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# THE STRATEGY OF MANAGEMENT AND UTILIZATION OF MINERAL RAW MATERIALS IN THE REPUBLIC OF SRPSKA THROUGH THE GLOBALIZATION ERA

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#### **ABSTRACT**

The mineral resources of the Republic of Srpska enable the exploitation and processing of mineral raw materials in the metal, metal processing, construction, chemical industry, cement industry, ceramics and construction materials, etc. The largest part (over 90% in terms of value) are reproductive materials for processing in other industries and a smaller part are products that go directly to the market. In the conditions of increasing and faster technological development and with the tendency of increasing exploitation of natural resources in the world with changes of previous life conceptions, there was a need to analyze the sustainability of the mineral resources and natural resources use for further development of the Republic.

The importance of a clearly defined Strategy for Management and Utilization of Mineral Resources and Raw Materials in the Globalization and Advanced Technologies Era is shown in the paper, which would enable planning and defining the goals of the use of mineral resources, clearer identification of the potential mineral resources, and basic starting data for creating the activities in order to more rational and economically efficient management of the natural resources in the Republic of Srpska. At the global level, it has become clear that geology is a very important geopolitical factor in the 21st century. The importance of disposition and knowing where, how many and what types of mineral resources we have, can be achieved through to the several strategic activities.

The development of the Strategy for the Management and Utilization of Mineral Resources of the Republic of Srpska, the "central interactive" database of mineral resources and the establishment of the Agency or the Directorate for Mineral Resources, are some of the proposals for these strategic activities.

Keywords: Management strategy, mineral resources, geopolitics, interactive internet database and Directorate for mineral resources

#### **INTRODUCTION**

In the conditions of uncertain future and increasing technological development of the world which uses some other global achievements with the tendency of increasing exploitation of the natural resources and sudden changes of the previous conceptions of life, there was a need for analyzing the sustainability and further development of the Republic of Srpska and the geopolitical position of RS

and BiH in relation to the surrounding countries. The development of a strategic document related to the raw-mineral complex can be important for several reasons:

- achieving the realistically possible and sustainable utilization of mineral raw materials with meeting the needs of environment safety, spatial planning and more balanced economic development of the certain regions in the Republic of Srpska,
- maintenance and improvement of the employment system of a certain number of people on a realistic basis, because it is a well-known fact that one job in the mining industry implies 4-7 jobs in the processing and construction industry, infrastructure and service activities, production with inorganic technology and traffic,
- defining a clearer and more stable position of the Republic of Srpska within Bosnia and Herzegovina, where there are many social and political barriers, which are reflected in the systemic solutions at the level of entities and the state of BiH and thus ways to attract the investment and project implementation.
- the size and importance of the market and the economies of almost all Western Balkan countries are not important globally, so it is necessary to keep in mind what is available in terms of mineral and natural resources in order to rationally use or give to use to the other foreign companies that have enough funds and secured markets.

The process of globalization cannot be prevented, but better positions and use of the existing one can certainly be secured more clearly if it is known exactly what is available and how much it can be worth.

The paper is designed to show the importance of mineral resources and raw materials in global political processes and economic trends in the era of globalization and the use of modern technologies. In addition, the situation in the mineral industry of the Republic of Srpska is presented, which resulted in certain proposals for improving the effects of the use of mineral resources and mineral raw materials, and thus the development of the economy of the Republic of Srpska.

### GEOPOLITICS AND GEOLOGY

Mineral raw materials can be associated with all human activities and everything that man produces. All or almost all is made from mineral raw materials or products made from them. The great importance in the application of mineral raw materials and at the same time the negative legacy in the performance of mining activities in recent decades has created a very negative public attitude towards the exploitation of raw materials and led to the "removal" of most mining activities from Europe. The European Union has realized that this may have improved environmental conditions, but it has also created a great dependence of the European market and industry in terms of not having enough of its own sources of necessary mineral raw materials.

Geopolitics is historically connected in continuity with the existence and development of human civilization and connects natural and social sciences where carries with it parts of mathematics, law, economics, politics, and lately more and more geology [1]. Geopolitics, as a discipline that studies the relationship between political power and geographical space, is an increasingly important sphere of socio-political changes in the world that have occurred as a result of the relationship of world powers [2].

