

RESOURCES AND ENERGY, CORE COMPONENTS OF NATIONAL SECURITY

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Abstract: Development strategy of any nation is a coherent vision of the future, certainly in terms of Strategic generous and realistic concept of sustainable development. Responding to the European objectives in the context of globalization processes, Romania needs to realize obligations as an EU member country and entered the details of modern development. National Security of the Development Company is a dynamic, multidimensional, and at this time outweigh those characteristics. Energy mean for mankind which means blood for the body. Researchers Romanians work in identifying each geographic area in any case to identify the source of energy that will be optimal to exploit both the technical and economic. In while working to develop technologies for their that converts renewable energy into electricity that you not be totally importers of such technologies. At the same time working on an inventory of traditional energy sources and to provision their life time. Natural resources are an essential part of national heritage and classified under inexhaustible natural resources - solar energy, wind, geothermal and wave category of renewable exhaustible natural resources - minerals and fossil fuels and renewable - water, air, soil, flora, wildlife. Like any other nation truly strategic resources are gas, oil, water, wind potential, etc. This work aims to investigated which is the balance of these resources (as we are / how we need), to highlight the "vulnerability" of these resources, then submit their proposals for balancing (elimination of "vulnerability").

Key words: resources, energy, national security

INTRODUCTION

Addressing issues related to resources, energy security is relative and depends radically timing analysis and perspective from which to do so.

From Latin: Securitas - securitatis "security word meaning" to be safe from any danger, and quiet confidence that it gives anyone the absence of any danger. "

Although the definition seems comprehensive questions appear reasonably related to the identification of target / objectives to be protected in terms of national security - strategic goal of any government and logical questions regarding the identification of hazards that exist or may exist in relation to population country, with its present and future resources, the very way the company planned development. The whole concept can be applied as both obvious and considerable resources to the population globally, the whole world perspective and the narrow space of the ecosystem formed by the Romanian people, Romanian space with its natural and human resources.

Starting point of any analysis, zero, but certainly is related to the economic, political, military and social world and short-term development strategies of global and national bodies to act. The common element of any analysis is the consensus that certainly should reach all stakeholders involved in managing this problem.

Undoubtedly, as ecosystem, Planet Earth is changing what cause many problems in its security. It is noteworthy in light of increasingly dealing with security officers in the field. It is impossible to think of being isolated or low degree of interaction concepts for sustainable development of society, security, social problems, ethnic, religious, cultural. What should be

considered is that the concept is viewed in this way integrated content and full. It is essential that at any time be able to ensure the safety of the planet on a global scale, each nation, each individual, biodiversity, natural and human resources that we have individually and collectively to ensure the requirement to meet the needs of the present without compromising the ability of future generations to meet their own needs.

Is apparent that achieving security in terms of set depends almost every decision is influenced political, social, economic and / or administrative matters that we take.

In Romania noted vast transformation process has gone through the whole country with 1989 events. If by that time had at least theoretical structures (CMEA site) to which to relate, interact with and which theoretically would have helped us in solving security issues, in December 1989 by the collapse of the postwar security system has brought us where it was necessary to try to crystallize and to fix our new coordinates the country's economic development strategy and new insurance perspective as long as safe and national security.

Expressed the unanimous choice of Romanian society through its decision makers voice was firm within the meaning of NATO to ensure national security and the European Union for optimizing the nation's socio-economic development. Neither of the two processes has not been easy in terms both of international and political approach in terms of economic and social costs generated. The whole process of amending the positioning Romania in a completely different area was accompanied by original documents which crystallized integrated national security concept on the one hand (1994) and conceptually integrated country's economic development. We are therefore in a completely different country's position among world countries, a position which gives us a completely different perspective of development, but we put in front of other kinds of problems. Romania still has to overcome a number of historical gaps with developed countries in the world but the position is new, must operate simultaneously and entirely new development paradigm of advanced countries in all sections of economic and social life in harmony with the imperatives of turning natural capital and improve quality of life for its citizens. But we find that we become part of solid bodies when they just go through profound transformations, but the new global development conditions.

What must certainly do is to properly assess the conditions under which we operate at this time to evaluate as precisely what we are, what we want to be as far and what we want to have both the country legally considered in isolation and in terms of our nation located in the direct and continuous interaction with all nations.

MATERIAL AND METHODS

The paper has conducted an analysis of natural and manmade resources of the country and the national power potential, however in terms of analyzing the Development Strategy of Romania, the National Defense Strategy and the SDS.

RESULTS AND DISCUSSIONS

Resources of Romania

a) Natural resource

Natural resources are usually classified into:

- renewables and
- non renewable resources.

