THE IMPORTANCE REORGANIZATION TAXES AND REORDERING FISCAL PRIORITIES FOR SUSTAINABLE DEVELOPMENT OF THE ENVIRONMENT IN ROMANIA

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Abstract

This article discusses the major challenges in the field of environmental sustainability: the reorganization of taxes and reorder fiscal priorities. To propose a viable solution to address these issues presents a comparative analysis between two EU countries which shows that 80% of environmental taxes in Germany are linked to energy taxes, while in Romania the highest proportion of the total excise duty on fuels derived. Other potential areas taxable provide 10-15% of total revenue for the environment. Romania is the country with the lowest environmental taxes in Europe, and should consider gradual increase in these fees reduced performance reveals environmental taxes. This is one of the reasons why Romania, unlike Germany fails to promote effectively the goals of environmental protection and sustainable development. A double impact on environmental sustainability in Romania could increase revenue from environmental taxes in an environment of budgetary crisis.

Keywords: economic environmental tools, environment taxes, fiscal priorities, sustainable development of the environment

JEL classification: Q48, Q52, Q56

1. Introduction

For more than twenty years the humanity tries to create equilibrium between the economic activity and the natural capital. The difference between the usage of natural resources, the productive potential, the demographic raise and the medium/long term ecological sustainability capacity is more and more obvious. The necessity of a change in people's mentality and also in the production and consumption practices has been developed in a new concept of sustainable development.

It is important of using taxes as an instrument of obtaining the correct price on the spot, but also of imposing the positive effects of development, desired and backed by political will and scientific basis.

An adequate development of the environmental taxes cannot be done without a vast collaboration between specialized organs in finance, vast scientific research in the field, with the positive approach of the political parties, national governments and unions that are integrated on a global scale.

2. Economic and fiscal stimulative instruments

The worsening of the ecologic problem has generated a wide reflection and debate over the means of public politics strengthening and increasing their effectiveness. Supported by an organization such as OCDE, the idea that the environment protection and sustainable development objective cannot be achieved without a diversification of the means of intervention and public politics instruments starts to take over. The classic approach of the ecologic problem, administrative and regulatory, is completed more and more by an economic one based on various stimulative instruments.

The concept of economic instrument is difficult to explain. Starting from the OCDE documents, UE and the doctrinal considerations, this category regroups an ensemble of instruments: tradable permits, fiscality, liability for ecological loss, the environmental certification of the products and the means of production, negotiated agreements and the social responsibility of a company. First of all,

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among these instruments, there is the fiscality which is composed by fiscal taxes and covers tax exemptions. Regarded such that fiscal expenses are reduced sources of fiscal inputs for the recipient of the taxation, the fiscal spending have the advantage of being more popular but with a cost which cannot be negligible for public finances.

Other economic instruments which can be used in the environment area are: subsidies (loans given by a public authority in order to stimulate an ecologic behavior), royalties for the service brought (administrative taxes), permits and emission rights recently appeared, etc.

3. Environmental taxes

The legislative politics of many States has revealed four main economic and fiscal stimulation means, useful for environment protection: taxes, grants, consignments systems and pollution stocks.

Taxes are used to sanction the environment harmful activities. When the limitation of excessive usage which leads to the degradation of the environment is necessary, the production or marketing costs will rise. At international level, there are various types of taxes or royalties, each of them having a precise goal:

a) Taxes to finance a public or private system for collecting, recycling and elimination of waste;

b) Taxes of pollution, which can be used to reduce the emissions from big and medium industrial companies; they can be monitories at a reasonable expense. These can be applied in the case of atmospheric pollutants (CO2, sulfur dioxide, nitrogen oxides and water pollutants such as organic materials, solid suspensions, heavy metals).

These taxes are named pigouvian taxes, being designed for price collection through taking into account the external costs.

The main purpose of pigouvian tax is the economic efficiency. For example a tax for emissions takes into account three elements:

-the reduction of the quantity discharged: the tax increases the marginal cost of production which reduces the equilibrium quantity available on market

-technical substitutions: the tax forces the company to use technologies which do not pollute as long as the cost of decontamination is lower

-development and research: the tax induces the company to develop new techniques of production and decontamination in order not to pay the tax

c) Taxes for financing the loss repairmen

For example: the tax on oil and chemical products in United States which feeds directly the elimination of dangerous products fund; taxes on aircraft produced noise feeds the riparian compensation funds of the airports; taxes imposed by the water administration are used to help the ones who purifies them.