Natural resources are the common good and common wealth of each country and their use, economic application and economic evaluation should be planned and purposefully controlled. Since the conditions of resources exploitation are variable category, it can be said that the scope of resources is also variable. The increasingly pronounced problem of resources scarcity of vital importance for existence in the world, imposes the need for a more comprehensive view of global problems and the deficit of natural resources with a focus on the deficit of food, water and energy [3].

Globaly it has become clear that geology is becoming a very important geopolitical factor today, and how important is the availability and knowledge of where, how many and what types of mineral resources we have and how many there are in the world. We show the importance of geopolitics and geology in the following text, through some of the most vivid examples:

a. Lithium rivalry - the first two decades of the 21st century have become the priority geopolitical goals of all major economies in the world. Ever since the massive development of electric vehicles began globally a few years ago, the element lithium has been in focus as a strategic metal. Demand is huge at the moment in China, the EU and the United States, so securing control of lithium supplies is becoming just as important as securing sufficient quantities of oil.

The supply of lithium metals is becoming a strategic issue, and the production of lithium-ion batteries has promoted lithium into a "new gasoline". The United States and China have leading roles on the world stage [4]. Geological research in the Jadra basin on the slopes of Cer in Serbia is nearing its end, and there are 227 million tons of jadarite ore in the Adriatic basin, which could be transformed into 1.6 million tons of lithium carbonate equivalent, which is a global potential.

**b. Energy geopolitics and energy security** - in the modern world is determined by IT well-organized databases and with the help of mostly known economic, technological, fiscal political interdependencies. In methodological terms, energy geopolitics is divided into two subtypes: geopolitics of energy sources or, more precisely, geopolitics of natural resources for primary energy sources, and geopolitics of energy markets. The first includes the economic-political set of processes that define primary sources and the geopolitics of energy markets is related to economic growth, economic and political doctrines, processes and analysis of energy consumption, production, main production areas, transport routes and centers of energy consumption [5].

Energy security is an increasingly important feature in international relations, and thus affects the efficiency of foreign policy of a country. Many technologically advanced countries are finding that they are increasingly dependent on imported energy, which increases their strategic vulnerability and limits their ability to achieve a wide range of foreign policy and national security goals [6].

Natural strategic mineral resources, such as gas and oil (along with other energy resources that generate electricity), have a great importance for each country and for the global economy. Nature has not been equally generous to all countries in terms of oil and gas wealth. At the same time, a large number of oil-rich countries have been the subject of many geopolitical and political conflicts.

When it comes to the production and import of energy in the European Union, there is a noticeable dependence on imports, especially oil and natural gas, which affects a certain uncertainty in terms of energy supply. Primary energy production in the European Union and the negative balance between production and consumption, makes it increasingly dependent on energy imports, where more than half (58.2%) of the EU's gross available energy in 2018 came from imported sources. In the first two decades of this century in the European Union there is a trend of decreasing primary energy production and in 2018 it was 9.2% lower than a decade earlier.

The general decline in primary energy production in the EU is attributed to the depletion of geological reserves of mineral resources or the attitude of producers who consider the exploitation of nonrenewable mineral resources uneconomical and especially the exploitation of coal, which is burdened by great environmental constraints. In 2018, the largest share of primary energy production among EU Member States was in France, with a 21.7% share in the total EU, followed by Germany (17.8%), Poland (9.7%) and Italy (5.9). %).

In absolute terms, 14 out of 27 EU member states recorded an increase in the level of primary energy production in the period from 2008 to 2018. The largest increase in production was registered in Italy, Spain, Sweden, Ireland, and Finland, and the largest decline in primary energy production was recorded in the Netherlands, Germany and Denmark [7].

Primary energy production in the EU in 2018 was distributed to a number of different energy sources, the most important in terms of the size of its contribution renewable energy sources, nuclear energy (especially high in France, where it accounted for 78.0% of national primary energy production), solid fossil fuels, natural gas and crude oil as the main source of primary energy production from other sources (Figure 1) [8].

