Role of Fiscal Instruments in Environmental Policy Development

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Abstract
The present article "Role of fiscal instruments in environmental policy development", discusses the evolution of environmental policy at EU level. This paper demonstrates the importance of using fiscal instruments to increase efficiency and effectiveness of environmental policy implementation. In this context, is noted the link between environmental policy and fiscal policy, which relies on incentives at national, European and world level. This interdependence between the two policies can be seen in legal documents adopted by the European Union, among which we mention the Single European Act or the Treaty of Amsterdam.

The evolution of environmental policy and changes made to it are reflected in the corresponding objectives and priorities. Also an increased number of its instruments of implementation are mentioned, as follows: legislative, technical and economic-financial.

Key words: tax, fee, environmental policy, fiscal policy

1. Introduction
During the last years, the environmental policy has turned into one of the major challenges of the European Union, due to the complex issues arising in the majority of sectors of various economic, social and also political activities. In this context, it was necessary to create and develop a community environmental policy, fact achieved in 1972 and by which was pursued the involvement of all economic agents, of population but also of political representatives in diminishing the effects of any pollution-type on the environment.

Improving and maintaining a favorable situation regarding environmental protection implies a common duty, and the responsibility of strictly complying with existing environmental standards, as well as implementing a reporting system about the state of the environment, of the extent to which environmental policies were enforced, and efficient use of financial resources in view of solving environmental issues of areas severely affected by air, water, ground pollution and last, but not least, increasing and diversifying legal and economic-financial issues required for stimulating or diminishing various activities within the entire state structure with the purpose of diminishing negative consequences on the environment.

At the same time, at European Union level reaching the objectives implies increasing requirements and exigencies, materialized by implementing market instruments – environmental taxes or subventions directed towards this field, representing, according to the opinion of the experts, an efficient way of protecting and improving the “pressure” on the environment and an incentive for the economic agent to opt for ecological production, and for the civil society to encourage consumption of bio-products.
2. Development of the environmental policy within the European Union

In accordance with the development of the human society, the improvement of the environment’s quality became a concern increasingly obvious for the entire civilization, which implies financial and organizational efforts corroborated with formulating some scientific concepts both at national and international level.

Thus, within the Community area, the environmental protection activity becomes a necessary component of developing the economic sector, but also of the sustainable development of society. For this purpose, in 1973 the then European Community elaborated the first Programme of Action for Environment (PAE 1) which approached issues regarding the necessity of protecting water and air strategically and on long term. In view of continuing this program, in 1978 were enforced by means of directives and regulations measures for harmonizing at Community level the environmental procedures regarding the protection of air, water and ground known as PAE 2, which was to be achieved until 1981.

After this initial period, the Program of Action for Environment 3 shall reflect the influence of developing the single market on environmental aspects, emphasizing the shift from qualitative approach of environmental standards to the one centered on polluting emissions.

Also, during the same period is marked the signing of the Single European Act on 17 February 1986 which highlighted a “new state in the process of achieving the Community Internal Market and re-launched the Community action representing a very important moment in the history of the European Union” [1], and turned into the main document by which environmental protection gains legal basis within the European Community Treaty, aspect provided for in Art. 1 “The European Communities are founded on the Treaties instituting the European Community of Coal and Steal, the European Economic Community, and the European Community of Nuclear Energy, as well as of the Treaties and subsequent documents for their amendment or addition.”

In achieving the Internal Market, the Single European Act introduces:
- the principle of economic and social cohesion;
- cooperation between the representatives accredited to third countries and those of international organizations;
- in the field of cooperation “the technological and industrial conditions necessary for security”, etc. [2]

In accordance with the development of the Internal Market is necessary to implement a new action programme for the environment (PAE 4) characterized by creating economic incentives and implementing programmes for Evaluating the Environmental Impact and having as purpose the enforcement of the Framework Strategy for Sustainable Development.

The fifth Action Programme marks the shift from the old approach to implementing and using economic and fiscal instruments among which there could be reminded: the LIFE programme, Structural Funds and Cohesion Funds, but also the possibility of consulting with involved parties in developing these programmes or environmental actions as component of the decision making process.

Yet, the environmental policy undergoes continuous development, more emphasized as of 1 May 1999 by the enforcement of the Treaty of Amsterdam, act that will change the Treaty of the European Union. The articles of the new Treaty emphasize the role of the citizen, strengthening the democratic character of the institutions, and from the environmental viewpoint the novelty element consists in changing the environmental policy
in a horizontal policy, so that within sectoral policies the aspects related to environmental protection turn into one of the compulsory components.

