare durabilă, pârgăhii financiare de protejare a mediului, ecoprodus intern net

#### INTRODUCTION

The government of each country has the duty to manage the economy so as to give the highest possible standard of living to the people – and this includes providing a prosperous environment for its businesses. The stewardship of the economy will aim to create the best possible environment for business in order to promote the development and growth of new and existing enterprises. Success in shaping such an environment will help promote employment and economic growth as businesses thrive in a positive atmosphere.

Managing businesses so as to minimize the adverse impact on the environment now attracts an enormous amount of media and public attention. Society has come to expect higher standards of environmental performance. Opinion surveys conducted by the Department of the Environment showed that in 2006, more than one third of those responding considered environmental matters as one of the most serious issues facing the government. The media attention given to the environment has both been stimulated by and as a response to the public interest in this topic. As a result, it has elicited a significant response from businesses. Firms have become aware of the importance of being seen as environmentally responsible and reacting to the growth of “green consumerism”. But, indeed, the contemporary economic systems proved that they are unable to solve the environmental issues the international economy is confronted with. These issues exist in the whole world, in all the sectors (private, public, governmental and non-profit) and are an alarm for our future.

At the middle of the 20th century, firms started to use their caring social policies as a basis for their future.

The global economic growth is higher and faster while South America, Asia and the Eastern Block try to copy “the west development models” able to assure a minimum level of welfare. But, economic growth means ecological problems too. The contemporary environmental strategies use to heal partially the effects of pollution, while the real disease is

still growing. That means that society is confronted with great real environmental issues. Governments are developing ranges of legislation able to cover the most aspects of environmental pollution. Because of that, there exists a pressure on businesses to redesign products so as to eliminate those that are the most damaging for the environment. Thus, a new generation of environmentally friendly products is being developed. Some firms have invested huge sums in order to achieve this.

“The law of water protection” and “The law for fresh air” (USA) are regulations which gives birth to a new field: environmental protection, which has two distinctly domains: the evaluation of the environmental quality and to prevent with new techniques the environmental damages. Using the national law system, each country use to establish pollution standards; that’s why, as a result, the output and sales of polluting products will fall and the new techniques eliminated or used to reduce the pollution. The production costs include new rent and rates, labour, material and transport spending. These are relatively easy to calculate and are employed in the calculation of profits. However, the environmental lobby has increasingly felt that the true cost of production should include also those costs borne by a third part – the social costs of production.

The producers who don’t respect the established pollution standards are punished through penalties, which should be fix or progressive and are calculated using as reference the quantity of pollution. The progressive penalty has the technical name: “pollution tax” or “environmental tax”.

Costs that businesses impose upon society include noise and congestion as well as air and water pollution; all of these can affect other local businesses and residents. If the polluting business either had to pay compensation to the third parties affected or adopts new (and presumably more expensive) production techniques, than the cost of production would be higher.

Possibly, the most significant implication of the environmental question for businesses applies to production processes. These are often major sources of air, water and noise pollution and frequently result in large amounts of waste products, some of which are toxic in nature. Businesses are now being increasingly forced to invest in new factories and equipment by legislation as well as by the need to maintain a clean public image.

## **MATERIALS AND METHODS**

Technically, fiscal policy can be said to refer to a policy based upon taxation. However, we shall use the term in its broadly accepted meaning of policy relating to the management of taxation and government expenditure. The possibility of controlling the economy by such means was only fully appreciated in the years immediately preceding the Second World War following the revolution in economic thinking brought about by the work of John Maynard Keynes.

The international taxation system has evolved rapidly over the last two centuries. We already know that our current taxes can be split into two broad categories: direct taxes on income and capital, such as income, corporation and inheritance taxes; and indirect taxes on expenditure, such as VAT and excise duties. But, a new category of taxes is largely used today with the classic taxes together. This is a major category of environmental taxes.

In the last decade of the 20th century, producers have the possibility to manage their own pollution. With the new methods, using economic instruments able to lower the pollution level made producers to sustain largely the scientific research in that field.