When it comes to imports and exports of primary energy, the decline in production in the European Union over the past decades has resulted in increased imports of primary energy and energy sources. The quantity of imported natural gas more than doubled during the period 1990-2018, making it the second largest imported energy source. Crude oil was still in first place in 2018 in terms of imported quantities, although it is 8.5% lower than in 10 years ago. Exports are much smaller than imports (more than five times). In 2018, fuel oil and diesel oil were mostly imported and sold, followed by motor gasoline and natural gas [7].

When it comes to the use of coal, technologically advanced countries of the world and especially the countries of the European Union, in order to reduce the effects of greenhouses, insist on "necessary" changes in electricity sources and the need to reduce the use of fossil fuels. The growth of coal consumption in the world is planned in the period from 2010 to 2030 to 2.5 percent. The plan for the European Union to be a green oasis and a completely climate-neutral continent is being realized through the confirmation of the so-called European Green Plan, which calls for even more ambitious goals and reduction of harmful emissions. So reduction of harmful emissions by 2030 should be a 55% lower compared to 1990.

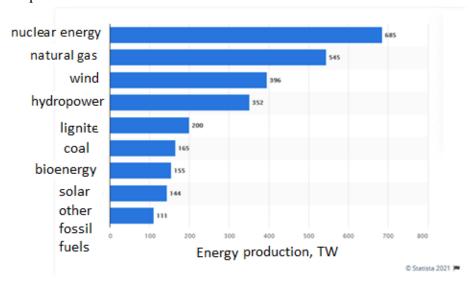


Fig 1. Primary energy production in the EU in 2108 by energy sources (www.statista)

Here is a brief basic overview of the current situation and data at the global level, related to the exploitation and use of coal as an energy raw material in order to better understand global policies and possible trends in energy (reviews and data at the end of 2018):

- The world's geological coal reserves amount to 891.5 billion tons, of which 28.5% are located in Eurasia, 23% in the United States. Coal reserves in BiH amount to about 5.6 billion tons, or 0.6% of world reserves and 2.2% of European coal reserves. At the same time, coal reserves in the Republika Srpska amount to 867 million tons, ie 15% of BiH reserves, or 0.33% of European reserves.
- Electricity production in 2018 from coal in the world was at the level of 64%, while in Europe it is 40.4%, -The countries most dependent on coal production are China, the United States, Japan, South Korea and Germany.
- The share of electricity produced on the basis of coal in BiH was 61.29%, and 14.6 million tons were produced, or 1.75% of coal production in Europe,
  - Coal production in Europe in 2018 amounted to 833 million tons, of which 758 million (91%) in about 10 countries (Germany, Turkey, Poland, Czech Republic, Ukraine, etc ....)

c. Steel geopolitics/production - the steel industry is one of the largest and most important industries in the world and has always been an important driver of the economy. The products of the steel industry are irreplaceable, e.g. in metal processing, car production, mechanical engineering and construction. However, environmental and labor protection issues put many steelmakers in a situation to question their cost-effectiveness and quite often to stop working [9].

The geopolitics of the ferrous metallurgy-steel industry is still one of the dominant geopolitical tools by which states pursue and protect their interests. The introduction of additional taxes and customs duties in order to protect our own steel industries from cheaper imports is one of the examples of the realization of their strategic goals by the most developed countries an unions (USA and the European Union). The problems of technological improvements are largely related to many limitations in terms of ecology and the provision of sufficient quality mineral resources [10].

When we talk about the steel industry, it is known that in the countries of the Western Balkans, only steel mills in Zenica and Smederevo still work, but they also face many difficulties related to placement, provision of raw materials, etc. Serbia remains exempt from EU safeguards and additional taxes at this time, and BiH still trades on the basis of bilateral quotas with the EU.

d. Drinking water - the use of drinking water is a political and security issue, as water is a public good and a human right, and not a market commodity. Drinking water is certainly one of the most important natural mineral resources that could strongly affect the security of some country in the coming decades in the circumstances of the global warming and climate changes. Therefore, drinking water sources need to be protected and according to Eurostat data from October 2017., some regions of the Western Balkans have a lot to offer when it concern of water.

