THE STRATEGY FOR SUSTAINABLE USE OF NATURAL RESOURCES AND THE ROLE OF STATE

MARIUS BULEARCA,

PH.D., CENTER FOR INDUSTRY AND SERVICES' ECONOMICS, ROMANIAN ACADEMY, BUCHAREST, ROMANIA

E-mail: <u>mariusbulearca@yahoo.com</u>

CATALIN POPESCU,

PH.D., OIL AND GAS UNIVERSITY OF PLOIESTI, PLOIESTI, ROMANIA

E-mail: cpopescu@upg-ploiesti.ro

Abstract:

The relationship between economy and nature, nature and living environment has changed in recent decades and requires changes in economic behaviour and the attitude of the common values of society. Overall, despite much more lower income compared to those at European level, in Romania resource consumption and waste generation are high, hovering over natural regeneration capacity of the environment. Based on these considerations, the main objective in this work was to identify those coordinates for sustainable development policy applied in the extractive industry in Romania, thus achieving these strategic objectives to ensure the medium and long term, high growth, and consequently, a significant reduction of social and economic disparities between Romania and the other Member States.

Keywords: extractive industry, national strategy, natural resources, sustainable development, the European Union

JEL Classification: Q01, Q32, Q34

1. Introduction

The concept of sustainable development crystallized in time, over several decades, during internationally scientific debate and acquired precise political meanings in the context of globalization.

For Romania, as a Member State of the European Union, sustainable development is one possible option, but the only rational perspective as a nation, resulting in the establishment of a new development paradigm at the confluence of economic, social and environmental factors.

Therefore, the concept of sustainable development is the premise that human civilization is a subsystem of the ecosphere, depending on material and energy flows, on its stability and capacity for self-regulation. Public policies are developed on this basis [5], designed to restore and maintain a reasonable balance in the long term, between economic development and the integrity of the natural environment in ways understood and accepted by society.

To act realistically, well informed on the strategic direction of sustainable development is necessary for Romania, its citizens and its foreign partners to have a clear starting point on the road, the real assets of the country, but also on flaws inherited from a complicated historical background.

Therefore, under the specific conditions of Romania, the connection to the transition to the new model of sustainable development in which the country is engaged alongside with the other Member States of the European Union must be matched by their extra effort aimed at existing substantial gaps at several levels of the national system.

2. The strategy for natural resources sustainable use

It is widely accepted that the extractive industry is a vital sector of any economy of a country where there are natural resources that can be exploited. Experts say that this industry is a source of foreign income, foreign direct investment, and not the least, is the main and sometimes only a country's energy supplier. The activities of any State in the extractive industry provides employment for the population, bringing large contributions to the public budget through payment of taxes, as such revenues from these activities may be directed to charity, but at the same time, there is an environmental risk, greater or less related to each initiative taking place in this industry.

Extractive industry activities are widely recognized as having a significant impact on the population, both in terms of financial and social, cultural and environmental point of view. More increasingly, in recent years has

"ACADEMICA BRÂNCUŞI" PUBLISHER, ISSN 2344 – 3685/ISSN-L 1844 - 7007

emphasized the need to minimize the negative impacts and promote positive elements to control negative externalities and equally to develop the skills of those involved in minimizing undesirable impacts.

Practice shows that conflicts of interest often occur between the beneficiary companies of products from extractive industry, on one hand, and environmental regulations that attempt to minimize the negative externalities resulting from the activity of this industry, on the other hand. On one hand, there are controversial discussions on the impact of the regulations on the performance of firms. On the other hand, in response to pressure from shareholders, companies begin to increasingly integrate stronger concept of Corporate Social Responsibility (CSR) and more and more studies are subject to impact public opinion and judgment.

Other specialists come to support the idea that regulations are structured such as to reduce the negative environmental impact and boost extractive industry specific activities based on new, innovative components generating both profit and environmental protection. This "win-win" Porter-type approach is the subject of many studies and articles but unfortunately, some quantitative approaches based on econometric methods invalidates the hypothesis in practice.

Extractive industry scholars state that natural resources, and in this respect Romania is a rich country, should bring prosperity, especially in a developing global economy with a growing consumption; in fact, rich countries in minerals such as gold, coal or oil are often poorer and grow more slowly than those who buy their resources. The paradox is explained by the lack, deliberate in some cases, of a strategy for sustainable growth that does not allow Governments to invest revenues from the exploitation of their raw materials into means for more sustainable economic development, such as education or transport. Thus, as their resources exhaust, countries become poorer.

Although countries such as Nigeria, Liberia, Venezuela and even Russia are rich in resources, a large proportion of their population lives below the poverty line, without access to water and sewerage, electricity, hospitals, schools and adequate transportation. The paradox has a name too: "the curse of natural resource wealth" and its ingredients are well known. Resource-rich countries tend to have strong currencies, making other exports uncompetitive, as explains Joseph Stiglitz, Nobel laureate for economics [2].

Then, as exploitation usually does not provide many jobs, unemployment increases. Also, due to volatile prices of resources, economic growth is unstable. The volatility is often exacerbated by international banks that rush to come and invest when prices are high and retract without hesitation in difficult times, all in compliance with the principle that bankers lend only to those who do not need their money.

