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# THE CONSEQUENCES OF UNSUSTAINABLE ECONOMIC ACTIVITY ON CLIMATE CHANGE

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**Abstract**
In the postmodern economy, entrepreneurs were motivated to obtain profitable growth rates without correlating economic output indicators with the ability to regenerate economic resources. For this reason, there was an increase in the supply of economic goods absorbed by a rise that had to be supported by monetary inflationary instruments. The issue that has escaped somewhat under control is providing of economic sustainability and environmental impact on the medium and long term. The effects of this extensive, accelerated, consumer-focused economic process propagate to the environment, generating global problems with severe repercussions in terms of ensuring a homeostasis at social level.
The paper analyzes, in a comprehensive holistic approach, the factors that influence the sustainable economy and their deviations in the real, formal form of the manifestation of the economic activities. The results explain the rational strategy for rarely assisted technological resources in consensus with ensuring sustainable welfare for the individual and society.
**Keywords:** sustainability; economic policy; globalization; climate change; living conditions;

## 1. INTRODUCTION

In the context of globalization, the current economic development requires accelerated growth rates using rare resources with an inelastic replacement rate with devastating effects on individual and natural ecosystems. At the same time, industries and production systems are changing, with a major effect on consumption and budget allocations. In this way, the individual, as a work force, surprises the chaotic rhythm of accelerated development through changes in biorhythm, intrinsic motivation on work, supporting family budgets. Another effect is the deep climate change with an effect on people's health, tourism and related activities.

The economy has become more than just a science that is studied in any education system, as the organic part of the social sciences; it is a state of affairs, a state of mind and a way of life of the contemporary man. In any case we have found out, we are concerned with the price of the product showing utility for us, so far as the nominal net income allows us to purchase or not, the way of the development of certain indicators affect the level of salary, how it will affect the workplace change of coordinates, of the monetary policy and exchange rate, what impact have certain statements of dignitaries on the oil market. All these are determinations of the economic behavior of the economy subjects, namely consumers and producers [1].

## 2. THE GENERAL PURPOSES OF SOCIETY IN TERM OF SUSTAINABILITY

In the context of the current changes due by the development of society, new rules of conduct are required in relation to the natural environment of both individuals and companies. The rules concern the production and consumption of economic goods. As a result of the growth of the wealth of societies, there is a dichotomy between the incomes of developed, emerging and poor countries, with increasingly serious implications for people's quality of life and the natural environment. In this context, the society must reinvent itself in identifying development opportunities that respect the environment and especially the future of humanity [2].

In addition to the sustainable approach to environmental policies, companies have created an environmental protection system based on the Supplier Responsibility Code (SRC) created in 2016. The SRC transforms the higher risk of suppliers into factors that encourage essential supplier's solutions to support sustainable customer's business.

For the better development of the whole economy, it is very important to analyze the principles of the market through the 'Portfolio Management' (*i.e.* to transform the weaknesses of the market into opportunities, identifying the best solutions for the business to use the natural resources in a rational way, with minimum productive costs), 'Investing in Innovation' (investments in education, research and high technology will create products with high innovative potential that will transform the current production means with low energy consumption and with a favorable impact on the natural environment) and 'Business Transformation' (the new methodology of optimizing and standardizing the global business processes to generate instruments of deploying an enterprise resource planning (ERP) system that optimizes global supply chain) [3].

## 3. RESULTS AND DISCUSSION

The resource allocation thus becomes a matter of survival for generations, both present and future generations, in terms of access to and benefits from its environment and can be dealt with, with the major benefits through knowledge.

The more eco-efficient the allocation process becomes, the more economic treasure-justice will generate development. What places economy and ecology on enemy positions must be the way in which the market works in relation with the negative externalities that the market itself generates. The market trend is to internalize the benefits and socialize externalities/ costs.

An approach to the sustainability perspective on the dematerialization of economies must be the analysis of several indicators that influence the whole economy, in terms of healthy and prosperity.

The Production and the sustainable consumption index characterizes the level of the use of natural resources considering the principles of eco/efficiency by referring to:

- managing waste as a result of eliminating any misuse of resources as well as the control of the greenhouse gas emissions that may affect the bio/system and the eco-equilibrium of Terra (in such a context, the Producing waste with exception of major scrap index distinguishes itself)
- models of consumption of the main energy intensive resources that may generate pollution (the Consumption of electric energy in households index)
- models of production which, through the use of clean technologies, incorporating high-tech scientific research and contributes to maintaining the natural balance (Organizations and sites registered with the environmental management and audit index (eco-management and Emas audit scheme)).