Thus, the number of cubic meters of fresh water per capita can be defined (Croatia has, for example, 27 330 m<sup>3</sup> of fresh water per capita, which puts it in first place in the EU, Slovenia is in fifth place with 15 550 m<sup>3</sup>, while, for example, Romania with 1 840 m<sup>3</sup> close to the limit of 1700 cubic meters per capita, which is the lower standard set by the UN). BiH has about 9 460 m<sup>3</sup> of fresh water per capita, which certainly places it in the group of the countries that can product and export of drinking water. The battle for water as a public good is not limited to the region and this debate is strongly present within the European Union, warning of the threat to drinking water sources by insatiable investors who want to make money by selling the public resources The European Water Movement [11].

## SITUATION AND PERSPECTIVES OF THE USE OF MINERAL RAW MATERIALS OF THE REPUBLIC OF SRPSKA

Why is it important to know this information !? It is a realistic estimate that we cannot influence or change the geopolitical trends in the world, but it is necessary to recognize the global trends and try to determine more precisely through a certain strategic document what is available, how it is used, how it can be used and who could be "a strategic partner" in the development of a specific project for the use of a mineral resource or better said a mineral raw materials.

Thus, there would be no situations in which, in some existing projects with foreign investments and companies that use the certain resources, the Government of Republic of Srpska does not have the appropriate mechanisms for protection of the economic and social interests or the possibility to change and improve something in the realization of such projects.

### Current situation in the exploitation and industry of mineral raw materials

The mining sector in Republika Srpska has a small share of gross domestic product when compared to the developed countries of the world. Mineral raw materials and the mining sector do not have the economic significance that they should have, as can be seen from the data for the area "Mining and quarrying":

- The number of employees has varied between 5,100-5,300 employees in the last decade, which is just under 2% of the total number of employees in RS. There are only 1,000 workers under the age of 45, which shows that occupations in the field of geology are not attractive for young people,
- The average size of net salary during 2018 was 1,126.00 KM (which is the third largest net salary, after financial services and information and communications and it is the only way to attract young staff in these activities),
- during 2018 and 2019, the number of legal entities in the field of "mining and quarrying" was only 192
- GDP-gross domestic product amounted to about 200 million KM, ie. about 2% of the total GDP of Republika Srpska [12].

Problems and matters related to the use of concessions, ie mineral raw materials in the Republic of Srpska are regulated by the Law on Concessions and the Document on Concession Policy, and the conditions by other legislation related to this economic activity such as the Law on Mining, Law on

Geological Research, etc. Today, the valid Law on Concessions [13] and the Law on Amendments to the Law on Concessions [14,15] with the Document on the Concession Policy [16] are applicable.

During 2012. and 2013., the Government stated that the system of concessions until then in the national budget generated the minimal revenues from the exploitation of mineral row materials in the amount of about 3 million KM, stating that it is inadmissible to prolong such a situation. The reasons for the adoption of the current Law on Concessions are contained in the need to establish a legal basis that will provide a more efficient and functional procedure for awarding and implementing concessions, which would eliminate the shortcomings identified in the previous law, in order to exploit natural mineral resources, which are need to be put in the function of economic development and optimal use by the adequate measures of politics for concession awarding.

One of the most important documents in the implementation and application of the Law on Concessions of Republic of Srpska is the Concessions Policy Document, but the question of the methodology and basis used in drafting the document can be raised, which should be fully harmonized with the certain strategic and planning documents.

On the basis of the mentioned legal regulations, a concession is being awarded today in the field of exploitation of mineral raw materials, but the contribution and benefits that the state has from that are still limited ("typical" concession contracts, "unconstructive" reductions in total investments in order to reduce one-time fees, inconsistent solutions in the Rulebook on concession fees, etc.). In addition, the Commission for Concessions of Republic of Srpska notes some other problems in the implementation of concession contracts [17]:

- most concessionaires point out the problem of limited and small local market
- deadlines for the implementation of contractual obligations, necessary for the start of commercial work, are usually not well agreed (no significant activities have been undertaken in the implementation of the concession contract, the contractual obligations have not been fulfilled within the established deadlines),
- for certain mineral raw materials, new approvals for exploitation are required, ie. new concession award procedures are being implemented or have been implemented, although it is evident that there are sufficient capacities in these areas for the exploitation of the same mineral raw material and which is not used at full capacity.