From the point of view of resources allocation, the advantage of financial taxes may be:

-regarding the economic optimum, the financial tax induces that every public service made must have a price;

-regarding the environment, the tax works as an incentive that decreases the volume of emissions and waste;

The main goal of the tax is funding, the problem being analyzed from the point of view of State through pricing the public services. The effect is that the marginal cost is positive (null if the public service is funded through a tax that has nothing to do with the use of the service).

A tax implies the acceptance of some terms:

-a freedom of adaptation of those who pollute depending on the tax rate (which is not tolerated in the case of hazardous substances);

-a society must accept a residual pollution, which should not be accepted for those pollutants which would better be forbidden;

-the results of the tax are imprecise and delayed there is an uncertainty in what concerns the results.

The fiscal instrument inserted should be predictable and relatively stable in order to allow the ones involved to planning their investments against pollution; the tax must be easy to understand and implement and the cost of these activities must be low.

In order to be introduced in the tax practice and to be easy to apply, the taxes must answer a series of criteria which form the laws of fiscality: simplicity because a tax hard to calculate is difficult to implement. At the expense of efficiency it is necessary to be found an optimum solution, a middle way between a simple tax, less efficient and a hard to implement tax, transparent-the clarity of the tax objectives, the type of pollution and the means of usage of the amounts collected.

The taxation of the activities with a high impact on the environment is part of the Market-Based Instruments (IBP in Romanian) which represents one of the most powerful instruments of change concerning the model of resources usage every State has.

In Germany, the tax for coal combustion, introduced in 2006 had the value of 1.98€/GJ. , and in 2011 it raised to 2.5€/GJ. With the promotion instruments Germany is using in present, the heating market will double in 2020 comparing with 2010. Therefore, the Government of Germany is applying the following economic instruments:

-compensates a quota system for the fuels coming from sources of renewable energy;

-provides payments bonuses (buying) based on the private relations of change;

-approves funding (capital grants).

4. Energy taxes

Energy taxes include the taxes on energy products used for transport but also in order to power the stationary equipment. The most important products used in transport are gasoline and diesel. Among the products used for the stationary equipment are the natural gases, coal and electric energy.

Romania has a decrease of taxes on energy starting with year 2000, being on the last places in the European Union(with percentages between 1.9% from the value of GDP) comparing with Germany, which has a significant decrease in 2007, following that in 2010 to apply higher taxes for CO2 emissions. The evolutions can be explained through the actions of limitation of National Governments over constant rise of the natural gases and oil prices effects in the last years and through the accentuation of other instruments usage in order to achieve environment objectives (Figure 1).

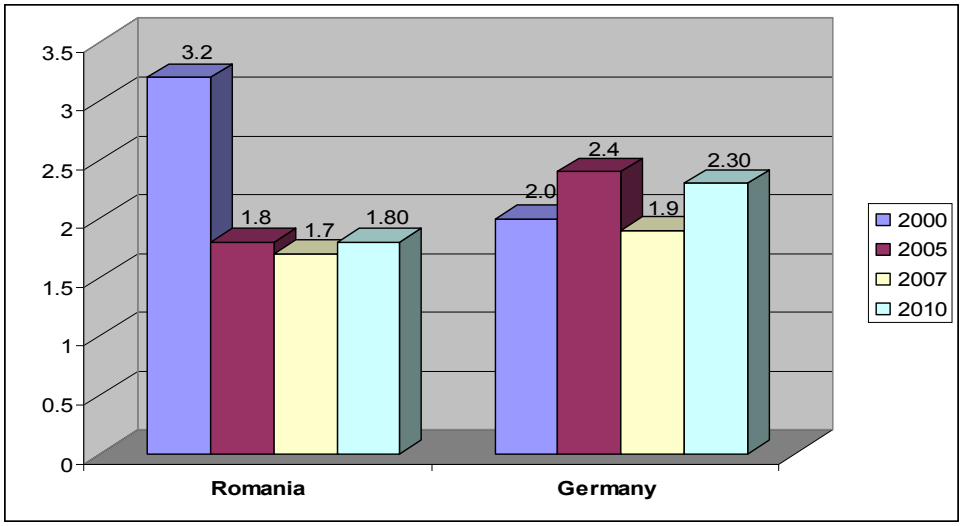

Fig.1. *The evolution of incomes from energy taxes (% GDP)*

Source: Umweltbundesamt/ Energiesteuern

The key measures used in these sectors are the construction and renovation of efficient heating systems with the reduction of CO2 emissions from a total of 31 million tons of CO2. An additional incentive is the Building Renovation System, State financed.