Resources may also be classified based on their origin as:

- biotic resources, derived from animals and plants;
- abiotic resources derived from land, air, water, etc., mineral and energy resources are also abiotic resources some are derived from nature.

Natural resources are an essential component of national heritage and are classified as inexhaustible natural resources - solar, wind, geothermal and wave and exhaustible natural resources category, non-renewable - minerals and fossil fuels and renewable - water, air, soil, flora, wildlife.

Romania's mineral resources metal and metallic links are diverse: oil, with ancient traditions of mining, gas, coal (coking coal, brown coal and lignite), ferrous and non ferrous ores, deposits of gold, silver, bauxite and salt.

Romania's water resource is the surface water that are inland rivers - the main source of water, natural and artificial lakes, the Danube River and groundwater. Danube is one of the major components of the landscape, to which Romania define settlement on the continent. Danube builds on his meeting with the Black Sea, one of the most beautiful wetlands in Europe, namely the Danube Delta, with total area of 4178 km² distributed in the territories of two countries: Romania (82%) and Ukraine (18%) .

Coastal zone and continental shelf of the Black Sea offer various conditions for exploitation of underground wealth (oil, natural gas), water (fish breeding).

b)Human resources

Human resources are those resources that man has a definite contribution. Of Romania's human resources include:

Tourism

ROMANIA'S REMARKS tourism potential is given by Natural Resources (Variety relief, climate, hydro-graphic, flora, fauna) and the Anthropic resources (archaeological remains, historic and architectural monument, museums, memorial houses). Currently, Romania has 2840 housing units of which 811 units are the hotels of different categories, an important part of tourist interest is the human resources. Viestițiile archaeological training and continuity are related to the Romanian people, the old city on the coast: Pontu's Euxinus oraștie. Monumentele ruins of historical and architectural world have special values: monasteries and churches of Bukovina (Moldavia, Voroneț Putna) with exterior frescoes, wooden churches of Maramures, Transylvania towns and castles, monuments of the capital cities of former Romanian countries. All this adds elements of folklore, tourist villages (typical ethno-folkloric, cultural and historical landscape) Museums and memorial houses which enhance the attractiveness of the area.

Economy

Romania's economy is constantly developing due to economic reforms. Romania's main industries are textiles and footwear, metallurgy, machinery and light assembly machinery, mining, wood processing, building materials, chemical, food and petroleum refining. Less importance is the pharmaceutical industry, heavy machinery and appliances. Currently, the motor industry is evolving. Romanian IT industry is experiencing a steady annual growth. Romania's economic power is concentrated primarily on the production of goods by small and medium enterprises in industries such as precision machinery, motor vehicles, chemicals, pharmaceuticals, household appliances and clothing.

Culture

Romania has a special culture, which is the product of geography and its distinct historical evolution. Is fundamentally defined as a meeting point of three regions: Central, Eastern and Southeastern Europe, but can not really be included in any of them. Romanian identity was formed on a substrate from a mixture of Roman and Dacian elements, with many other influences. In ancient and medieval the most important influences were the Slavic peoples who migrated and settled in nearby Bulgaria, Serbia, Ukraine, Poland and Russia, Greece, medieval, Byzantine, Ottoman Empire, the Hungarians, and and the Germans living in Transylvania. Modern Romanian culture emerged and developed over the last approximately

250 years under a strong influence from Western culture, particularly French and German culture. In addition, representing most of the remaining descendants Byzantine Romans, Romanians are also the only Orthodox Christian people of Latin peoples.

Energy and energy types of Romania

Romania has a wide range, but reduced the amount of primary energy resources: oil, natural gas, coal, uranium ore and important potential renewable resources, especially in hydropower.

Exhaustible energy resources

Oil deposits are limited, since there is a decline in domestic production, provided that no new deposits have been identified with significant potential.

Oil and gas fields are also limited, and after 1990 domestic production is declining. Current oil reserves are estimated at 73.7 million tonnes. Oil production fell from 14.7 million tons in 1976 (the year of peak production) to 5.2 million tonnes in 2005.

Current gas reserves are estimated at 184.9 mld.m³.

Natural gas production was 12.5 mld.m³ in 2005, which represented 71.4% of total annual gas consumption.

In these circumstances, increase the role of indigenous coal and in particular, of lignite, the national energy balance. Geological reserves of coal in the leased perimeters and having operating licenses are:

Coal - 279 million tons of which exploited (for which the license) 72 million tonnes;

Lignite - 1490 million tons, of which exploited (for which the license) 719 million tonnes.

Uranium reserves are of particular interest to the national economy, given the ongoing nuclear program. In 2005, ore production was 61,000 tonnes. Ore is processed at the plant in Feldioara used nuclear fuel operation of Cernavoda NPP Unit. Uranium ore reserves are estimated at about one million tonnes.