For the period 2001-2010 “Our Future Our Choice” is the 6th Programme of Action for Environment PAE 6 that proposes “five major directions of strategic action: improving the implementation of current legislation, integrating environmental concerns in other policies, market closeness, empowering the population as private citizens and granting them support in changing attitudes, taking into account environment in relation to land use – decision planning and management”.[3]

Yet, an important role in finalizing the environmental policy is given by the existence of the current European legislative framework in the field, represented by protocols, programmes, regulations, decisions and directives about environmental protection.

3. Impact of using fiscal instruments on the environmental policy
In time, the fiscal area was subjected to changes generated by the altered economic conjecture, by the stakes of sustainable development. These changes aimed the fiscal regime as a whole both at national and European level. In view of achieving the single market, is noticeable the importance of implementing a harmonized and coordinated fiscal legislation in all European Union Member-States. Fiscal instruments corresponding to the environmental policy are no exception to the rule.

At European level, within the category of fiscal instruments were included taxes on pollution, entry- and import taxes, called generically coercive instruments. Currently, environmental taxes are regarded as the most efficient instruments on the market used for achieving the major objectives of the environmental policy.

Also, it shouldn’t be omitted the fact that their role is of diminishing environmental pollution factors and of creating or feeding the required funds for environmental protection; consequently, environmental fiscal instruments should have a stimulating character for determining the potential polluters to act so as to diminish the negative effects of environmental degradation.

At European Union level, environmental taxes were treated depending on the four large categories, respectively taxes on energy, transport, pollution and resources. The weighted average of incomes resulting from these taxes expressed as share of the GDP for the period 2000-2009 was comprised between 2.4% and 2.7% at EU-27 level, as compared with the Euro area where for the same period were recorded values between 2.3% and 2.6%.

In this context, it can be stated that even though the number of environmental taxes and their amount decreased within the European Union, the cashing originating from these taxes are relatively low. The states with the lowest budgetary incomes realized from collecting environmental taxes were in 2000 Estonia with 1.7% of the GDP, Poland with 2.1% of the GDP and Spain with 2.2% of the GDP, while in 2001 the lowest collection level was registered in Slovenia with 2.0% of the GDP. For the years 2002-2003, the average of environmental taxes in total incomes computed as share of the Gross Domestic Product was comprised between 1.9%, in the case of Estonia and 2.2% in Slovakia. For the period 2004-2005, a slight increasing trend was recorded, by approximately 0.4 pp in Lithuania (2.3%), as compared with Spain where the level stagnated at 1.9%.

Once with the emergence of the first imbalances generated by the financial-economic crisis, in the field of environmental taxation were recorded decreases by about 1 pp at the level of the 2006-2007 period and of up to 2 pp in the subsequent period, that is 2008-2009, the country with the lowest collection level being Spain (1.6% of the GDP).
Yet, at EU-27 level there are states which collected at the level of national budgets a substantial amount from incomes originating in such sources. The states with the highest incomes from environmental taxes expressed as share in GDP are shown in Table no. 1

Table no. 1. Incomes from environmental taxes expressed as share in GDP

<table>
<thead>
<tr>
<th>Period</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>5.3</td>
<td>5.2</td>
<td>5.4</td>
<td>5.2</td>
<td>5.6</td>
<td>6</td>
<td>6.2</td>
<td>5.9</td>
<td>5.7</td>
<td>4.8</td>
</tr>
<tr>
<td>Netherlands/Cyprus*</td>
<td>3.9</td>
<td>3.8</td>
<td>3.7</td>
<td>3.7</td>
<td>4</td>
<td>3.9</td>
<td>4</td>
<td>3.8</td>
<td>3.8</td>
<td>4</td>
</tr>
<tr>
<td>Malta</td>
<td>3.7</td>
<td>3.7</td>
<td>&lt;3.5</td>
<td></td>
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As outcome of performed studies at European level, the conclusion was reached that “taxes on energy are by far the most important, representing approximately three quarters from fiscal incomes, the average being placed around the value of 20% from total taxes and social contributions”.[4]

From the viewpoint of pollution taxes, these represent a low value in total incomes. In order to improve this deficiency was introduced the tax on toxic emissions and SO2 emissions, a price that had to be paid by polluters depending on the quantity of sulph dioxide released into the atmosphere. At the same time, the European Parliament and the European Council implemented the Regulation no. 715/2007 of June 20, 2007, in view of fulfilling the EU objectives regarding air quality. For this purpose, “are necessary additional diminishments to emissions originating from the transports’ sector (air, maritime and land-transport), from households, and form the energy field, from the agricultural and commercial sector. In this context, the task of diminishing emissions originating from vehicles should be approached within a global strategy. The Euro 5 and Euro 6 Norms constitute one of the measures meant to diminish the particle emissions and precursors of ozone, such as nitrate acids and hydrocarbons.”[5]

Also, in view of determining the emission norms the implications on market will be taken into account as well as the extent to which competitiveness shall be affected between producers, along with identifying the value of costs borne by economic agents, improving the air quality, as well as the global impact on dioxide carbon emissions. Yet, all these changes shall inevitably attract the introduction of new taxes on environment, that will increase the fiscal pressure already felt in this field.