The economic instruments which are a real hope to protect efficiently the environment are methods used partly for the negotiation of the ecological relationship between the manager

and the government, and partly they are fiscal advantages given by the legal authority to sustain beneficial actions/activities in the environmental field. These **economic instruments** are:

1) **Non-fiscal instruments**, which means taxes established through the fiscal policy (taxation legislation) and which are variables depending on the consume level of the environmental elements. Non - fiscal instruments are:

a) **Utility taxes/rents** are those established for the use of public goods and services. These taxes reflects the real cost of the resources needed in the production process and are proportional with the consume level.

b) **Consignment taxes** are established for the recyclable wastes, which could generate a huge pollution. The procedure is, to percept a “producer tax”, needed to obtain in change, a place to store the waste products. The taxes are returnable when the producer recycles the waste.

c) **Negotiable licenses**, are an efficient way to stop the pollution and to increase the industrial production, without an ecologic danger. That means to establish using an impact study the quantity admitted to be produced of each waste, without the harming of the environment. In the case, other producer can't obtain easy these license because he used a polluted technology, he can negotiate with another producer to obtain from the last a part of the authorized waste quantity, with the condition that, the other producer use “environmental friendly” technologies. This operation is a licenses negotiation, which requires a cost/price.

d) **Credit advantages** are not non-fiscal instruments, but they have a huge importance in the transitional economies. It means to credit the investors which respect the environment. In a free market, where the capital market is private, it is difficult to obtain such credits which aren't an advantage for the creditor (because the interest rates in that particular case are low and long term).

In time, the licenses systems could stimulate environmental friendly technologies and create life styles.

2) **Fiscal instruments** are the result of the direct implication of government in that domain.

a) **Ecological taxes** are the most efficient and the easier to use fiscal instruments, because, in that case is not needed an attentive surveillance of the pollution emissions. It means that, to stimulate the reduction of the pollution emissions by diminishing properly the taxation. The pollution standards just remain a limit value which can't be exceeded, but, for each pollution reduction is diminished proportionally the tax calculated using the waste level.

b) **Fiscal incentives** are a governmental subvention for some activities or investments.

In the case of the investments, the fiscal incentives use to stimulate the businesses which apply environmental friendly technologies.

The financial instruments are a strong incentive to protect all the activities which protect the environment.

These instruments are differentially operative, and these differences depend on the activity or the ecological state of the country (developed or developing countries).

In the future, at international level we will assist at a growth of the value of the funds coming from environmental taxes. The centrepiece of the financial system is the Environmental Protection Legislation from each country, which introduces the notion of Integrated Pollution Control which recognizes that to control just one aspect of pollution is inadequate since the environment is an integrated system – damage to one part means damage to the whole. This legislation requires businesses to minimize pollution as a whole, rather than

simply concentrate on one aspect. That way, the unemployment problems will be partially solved, because of the growth of “clean investments” and of the sustainable economy.

The principle that “the polluter pays” is a global one, which strengthens the environmental controls on industry. It sets higher standards for industrial emissions, effluents, waste disposal and resource management and provides the instruments for tougher enforcement.

Using the above stated principles, huge sums are taxation ally transferred in the environmental accounts.

That way, the government’s policies is classified and is generating an impulse towards modern taxes (the ecological one).

Fiscal policy is not the negative side of the environmental policy, because, that “green taxes” may improve the economy. Surprising is that, countries with low experience in that field (like the planned economies are) implements the most complex ecological taxes. This taxation system wants to avoid pollution. The production of wastes (under the standards limit) is exempt from taxation. But, the corruption and inflation of the ‘90s weakens the power of the taxes; so, to pay this tax is better than the control of pollution. In those “communist countries”, a lot of companies are still public property and they transfer the spending to the consumers and governments. That’s why, these companies are not sensible at the market changes. Indeed, the contemporary tax system may be a solid base of what should in the future become a robust set of ambient taxes.

Instead the pollution taxation, some governments use to bid licenses for the right to pollute and exhaust the resources. Using this system, the society can impose a maximal admitted limit for the pollutants quantity and resource utilization (yearly), and to permit the free market to establish a price. In contrast with these method, using ecologic taxation the government establish the price and allow the market to decide the quantity. But, this “fiscal market mechanisms” are comparable: both can generate governmental funds and use the market to discourage the environmental destructions.