The global demand, growing as a result of the globalization of needs and consumption, contributes to the increased opportunities for producers, which attracts a high consumption of natural resources and polluting technologies. Recent research requires the need to limit the use of productive polluting. It is important to encourage the de-growth, especially among emerging economies, in order to contribute to sustainable development [4].

However, the world's economies identify growth opportunities in particular to meet the need for jobs, to increase labor incomes. The convergence of growth with sustainable development is an array of creative economies with investment in innovative, sustainable, eco-growth production means.

In Romania's economy, as a result of economic growth in nominal terms, due to the increase of consumption, without a growth of the domestic supply of economic goods, a moderate increase in the productivity of natural resources has been identified, with moderate effects on the sustainable development of the economy. In order to increase the economy in real terms and to be sustainable, investment efforts need to be stepped up, especially in education and creative technologies.

The Resource productivity indicator expresses the annual quantity of raw materials extracted from the national territory of the local economy, adjusted by the balance of incomes in relation to what happens abroad. Romania is found to record low levels of the indicator in relation to the EU-28 average (Fig. 1), which shows that the degree of use of natural resources exploitation in order to cover the needs of consumers is reduced, either by the precariousness of the means and mechanisms that confer competitive foreign economical goods or either through the use of rigid institutional levers, having the effect of the contraction of the production of goods.

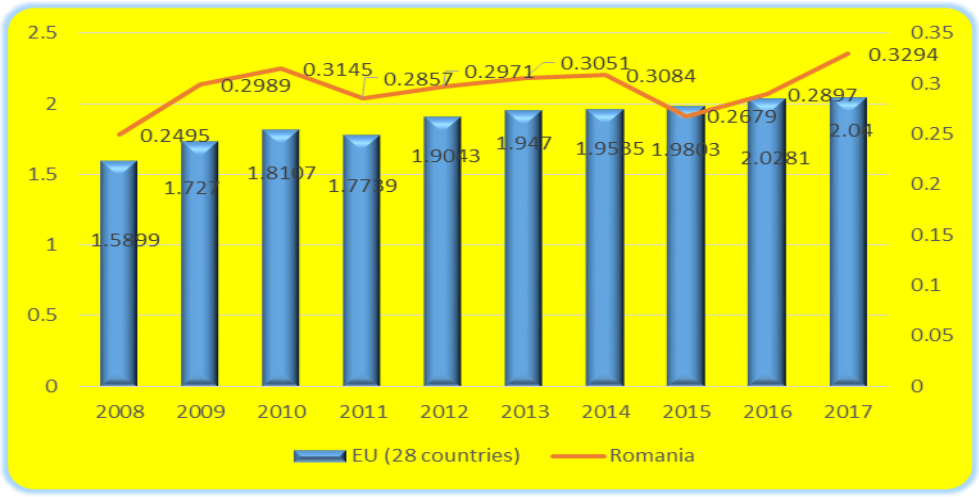


*Fig. 1. Graphical representation of the productivity of the natural resources in Romania with respect to EU, between 2008-2017*

A way of questioning the difficulty caused by extensive growth and reflects the policy of the Kyoto Protocol (1997) [5] is the problem of climate change. Emissions, deforestation, and pollution can be tackled as well as the knowledge as public goods produced privately.

If knowledge is non-rival and/or globally available, mostly due to new information technologies, $CO_2$ emissions, reflecting the same infinite expandability, are global. And knowledge, and $CO_2$ emissions, which are generated by different economic agents, are unmotivated. In other words, knowledge and $CO_2$ emissions, are public goods produced privately. The implications of this 'treatment' are immediate and institutional and bring the same level of development and equity issues with reducing the environmental damage over [6, 7].

The most important is probably the movement of goods trade. How public goods, as $CO_2$ emissions, different ideas, blueprint (are infinite-expansible for the purposes of the provision of services and advantages/disadvantages) etc. are produced privately, a new institutional system or a new system of property rights, is necessary.

Experts argue for the marketing rights of ownership to pollute or to use the atmosphere (global emission markets) that makes it possible both to internalize negative externalities by rights policy (or to counteract the tendency of the market to socialize the costs), as well as the possibility that the emissions intensity decrease, mainly due to better alignment of costs with benefits.

Through such instruments, a greater openness of economies towards new and more environmentally friendly forms of production (knowledge society) is very necessary. What it is likely to separate public goods markets of private goods markets are the principles of efficiency and equity, which, separated in traditional markets in goods, become correlated markets of public goods.