Here is a brief overview of the current situation of use of the above types of mineral raw materials in the Republic of Srpska:

a) Coal exploitation - in Republic of Srpska the coal production in 2018, amounted to 7.28 million or 49.8% of production in BiH, so based on the above reserves, it can be estimated that the existing coal reserves, in the production levels achieved so far and during the operation of three installed thermal power plants (Ugljevik, Gacko and Stanari) with a capacity of 300 MW, provide simultaneous operation in the next 50-100 years with a stable energy balance of the Republic of Srpska. Whether the work of our thermal power plants will be feasible in the next 100 years will therefore depend not on natural mineral potentials, but on geopolitics, ie on the strategy of Republic of Srpska and the possibility of its realization and directing and further development of the economy in this area.

- **b) Metallic mineral raw materials** Lead and zinc reserves in the Srebrenica area ensure work for decades (with additional research in other areas in the area and more), and iron ore reserves in the Ljubija region provide the possibility of exploitation for at least three to four decades (with the current operation of the Omarska Mine within ArcelorMittal). Only the bauxite reserves in the region of Milići and Vlasenica are now "observable" in a qualitative and quantitative sense, and without some successful additional geological research, they provide work in the next 10 to 15 years.
- c) **Drinking water** from the aspect of providing the necessary quantities of drinking water, the importance of groundwater is essential. Analyzes performed in recent decades have shown that about 80% of drinking water in the Republika Srpska territory is provided from underground sources. Republika Srpska has significant groundwater reserves, of which only a small part of the balance reserves has been used so far [18].

This data is very important, bearing in mind that much more drinking water is imported than exported. This is the current situation throughout BiH. According to the BiH Market Surveillance Agency, the Food Safety Agency and the Indirect Taxation Authority, in 2018 the import of drinking and mineral / carbonated water reached the value of 154.3 million KM, and BiH was in a deficit of almost 100 million KM [19].

Is it necessary to have such an import and deficit in drinking water and whether at least part of that money could not be used in investing and opening a plant for bottling drinking water. The answer may again be in adequate strategic planning and creation of strategic directions for the development of the mineral resource complex of the Republika Srpska and BiH.

#### d) Some non-metallic mineral raw materials

- d1) Cement In 2017., hundreds of thousands of tons of stone, gravel, cement, lime, gypsum and clay were imported into Bosnia and Herzegovina, despite the fact that the country has capacities for their processing and production, as well as all the necessary geological predispositions. Official data show that amount of imports is over 80 million marks, which exports cannot keep up with it, as they are twice less and to approximately 40 million. Of the total imports, the majority, more precisely 61.3 million KM, refers to cement in the amount of 452 433 tons [20].
- d2) Brick and ceramic products due to the application of new construction technologies (Investors are increasingly using the concrete structures and panels for the construction of buildings) in Bosnia and Herzegovina, out of 29 brickyards, only four survived [21]. The question of whether it is necessary for production in BiH or not, can be answered in the data available to the Agency for Market Surveillance in BiH, and related to the import of brick and ceramic products in the last three years. The import of brick and ceramic products in BiH is in the period from 2017 to 2019. amounted to between 101 and 110 million KM.
- *d3) Mineral wool* Import of mineral / stone wool and natural products for thermal isolation in BiH in 2018. was about 10 000 000 KM, and there are natural-geological conditions for starting this type of production.
- **d4)** Technical building stone As an example of reviewing the state of concession and thus the manner and effectiveness of mineral raw materials in the Republic of Srpska, we cite the example of technical building stone, because it illustrates the "absence" of planned concessions or optimal use of mineral raw materials in the Republic of Srpska. According to the data of the Commission for

Concessions of Republic Srpska and the Register of Concessions of Republic of Srpska from 2019., Figure 2. shows an overview of awarded concessions for technical building stone. At first sight is obvious, in addition to the unrealistically large number of issued concessions, inregular and rob spatial disposition of awarded concessions in terms of spatial aspects, market conditions and population, but also in relation to the type of mineral raw materials.