Nowadays, exists hundreds of environmental taxes, putted on: production of CFCs, damage of the marine life, PET packaging. But, most of these taxes are modest or low and unable to affect the economic and social environment. These taxes are used to finance the environmental programs. But, in the northern Europe are used with high efficiency the market mechanisms. In 1991, Sweden made the first environmental taxes translation. He lowered the income taxes with 1.65 billion \$ and initiated an SO<sub>2</sub> tax (3050 \$/ton), a CO<sub>2</sub> tax (120 \$/ton) in 1995, and other environmental taxes. After a year, the SO<sub>2</sub> pollution was decreasing with 12%.

## **RESULTS AND DISCUSIONS**

The necessity of altering business practice and policy to take account of pollution estimation and the damages he create is the main characteristic of the environmental economy. After the estimation of the pollutants effects, it’s difficult to establish in money the real damage generated.

It’s not easy to create a unique tax and a license system possible to be applied in the whole world. But, the environmental market system must not be regressive; it’s not allowed to collect more “ecological” money from pours than from reaches. To avoid such discrimination, politicians must be able to promote a progressive tax system. A harmonization of the environmental taxes will be a solution. Businesses are also affected by international agreements aimed at dealing with environmental problems. Indeed, some people argue that the only realistic response to protect the environment is on a global scale – for example, the control

of the production of ozone – depleting chemicals throughout the world or acid rain, or global warming.

New processes and products affect the human side of organization as well. Change can sometimes be difficult to introduce, though many workers welcome changes intended to help protect the environment. New processes can result in redundancies as some jobs and skills become obsolete. It can, however, lead to the recruitment of people with new skills or to the retraining of existing workers in new techniques. A major area of training is that of environmental management. This entails ensuring that managers are aware of current environmental legislation, developing processes to meet the new – legislative requirements and monitoring the changes implemented. Studies on behalf of the government suggest that even the largest firms are deficient in this respect and that further training is necessary.

“Environmental market/systems” seems to be a revolutionary policy, which is integrated in the main area of businesses. We can see what a global fiscal reform means to build up coalitions which have the power to transform a vision into reality.

Governments are able to make rapidly all that changes. Society expects higher standards of environmental performance from businesses. The implication of environmental protection for businesses is profound; they require a corporate response which affects all aspects of business behaviour. The exact nature of the response will depend upon the nature of the firm and its products.

Governments must implement the tax changes in a rhythm able to permit the individuals to adopt themselves.

That way, slowly, the industrial – sustainable economy is formed. Like an ecosystem, global economy is developing rapidly reaching finally the moment when he must function like a natural environment, because, if not, the human life will be in danger.

From the fiscal and environmental point of view, market mechanisms concerned effectively with ecological issues will be larger and larger. The developed countries are responsible for the high polluting with chemicals and oil refining.

However, as with many changes in the business world, the environmental issue provides commercial opportunities.

Nowadays, a lack of balance is that individuals expect to loose after the implementation of the ecological destructive businesses. For politicians, to apply pollution taxes means a hard work: that happens because; one side they are an opposition coming from the industry and, on the other side the public is not well informed. Sometimes, politicians spent money to sustain environment protection programs (but, these strategies are viable only in the developing countries). In a long term, such strategy may limit the market mechanisms at a minor role in struggling against the environmental programs. The way these taxes are used, will affect the effects of the market mechanism upon the jobs and the economic development. At the same time, they determine the political future of a country or region.

The financial market instruments form the economic activity and are able to generate funds used in other purposes. That permitted them to serve the environmental sustainability. The ecologic economy development makes changes in the structure of the GDP. That's possible because they exist countries where, the environmental factors are incorporated in the evaluation of the gross domestic product.

## **CONCLUSIONS**

But, this evaluation seems not to be correct. That's why a lot of evaluation done before in that domain uses another concept: Environmental Adjusted Net Domestic Product, an indicator able to reflect and evaluate the economic welfare. The EANDP proposes to account

the human resource consume diminishing the use of natural resources, in the idea that, welfare means first of all: sustainable development.

Welfare means the quantity of money an individual have / earn. The environmental issue provides commercial opportunities too. Firms who can be seen to meet society's need for a cleaner environment will gain a competitive advantage.

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