But the most obvious reason is that *resource-rich countries do not pursue sustainable growth strategies*. Governments do not realize that if they do not use the wealth resulting from the exploitation of resources for productive investment to diversify the economy, in fact they poor their countries. Political dysfunctions exacerbate the problem, given that conflicts over access to gains from resources favour the establishment of corrupt and undemocratic Governments.

Therefore, we need to talk primarily about economic policies to be implemented, and the institutional apparatus which must be effective and based on a non-corrupt State. This institutional framework is facilitated by the presence of a strong and trained civil society [1] - [3], and we believe that this is possible only if civil and political community is based on transparency. Thus, should be explored the opportunities of economies based on natural resources that can accelerate the diversification of economic structures.

Once accepted the fact that the most serious environmental problems are related to the use of non-renewable natural resources in the production process, we can admit the need to discuss issues related to economic policies that allow an optimal implementation, its impact on the economy, and in particular the contribution in promoting technical progress.

Romania has competitive advantages, including investor protection, market size, quality of education in sciences and, after years of recession, lower prices of real estate assets and a return to normal parameters of the relationship between wages and productivity. To receive them, we have to eliminate or at least reduce the competitive disadvantage in terms of infrastructure [2].

Romania has, however, a high-intensity competitive disadvantage compared to other European countries in terms of quality infrastructure, in general, and roads, in particular. Therefore investments oriented to transport routes development are vital, including the re-industrialization process. They must be accompanied by investment in communications and public utilities infrastructure, without which large private investment can not be achieved, or are too expensive.

Moreover to the above one's, there are added vulnerabilities of the economic environment in Romania, in particular the international investment of Romanian companies, productivity in manufacturing industry, innovation, energy efficiency and the development of competitive economic clusters at local level.

There are three major directions of sustainable growth; first, a smart growth by increasing R&D expenditure in GDP while increasing costs and reducing early school education; second, a sustainable economic growth by reducing carbon dioxide emissions, along with increased energy efficiency and increasing the share of renewable energy in total energy consumption; and third, an inclusive economic growth by increasing the employment rate and poverty reduction. In addition for the case of Romania, is essential to reduce the underground economy and tax evasion.

Optimizing the use and protection of natural resources and assets must be part of the Romanian National Strategy for Competitiveness [7]. The vision of the National Competitiveness Strategy is to develop business on

competitive basis in an ecosystem capable of supporting excellence on global level, opened and favourable to free enterprise and innovation, to stimulate productivity growth and oriented to integrated and sustainable transformation of the Romanian economy.

Only encouraging entrepreneurial discoveries provides capitalization of the best benefits available to Romania, leading to high specialization in production and research, of local resources qualification, and of natural factors, all leading to better quality of life.

3. The role of state in the new european context

Romania's entry into the European Union has imposed its harmonization with European policies in all areas, including the sustainable development, both nationally and regionally.

Even though over the years, after 2001, various plans and national development strategies variants were initiated and developed, reflected more or less in "sustainable" realities around us, today we face some commands that will fundamentally influence Romania's future.

If we accept that sustainable development means "meeting the needs of the present without compromising the ability of future generations to meet their own needs", then its accomplishment depends and is influenced by almost every political, social, economic decision and/or administrative action which we take at present.

The analysis starts from the observation that at the end of the first decade of the XXI century, after a long, traumatic transition to pluralist democracy and market economy, Romania still has to overcome significant gaps compared to other Member States of the European Union, together with the adoption and implementation of the sustainable development principles and practices in the context of globalization.

Despite progress in recent years is a fact that Romania still has an economy based on intensive use of resources, an administration and a civil society still in seek of a shared vision, and a natural capital facing the risk of damages that may become irreversible.

Extractive industry sector in Romania is a particularly important segment designed to actively support the country's economic development by providing a variety of primary energy and mineral products, used alone or as raw materials [6].

That's the reason why the State's role is crucial in the effective management and sustainable use of mineral resources to ensure long-term supply of raw materials at the national level while creating preconditions for economic development in a global environment with opportunities for activities generating international business.

Strategically speaking, risks and threats to access to power and non-strategic resources are increasingly diversified. The accelerated growth in global consumption of mineral resources gradually led to the restriction of "controlled" access to sources of supply, and in conjunction with limiting the number of suppliers, led to the emergence of monopolies and oligopolies; these facts exerts a direct influence on economic security, in which extractive industry development strategy of a State becomes ever more obvious part of national security.

The State is therefore required to establish a strategy to include at least the following:

- definition of critical raw materials;
- > launch of strategic raw materials diplomacy [4];
- provision of legal action on access to raw materials and their sustainable management;
- > identify and challenge trade distorting measures taken by third countries using all available mechanisms and instruments;
- > promote sustainable access to raw materials in development policy, making use of budget support, cooperation strategies and other instruments;
- > improve the regulatory framework regarding access to land; expand the knowledge base through a better connection of national geological surveys;
- > promote skills and focus of research on innovative exploration and extraction technologies, recycling, materials substitution and identification of resource efficiency;
- > increase resource efficiency and foster substitution of raw materials products; encourage recycling and facilitate the use of secondary raw materials.