The high usage of cogeneration and renewable heat generation, in the household area and in the tertiary sector has reduced the co2 emissions until 18 million tons of CO2 a significant value registries in the last 2 years.

The taxation of energy is a national decision which generates systematic incentives in order to adopt efficient measurements of emissions reduction. From the energy consumer point of view, this taxation is advantageous economically speaking only if these marginal costs of avoidance are lower than the national rate.

The law offers to smaller companies a limit for reimbursement of energy tax. The ones who have consumed a small amount can receive the money back. For the companies in the producing industry (agriculture and forestry) which consume more than 25000 kWh of electricity per year, the environment tax is reduced from 2.05 cents/kWh to 1.23 cents/kWh.

Starting with the first of January 2008, the medium and small companies have the right to a reimbursement of eco-tax, in the case in which they have a minimum annual consumption of:

-heating oil: 12.530 litters (previous 25.100 litters);

-natural gases: 93.200 kWh (previous 140.00 kWh);

-GPL: 8460 kg (previous 140.000 kWh) euro/ kWh;

• GPL: 24,24 euro/kg.

For the individual consumption, the amounts of reimbursement are highlighted below:

-heating oil: 16.36 euro/1000 litters

-natural gases: 2.20 euro/1000 litters

-GPL: 24.24 euro/kg

In 2011, the taxes for energy continued to rise. While the fiscal incomes have risen, the energy tax rules have changed. The renewable energy law encourages the extensions of the installations which produce electricity from renewable sources of energy. The EEG tax rises to 3.53 cents/kWh; the cogeneration tax falls to 0.03 cents/ kWh (Figure 2).

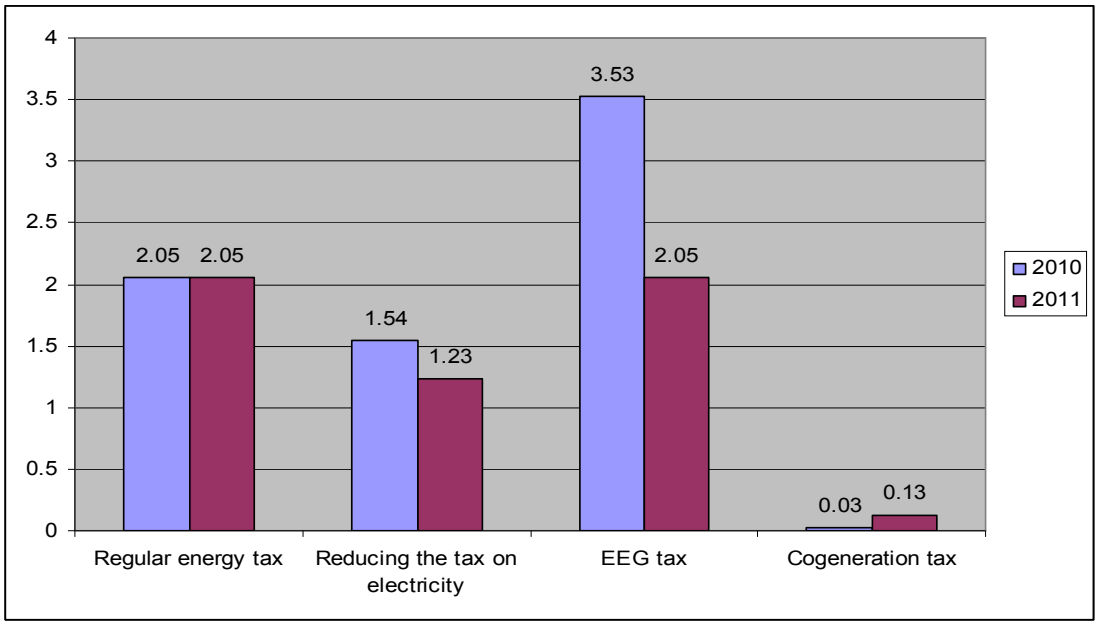

Fig.2. *Evolution of the price - taxes for energy*

Source: Umweltbundesamt/ Energiesteuern

The share of energy costs from the total energy costs varies even at the level of germen energy sector between 1%- 10%. This variation reflects the different taxation of fuels by reducing the fiscal tax share. On average, the costs associated with energy represent between 8%-14$ from the industrial sector costs.