This has created the market conditions in which it is difficult to place the certain volumes of production and especially to achieve the planned sales prices according to feasibility studies conducted during the award of concessions, which implies minimizing the effects of concessions and lack of adequate results of granted concession rights to this type of mineral raw material.

## The perspectives of mining in this area

It is known that in the Republic of Srpska there are currently 6 active mines of medium capacity with different mineral raw materials [22]:

- iron ore mine with a capacity of 1.6-3.0 million tons of iron ore,
- three coal mines with capacities of 1.5 to 2 million tons of coal (Stanari, Ugljevik and Gacko),
- Sase-Srebrenica lead and zinc mine with about 300 000 tons of ore,
- Bauxite mine Milići with a capacity of 400 000-600 000 tons of bauxite,
- dozens of quarries, deposits of underground mineral, thermo-mineral and drinking water, potential deposits of antimony, new deposits of lead and zinc, barite, other non-metallic mineral raw materials, etc.

It is estimated that coal reserves, as mentioned earlier, provide decades of operation of the three existing thermal power plants. Lead and zinc reserves in the Srebrenica area also ensure exploitation for decades (with additional research in other zones in the area and more), and iron ore reserves in the Ljubija region provide the possibility of exploitation for at least three to four decades.

Mineral potentials in terms of non-metallic mineral raw materials (production of cement, ceramics, brick products, various non-metals for fillers) and underground thermal and thermomineral potentials (further development and opening of spa and recreational tourism on the basis of underground water resources) are realistic and with this level of knowledge and affirmative for realization.

All of the above indicates the need to make a clear "cross-section" of what we have, what is currently usable, how much money is needed for implementation and, most importantly, what would be obtained by using them. Large, and if the certain changes do not occur in the next few years, irreparable shortcomings in the new-planned geological research cause that the balance geological reserves to be depleted over time and the possibilities of finding some new larger deposits of certain mineral resources will decrease over time.

The development of strategic documents would create a long-term plan of geological research in order to expand existing and find new mineral resources, which could be "offered" on the global market and which would represent the "replacement" capacities for those who will be exhausted.

Citing the reason that the state does not have the financial means for the geological research is a fact that should not create a situation in which nothing is done in order to change this situation, and for these reasons it is necessary to find certain solutions and realization of the mining projects, ie projects of exploitation, processing and use of certain mineral raw materials, we can state the certain guidelines, which in accordance with the size of our space, potential and existing deposits and the size of possible markets and placements, could be reflected in the following:

organizing the production on a smaller attractive deposits of non-metals, rare earths or technological landfills when using technogenic raw materials on the principle of low-tonnage production and the so-called SSM capacity (Small Scale Mining),

- organizing production on a smaller deposits and with smaller capacities on the principle of contract mining, ie engagement of the subcontractors and their equipment, the so-called Contract mining, which relaxes the projects in terms of load with capital costs and
- adoption of special regulations for taxation in the mineral sector, whereby the interests of investors and the state would be equally protected.

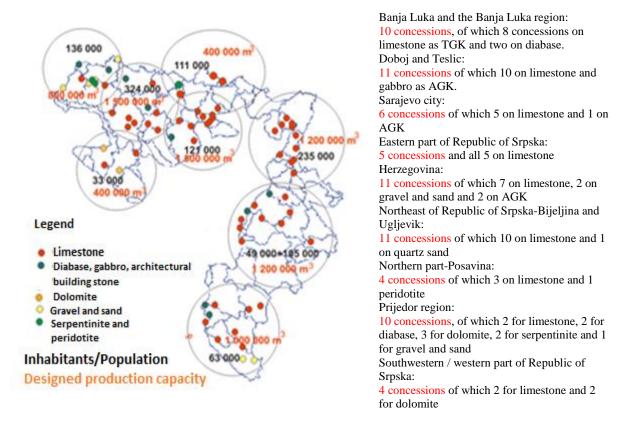


Figure 2: Map with the quarry disposition in the RS [22]