Thus, economies that pollute less atmosphere or depend on more than natural resources, but without being as polluting as industrialized economies have more rights to pollute and vice-versa, economies that pollute more, have smaller rights to pollute; in this case they pay more to acquire more rights. This is covered by the Kyoto Protocol (2005) [6], which becomes an instrument of international law [7, 8].

Following the intensification of the investment process, both in the EU and in Romania, there is a decrease in greenhouse gas emissions produced by household consumption (Fig. 2). This is mainly due to the education of the population in selective waste management, but also as an opportunity for development for the local economy by transforming waste into raw materials.

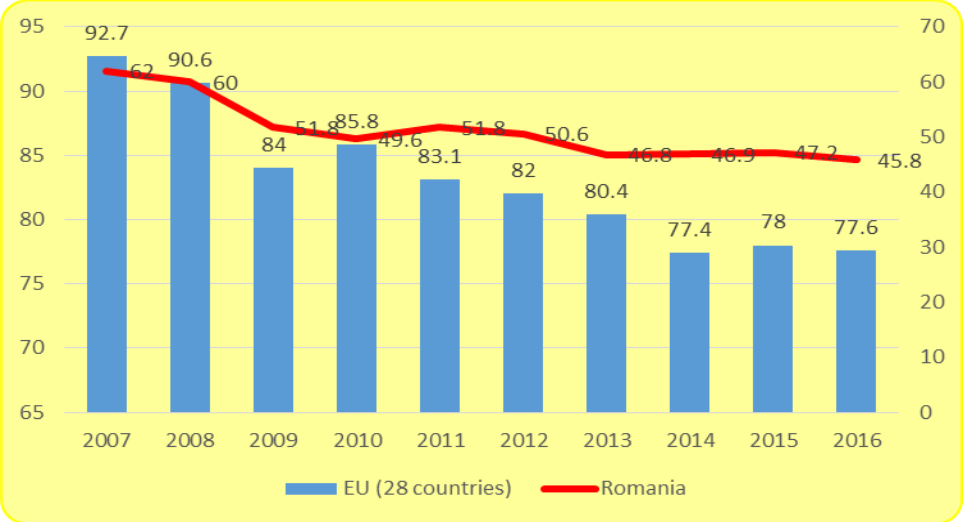


*Fig. 2. Graphic representation of the household gas emissions in Romania in comparison with EU-28, between 2007-2016*

EU has decided to reach at least a 20% reduction in greenhouse gases emissions by 2020, comparable to 1990. This objective implies:

- a 20% reduction in emissions from EU ETS sectors (scheme of trading the greenhouse gases emissions), comparable to 2005 up to 2020;
- a 10% reduction in the sectors outside the EU ETS. To achieve this goal of 10% global objective, each Member State has agreed on some limits on emissions of greenhouse gases specific to each country for 2020 comparable to 2005.

E.U. Member States' efforts to reduce emissions of greenhouse gases are accelerated by intensifying the implementation of clean technologies at the level of economic activities, scientific research and progress of biotechnology in waste management, rational use of natural resources, the production of economic goods with regard to the principles of sustainability and sustainable approach to actions and economic processes.

EU makes little progress in addressing the sustainable economic Act, both in relation to related strategies and regulations economic system and intensification of the efforts of financing, from specific programs adopted by the EU institutions (The Committee on environment, public health and food safety, The European Parliament, The Council of the European Union and the Environmental and Climate Policy, The European Commission, "The agriculture, rural development and environmental protection", The Economic and Social Committee, The Commission for environment, climate change and energy, The Committee of the regions and the European Environment Agency.

The principles of fairness and efficiency, in particular in identifying public and private (non-competing) property, creates the magnitude of institution policy. And fairness, and effectiveness of specific trades and allocations under the market meet here; the market is not eliminated, but under the new institutional arrangement it produces greater equity, not just efficiency.

Energy intensity expressed in gross domestic consumption of energy in relation to the national economy (the amount of energy required to produce a unit of GDP) and represents the gross domestic consumption of energy (calculated in tons of oil equivalent-toe) relative to GDP. With regard to the Romanian economy in relation to EU-28 (Fig. 3), you can notice a relatively high energy consumption for the production of economic goods, which shows a low degree of eco-economy incidence, the lack of funding for the implementation of the measures of production in accordance with the sustainability principles, a low level of education in relation to the use of biotechnologies.