Starting from 2002, in Germany, there have been allocated 550 million euro for annual reduction of emissions-193 000 tons of co2. By this action, in 2010 the quantity of CO2 emissions has been reduced with 17.000 tons.

This action may continue with a reduction of emissions by 2035 from 2.9mil tons to 3.2 mil tons of CO2.

In 2011, Germany had an emission tax of 23 euros/ton of CO2. These 23 euros are necessary to save a ton of CO2 in high quality carbon projects for developing compensation. With this amount, the quantity of greenhouse gases lowers and the costs for certification and management are covered.

Every month, a household pays on average 32 euro; more than in 2000 for the same quantity of energy and 14 euros for the transportation cost. This in turn generating the rise of prices.

5. Forecasts for 2020-2030

Through the rise of fuel energy tax, there will be created many efficient economic incentives for the economy of fuel and for CO2 emissions reduction.

The rise of taxes may lead to an annual report of 3 cents/liter from 2012 through the tax rates of energy, presented in the table below (Table 1). These form with the help of a basis of calculation a potential emission reduction.

Table 1

The rise of energy taxation rates between 2020-2030 2005

	2000	**2020**	**2030**
Energy tax without shares gasoline/diesel (cent/l)	65,45 / 47,04	65,45 / 47,45	65,45 / 47,45
Energy tax with shares gasoline/diesel (cent/l)	65,45 / 47,04	95,45 / 86,64	125,45 / 116,64

Source: Umweltbundesamt/ Energiesteuern, march 2011

In both states, energy taxation should be levied according to the carbon content of each fuel. Environment Agency proposes that the Federal Government of Germany to implement this adjustment gradually from 2012 to 2016.

The actions of economic instruments (Table 2) provided for the period 2020-2030 increased taxes on petrol and diesel by 30 cents / l and 40 cents / l In the absence of taxes uses higher tax rates will not act effectively against CO2 is likely a phenomenon of long-term increase in pollution.

Producers of electric energy from renewable energy: biomass, bio liquids, biogas can benefit from the promotion system established through law only if they have certificates released by accredited bodies, which attest the origin of their sources.

Table 2

Economic instruments of renewable energy promotion

	Share obligations	Certificates green	Tariffs "feed-in"	Exemptions fiscal	Taxes	Regularization	Subsidized loans
Germany	X		X	X	X	X	
Romania	X	X			X		

Source: data processed by the authors

In Germany, the main things on which the promotion instruments are based on can be:

-the objectives of CO2 emission reduction until 2020;

-energetic efficiency;

-internalization of costs in the transport sector.

Another essential idea on which Germany relies on is the bonus from the cogeneration tax or from the innovative technologies which can be considered an efficient incentive for the up gradation of energetic efficiency. An expected outcome is that 90% of the produced energy can be recovered, in comparison with the current power plants which have an efficiency of 48%.

6. Conclusions

From the information presented above, Germany as well as Romania uses two important instruments in order to achieve the objectives for climatic changes control: taxes on energy and selling emissions.

For promoting the renewable energies, a household pays approximately 10 euros, an acceptable amount for the population's income.

The promotion of renewable energy resources supposes high costs and bigger investments but the final price will be fair. A percentage of 88% from the German population wants the external costs calculation on the energy bill.

A comparative analysis between Romania and Germany shows that 80% of German environmental taxes related to energy taxes, while in Romania the highest proportion coming from all excises on fuel (petrol and diesel). Other potential areas taxable (CO2 emissions from air transport, agriculture, waste) get only 10-15% of the total environmental revenues.

Proceeds in both countries the state budget showed a downward trend during the period 2005 - 2012, event driven higher revenue from other areas and environmental neglect. Romania is the country with the lowest environmental taxes in Europe, and should take into account the gradual increase performance of those duties which reveals reduced environmental taxation. This is one of the reasons for which Romania, unlike Germany fails to effectively promote the objectives of environmental protection and sustainable development. A double impact on Romania solution may be to increase revenues from environmental taxes in budget crisis environment and use renewable resources available in our country.

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