Renewable energy

Romania has a potentially important renewable resource: hydroelectric power, biomass, solar, wind and geothermal.

Furnished technical hydropower potential of the country is 36 TWh / year.

Furnished the economic hydropower potential is estimated at 23-25TWh, with an installed capacity of about 8000 MW.

In 2005 the recovery had reached about 80% of the economic potential furnished, are running hydroelectric facilities totaling an installed capacity of 600 MW with a potential production of 1870 GWh / year.

Biomass energy potential is about 7594 thousand toe / year, of which 15.5% is from forestry residues and firewood, 6.4% sawdust and other wood waste, agricultural waste 63.2%, 7.2 % 7.7% household waste and biogas. However, Romania has an important potential for energy plant crops dependent on surface area available for these crops.

Energy potential SOLARO-thermal systems is estimated at about 1434 thousand toe / year and that of photovoltaic systems from about 1200 GWh / year.

Furnished technical wind potential is estimated at 8 TWh / year.

Romania has a potential of about 167,000 toe/year of low enthalpy geothermal resources, which currently builds about 30 000 toe / year.

Romania has important reserves of coal, a relatively large hydropower economically furnished and equipped technical potential of renewable material, which constitutes favorable conditions to support long-term energy sector development.

In terms of expected growth in coming years the price of oil and dependence currently a sole source of imported natural gas supply, development of energy coal, nuclear and

renewable resources, are the main options for the future.

CONCLUSIONS

XXI century has, in addition to higher expectations of freedom, living standards rose, a world of peace, stability and cooperation, and a host of new risks and threats, especially non-military, which transcend national borders. Globalization sources of threat to international security imposed globalization of institutions, mechanisms and instruments of action against them.

According to opinions of experts mankind is moving towards an environmental disaster, since the consumption of natural resources exceeds by almost a third of Earth's support capacity. Moreover, global natural capital and biodiversity are in continuous decline and more and more countries slip-easy to a permanent or temporary water crisis. This is the message that you send the latest edition of Living Planet Report (Living Planet Report), released by the WWF (World Wide Fund for Nature). Published for the first time in 1998 and repeated every two years, the report describes the state of biodiversity at world and pressure on natural resources consumption of mankind exercise natural ecosystems. This year, it clearly indicates that more than three quarters of the world population lives in countries with ecological deficit, the national consumption exceeded biocapacity.

As is evident from the report "Living Planet in 2008, the current pace, the world will get to eat 2050 of two planets natural resources - whether those resources are not exhausted already. The report confirmed the trend of loss of biodiversity, and reported in previous reports. Meanwhile, mankind's consumption of natural resources has grown to the point where the Earth can not cope with the struggle for resource regeneration.

In Romania, the consumption of natural resources and lifestyle far exceed the carrying capacity of natural ecosystems. As in the entire Danube-Carpathian region, carbon emissions are a significant percentage of the impact that our country has on the planet. Moreover, despite much lower incomes than those in Europe, in Romania resource consumption and amount of waste generated are high, hovering over the natural regenerative capacity of the environment.

Similar initiatives are needed in the energy sector. Energy consumption in Romania is almost double compared with other countries UE. Michael Baltzer, Director WWF Danube-Carpathian region underlines our potential for growth and living standards, while decreasing resource consumption, "For countries in the region Danube-Carpathian there are significant opportunities for development and increase living standards, while ensuring that we do not exceed the only planet we have".

In recent years the problem of energy resource depletion and energy security dominates the agendas of major global players. Competition for energy resources in the contemporary world remains a source of crises and conflicts, with a special polarization and / or catalyst forces as long as demand increases faster than supply, and major oil reserves are located in areas characterized by deep political and economic imbalances and instability. U.S., EU, China and Russia are both in relationships of competition and cooperation in the access, control and exploitation of these resources. Center of gravity of world production gradually moved to other areas of South, Central Asia, Caucasus areas of interest being now states "intensive."

Democratization and securing sources of non-military means is probably the most appropriate times. Also, energy independence and interdependence appears to be the most viable way of solving the consumption of increasingly large.

An important role in ensuring national security - in terms of economic and social conditions - is to ensure energy security by adapting and optimizing operational structure of primary energy consumption and energy efficiency. In the end, Romania will act with priority:

reducing dependence on supplies from unstable regions or in countries using energy as an instrument of political pressure, acceleration programs for energy production in nuclear power plants, recovery concerns and to increase hydropower production power based on modern technologies for using coal. An important role must return the production of renewable and alternative energy and energy efficiency in industry and household.

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