At Romania’s level, these norms are found in the Law 9/2012 which, according the Art. 1 “determines the legal framework regarding the implementation of the tax for polluting emissions originating from vehicles”, the amounts cashed from instituting this tax, as mentioned in Art. 2 “constituting incomes to the budget of the Fund for Environment, in view of financing the programmes and projects for environmental protection”.

The calculation of the tax is realized on grounds of the Governmental Emergency Ordinance 1/2012, Art. 6 para. 1, letter a) “ for vehicles from the category M1 for which correspond the pollution norms Euro 3, Euro 4, Euro 5 or Euro 6” by using the following calculation formula:

\[
S_p = [(V_c \times T_1 \times 30\%) + (C \times T_2 \times 70\%)] \times (100 - c)\%,
\]  

(1)
Where

\[ S_p = \text{amount to be paid}; \]
\[ V_c = \text{combined value of CO2 emissions, expressed in grams/km}; \]
\[ T_1 = \text{tax for polluting emissions expressed in Euro/1gram CO2}; \]
\[ C = \text{cylinder capacity}; \]
\[ T_2 = \text{tax for polluting emissions on cylinder capacity}; \]
\[ c = \text{share of tax diminishement}. \]

By establishing a relationship to the statistical records realized in the period 2000-2009, the share of taxes on pollution as share in GDP at EU-27 level was maintained around the value of 0.1%, and respectively 0.2%, and for Romania the average value of this period was of 0.1% and with a maximum value in 2001 of 0.4%.

If we would realize an analyses of the pollution taxes from the viewpoint of their share in total environmental taxes, then it can be stated that the yearly average within EU-27 was of 0.4% in 2002-2009, the highest share being recorded in Denmark – 3.6%, corresponding to the year 2008, much over the maximum percentage obtained in Romania, respectively 1.3% in the year 2001.

The development of the pollution taxes’ share in total environmental taxes in the period 2000-2009, EU-27 as compared with Romania, is highlighted in Figure no. 1.

![Figure no. 1 Share of pollution taxes in total environmental taxes 2000-2009 in the period](image)


A relative importance in the field of environmental taxation have the transport taxes which within the European Union (27), computed as arithmetic average do not exceed 0.7% from GDP, and at Romania’s level their value varies between margins from 0.1% to 0.4% of GDP, in a period of approximately 10 years. The situation of transport taxes related to total environmental taxes within EU-27 as compared with Romania is exemplified in Figure no. 2.
By analyzing the graphic it is noticed that at European Union level transport taxes have registered an increase of approximately 1.7 pp in 2001 as compared with the year 2000 followed by a decreasing trend up to 2009 of 0.3 pp., and the situation of Romania highlights an increase of up to 1.1 pp corresponding to the year 2008.

4. Conclusions

The present study presents an analysis of the environmental and fiscal policy development, particularizing the environmental component of the latter, for a period of approximately ten years, marked by frequent reforms of both policies under the influence of economic, financial, and social factors of this period.

As result of this analysis it results that even though the environmental instruments were diversified, a low level of cashing is registered which is due to faulty collection of these taxes, to low shares and to imperfect enforcement of the legislation in the field or, why not, even due to the permissiveness of the legal framework.

At the same time, budgetary incomes of the EU Member-States originating in environmental taxes include to a considerable share excises for fuels, respectively petrol and gas reflected in the final price of fuels. The share of these categories of indirect taxation in the fuels’ price on the European market varies between 43% and 60% per thousand liters for petrol and for gas between 39% and 59% per thousand liters, in accordance with the data mentioned in the last Bulletin of the European Commission regarding the energy market.

In this context, the sustainable development policy becomes hardly achievable, and the state of the environmental factors will not be improved, unless following conditions are met:

- environmental protection shall become a joint obligation of all individuals, proven by strict compliance with the environmental standards;
- development and implementation of efficient national policies for promoting sustainable development;
- efficient and effective use of existing financial resources.
References
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