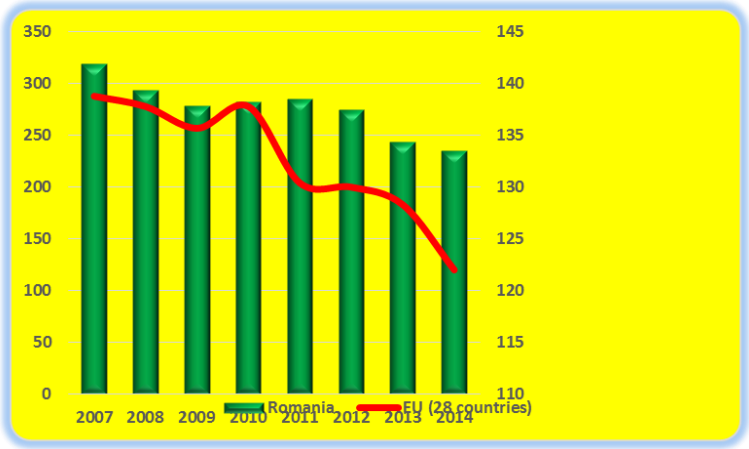


Fig. 3. Graphical representation of the indicator *Energetic Intensity of the Economy* in Romania in comparison to UE-28, between 2007-2014

The development of sustainable transport at EU level is an important requirement for conferring the character of sustainable economy and eco-economy, in particular. The transport, including all types of transport, is a catalyst for the growth of an economy, in terms of speed and volume of trade flows, on the one hand, but also has links with other economies having a transnational character. With regard to the objective of sustainable transport development, for the eco-economy development, the EU is considering increasing the mobility of labor, capital and investment, on the one hand, and reduce the negative effects of the environmental or cost arising from transport, such as pollution.

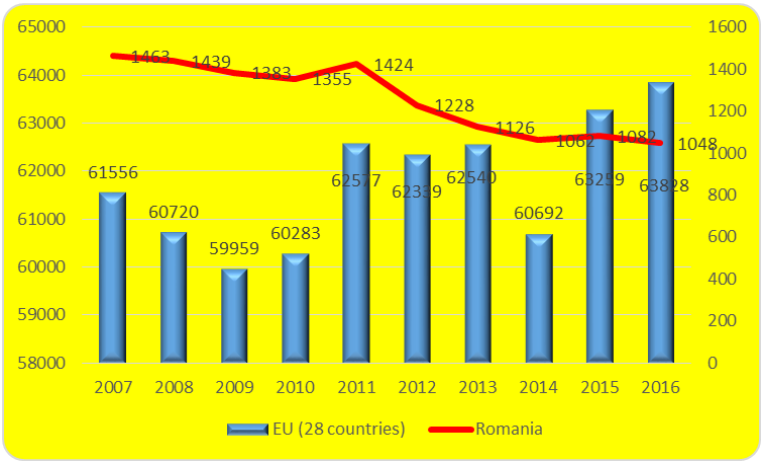


*Fig. 4. Graphic representation of the Transport energy consumption index in Romania in comparison to EU-28, between 2007-2016*

Also, in terms of sustainable transport, Romania records high costs in relation to the EU average (Fig. 4). From this perspective, it is necessary to intensify the implementation of strategies in the field of sustainable environmental policies addressing transport in terms of eco-efficiency, the

creation of mechanisms for the monitoring and control of compliance with institutional rules regarding transportation [9].

The most important element of the eco-economy is addressing sustainable principles of natural resources. The European Union is campaigning for the friendly and rational use of the natural habitats, their preservation, keeping the natural ecosystems, creating strategies and allocating resources for the maintenance of biodiversity and the natural sites created by nature.

The economic sustainability involves the rational relationship between the act of production and the act of consumption, in the conditions of an optimal allocation of natural resources. In the same time, with a sustainable approach of the economy, we seek to reduce industrial pollution, rebuild the environment by re-using and recycling waste, increase the incidence of sustainable transport, increase labor productivity through the use of clean technologies and innovative products.

In the paper we identified four indicators in related fields: productivity, greenhouse gas emissions, energy efficiency, efficient energy transport. These indicators can represent the basic pillars of an eco-economic approach as we transform energy-intensive means of production into eco-innovative means of production and develop the creative potential of the workforce.

## 4. CONCLUSION

This fact shows that interest in eco-economy still is high and the communion between man and nature on principles of sustainability is a long-term process. Progress in the maintenance of habitats in the context of the exploitation is carried out over time through education in the spirit of the principles of sustainability and sustainable approach to human activities, including scientific research, economic advance and biotechnologies, as a result of investments and financial allocations for development. Basically, 'eco-economy' is a concept both of the present and the future that refers to the stimulation of innovation and creativity compounded with scientific research, superior technologies and environmental concern on the concept of sustainability. Either approach can be regarded as a win for the contemporary economy, for the stakeholders in generally, provided that the popularization of the term meets the conditions spatially and temporally in any action context.

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