4. Conclusions

Based on these considerations, the main objective of this work was to identify those coordinates of sustainable development policy applicable in the extractive industry in Romania, so achieving these strategic objectives to ensure, on medium and long term, high growth, and consequently a significant reduction of social and economic disparities between Romania and the other Member States.

¹ Activities in the extractive industry can contribute to the development of European geographical areas, but because resources are limited, a strategy for sustainable development of these areas and after their depletion must be considered. Hence appears the need for a common European strategy to identify abandoned sites and extraction recovery possibilities.

Delivering these goals involves a series of actions.

On the first level stands updating the list of critical raw materials at an interval of 5 years and extend the evaluation object on their criticality.

On the second level there are policy actions to improve access to primary resources for:

- > providing better access to land, fair treatment on extraction compared to other uses of land which competes and a simpler and more direct permitting process;
- > promoting exploration and ensuring that exploration performed by companies is regarded as a research activity;
- > promoting research in the processing of ores and minerals, extraction from old dumps, extraction from deep deposits and exploration in general, mainly under the EU's research, technology and development Framework Programs;
 - > promoting good governance, capacity building and translucent.

On the third level there are actions to streamline the recycling of raw materials and products containing raw materials, in particular by:

- > collecting in a proper manner of end-of-life products containing critical raw materials, instead of storing them in households (sleep stage) or in landfills, or their incineration;
 - improving overall organization, logistics and efficiency of recycling chains;
 - > preventing illegal exports of end-of-life products containing critical raw materials;
 - > promoting research on system optimization and recycling of products and substances technically challenging.

It also requires encouraging substitution of certain raw materials, mainly by promoting research on substitutes for critical raw materials in different applications and increase the opportunities under the EU's research, technology and development Framework Programs; improve the overall efficiency of critical raw materials by combining two key measures: reducing raw material used to obtain a certain specific function of the product; and reduce the loss of raw material residues which can not be economically recovered.

Permanent dialogue within Government structures and between them and experts operating in specialized institutes would lead to making the best decisions concerning the use of certain resources. In Romania there are resources that arouse the interest of foreign companies to exploit. Unfortunately the decisions that are taken clearly show group influence, political or other kind.

Analyzing situations of gold, natural gas, petroleum, mineral water, we find it necessary to change the licensing mode, and also the prospecting mode. In our opinion, exploration should be undertaken by the Romanian State, the concession being made primarily for the benefit of the Romanians. Royalties set by current legislation we consider too low compared to profits declared by companies exploiting Romanian resources. A more focused legislation is needed for the national interest, otherwise these exhaustible resources will run out, and after their operation no visible benefits will remain for Romania, but possibly only major environmental problems.

In conclusion, for adequate capitalization opportunities for sustainable development of extractive industry sectors reviewed, domestic and international markets demand will be decisive, with its price fluctuations and circumstances, with the opportunities they offer, but also with the threats they posses.

Efficient use of these opportunities and avoid potential threats depends, ultimately, on the ability of businesses to develop distinctive competencies and competitive advantages, in short, to be able to face intensifying, continue competition in the domestic and international market.

Through appropriate measures of industrial policy in the extractive industry, the State can increase this capacity in industries where there are real and potential competitive advantages, as well as those who have a particular strategic interest.

5. Bibliography

- [1] **Ahrend, R.**, How to Sustain Growth in a Resource Based Economy? The Main Concepts and their Application to the Russian Case, OECD Economics Working Paper No. 478, February 2006, p. 2.
- [2] **Stiglitz, J.**, Resource Rich, Cash Poor, în Project Syndicate, August 12, 2012, http://www.slate.com/articles/business/project_syndicate/2012/08/why_resource_rich_countries_usually_end_up_poor.
- [3] **Zaharia, M., Popescu, C.**, Comparative Analysis on the Influence of the Economic Crisis on Education in some European Countries, International Journal of Synergy and Research (IJSR), vol.4, issue 1/2015, Special Issue Managing the diverse workforce: Challenges for Management and Society, pag 63-83, Poland;
- [4] *** Mining industry strategy for the period 2012-2035, the Romanian Government National Agency for Mineral Resources ANRM, Bucharest, 2012.
- [5] *** National Strategy for Sustainable Development of Romania Horizons 2013-2020-2030, the Romanian Government Ministry of Environment and Sustainable Development, and the United Nations Development Program National Centre for Sustainable Development, Bucharest, 2008, published in Monitorul Oficial no. 824, December 8, 2008

[6] *** National Competitiveness Strategy 2014-2020, the Romanian Government - Ministry of Economy, summary, v 2.0, release for public consultation, Bucharest, September, 2013.

[7] *** Romania's reindustrialization: policies and strategies, Applied Economics Group – GEA, June, 2010.

"ACADEMICA BRÂNCUŞI" PUBLISHER, ISSN 2344 – 3685/ISSN-L 1844 - 7007