# POSSIBLE ACTIVITIES FOR ESTABLISHING OF PLANNING MANAGEMENT AND USE OF MINERAL RESOURCES OF THE REPUBLIC OF SRPSKA

The document on mineral resource management should start from the fact that economic growth, as a consequence of global economic and social development, with the current dominant new and information technologies, requires increasing use of mineral resources. Mining is the carrier of mineral resources management and therefore, in addition to geological activity, it should affect the overall economic development of the country. Today, in the world over 60 billion tons of mineral resources are produced annually, and the average consumption per capita is 22 kilograms per day, of which the largest part (although the least produced there) is used in Europe [23].

In addition to the above, special attention would be paid to the market projection / analysis for metallic, non-metallic mineral raw materials, mineral, thermo-mineral and drinking water, technogenic mineral raw materials and energy mineral raw materials. Based on this projection and market analysis, it is necessary to make a dynamic assessment of mineral consumption in the future time period to be defined, with the suggestion that this time period should not be too long, because extending the assessment period increases the chances of errors or inaccurate figures and quantity (e.g. that period should be between 10 and 15 years).

The planned activities within the implementation of this work would be consultations with representatives of the competent Ministry of Energy and Mining and other ministries related to this issue (Ministry of Physical Planning, Construction and Ecology, Ministry of Agriculture, Forestry and

Water Management and the Concessions Commission of Republic of Srpska), state institutions, all levels of government, the companies engaged in the exploitation of mineral resources and engineering in mining and geology [22].

Defining the strategic and non-strategic mineral raw materials, the needs of the state and local communities for certain raw materials, markets in case of exports and opportunities in that direction, environmental safety conditions, levels of geological research of the certain regions and areas d other data that could be important / existence of staff, services, etc. are some of the basic elements of the Strategy for the management and use of mineral raw materials in the Republic of Srpska.

In the surrounding countries, ie in the Republic of Serbia and the Republic of Croatia, there are the strategic documents, namely the Strategy of Mineral Resources Management of the Republic of Serbia until 2030. [23], from 2016. and the Strategy of Mineral Resources Management of the Republic of Croatia from 2008. [24].

Our duty is that the further development of the mineral-raw sector should be realized in a planned manner so that our society has as many long-term benefits as possible and the creation of conditions for the replacement of capacities or the production of other types. That is why it is very important, in parallel with the development of the Strategy, a "central" database on mineral resources and raw materials is created, with an interactive internet platform and information structure that can be interesting for all potential foreign and domestic investors.

In addition, it is necessary to organize the Agency or Directorate for Mineral Resources, which is the practice in most countries and not only the most developed ones (usgs - Federal Geological Bureau – US, Federal Agency for Underground Use - Russia, DERA - German Mineral Resources Agency, etc.). It is necessary to change the practice in which it is allowed that over time, partially and according to the individual interests of certain interest groups, create a database on what Republic of Srpska has at its disposal and is used so successively, individually and as needed [22].

#### DISCUSSION AND CONCLUSIONS

Natural resources are the common good and common wealth of every country. Their use, economic usage and economic evaluation should be planned and controlled. Achieving realistically possible and sustainable use of mineral raw materials, maintaining and improving of the employment system of a certain number of people on a realistic basis, and defining a clearer and more stable geopolitical position of Republic of Srpska and BiH can be achieved through the several proposed measures and activities:

- development of the Strategy for the management and use of mineral raw materials of the Republic of Srpska - a document on the management of mineral raw materials where economic growth, with the current dominant new and information technologies requires increasing use of mineral resources,
- development of a "central" database on mineral resources / raw materials, with an adequate structure of information of interest to all potential foreign and domestic investors, and
- organization of the Agency / Directorate for Mineral Resources of the Republic of Srpska, which would manage all the above activities for the needs of the state.

A number of experts and institutions would deal with the implementation of the proposed activities and systematize the all collected information, which would enable the legislative and executive authorities a more comprehensive approach to resolving these very important issues for future development and strengthening the position of Republic of Srpska.

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