

Main factors influencing the implementation of the EU Critical Raw Materials Act in Poland

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Abstract. The paper presents the most important issues related to the introduction of EU Critical Raw Materials Act (CRMA) in May 2024. This fact results in numerous new obligations on EU Member States connected with various actions to develop supplies of 34 critical raw materials (CRM) for EU, but especially of 17 strategic raw materials for EU. In-depth analysis has shown that the implementation of CRMA in Poland requires the adoption of an appropriate domestic act on ensuring access to CRM, which will take into account also raw materials important for the national economy. This new domestic act is planned to introduce permanent mechanism of preparation of the National Mineral Policy of Poland. The currently valid National Mineral Policy of Poland will be replaced in the coming year by a new one, which has to take into account all issues resulting from introduction of CRMA and its implementation in Poland. The provisions of this new National Mineral Policy of Poland must remain in close correlation not only with CRMA provisions, but also with: projected future domestic demand for raw materials critical for

EU and important for the national economy, planned amendments to the Geological and Mining Law, expected introduction of multi-annual plans of the state geological survey, preparation, acceptance and commencement of the National Program for the Exploration of Critical Raw Materials, implementation of system of strategic deposits and institution of anthropogenic deposits, as well as the plan for international cooperation in the field of geology and raw materials. These activities are also aimed at improving the investment climate in the raw materials sector in Poland, which would result in the development of Polish production of some CRM from primary and secondary sources, also through the instrument of strategic projects according to CRMA.

Keywords: Critical Raw Materials Act, mineral policy, National Program for the Exploration of Critical Raw Materials, geological survey tasks

INTRODUCTION

In May 2024, Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials (Critical Raw Materials Act – CRMA) (<http://data.europa.eu/eli/reg/2024/1252/oj>) came into force. Some of the annexes to the CRMA are: an updated list of 34 critical raw materials for the European Union (EU) (Annex II) and a completely new list of 17 strategic raw materials for the EU (Annex I), which is a subset of the list of CRM. The lists of critical and strategic raw materials for the EU are established on the basis of the methodologies that are also provided in the above-mentioned annexes to the CRMA.

In Poland, the currently used concepts of CRM and strategic raw materials for the Polish economy were previously designated according to separate national methodologies. These lists are contained in the still valid government document – the National Mineral Policy of Poland (NMPP) 2050 (<https://www.gov.pl/web/klimat/polityka-surowcowo-panstwa>), adopted by the Council of Ministers in March 2022. Work is currently underway on the preparation of the new NMPP, which, among numerous amendments and additions, will include the adaptation of this document to the provisions of the CRMA, and contain the lists of critical and strategic raw materials for the EU as critical and

strategic raw materials for the Polish economy. However, taking into account the specificity and structure of the Polish economy, it will also be necessary – in this new policy document – to present a separate list of key raw materials for the Polish economy, established according to a separately developed original methodology.

The analysis of the management of mineral commodities in Poland in the last few years (<https://min-pan.krakow.pl/wydawnictwo/ksiazki/gospodarka-surowcami-mineralnymi-w-polsce-w-latach-2014-2023/>) indicates that, out of 34 critical raw materials for the European Union, Poland is currently a significant producer of only four raw materials: coking coal (in 2023: 11,924,000 t), copper (592,400 t of refined copper), feldspar raw materials (330,900 t) and helium (440 t). Of these, only one – copper – is on the list of strategic raw materials for the European Union. The situation is different in the case of consumption of CRM in Poland. Significant levels of domestic consumption are recorded for 10 CRM: bauxite – alumina – aluminum, copper raw materials, metallic magnesium, metallic silicon, coking coal, feldspar raw materials, phosphates, elemental phosphorus, natural graphite and barite. Significant domestic consumption is also recorded for five other CRM: boron, antimony, lithium and manganese raw materials, and helium. Of the 15 listed raw materials that are critical for the European Union and at the same time important for the Polish economy, seven raw materials also have the sta-

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tus of strategic raw materials for the European Union, namely: bauxite – alumina – aluminum, copper raw materials, metallic magnesium, metallic silicon, lithium raw materials (battery grade), manganese raw materials (battery grade), natural graphite (battery grade).

CRITICAL RAW MATERIALS ACT AND ITS IMPLEMENTATION IN POLAND

The Critical Raw Materials Act imposes numerous new obligations on EU Member States regarding various actions to develop supplies of raw materials defined as critical raw materials in the CRMA. These obligations concern, among others:

- ❑ Giving opinions on applications for recognition of strategic projects in the field of extraction, processing, recycling and substitution of CRM implemented in the territory of the Republic of Poland;
- ❑ Establishment and operation of contact points to provide assistance in the field of administrative procedures for issuing permits for strategic projects;
- ❑ Preparation of the National Program for the Exploration of Critical Raw Materials (NPECRM), aimed at increasing the amount of available information on mineral deposits for the production of CRM in the country;
- ❑ Monitoring and mitigating supply chain risks and increasing diversification of supply of CRM;
- ❑ Implementing national measures on circular economy, including development of a database of closed mining waste disposal facilities, as well as determining the recyclability of permanent magnets;
- ❑ Establishing sanctions for entrepreneurs who fail to comply with their CRMA obligations, including those relating to risk preparedness, project reporting, and recyclability information.

The CRMA obligations are interdisciplinary in nature and are new tasks for the government administration. At present, some tasks often remain within the competence of a number of ministries, while others are not assigned to any of them. There is no single institution that would be able to provide appropriate organizational and coordination measures to carry out these tasks. On the other hand, the provisions of the CRMA (including those relating to strategic projects) will often require quick and effective action in a short period of time, which need to be coordinated between appropriate ministries. In addition, these activities have to be appropriately incorporated into the new version of the National Mineral Policy of Poland (NMPP).

In-depth analysis has shown that the implementation of the CRMA in Poland requires the adoption of an appropriate domestic act on ensuring access to critical raw materials, including important (key) raw materials for the national economy (<https://www.gov.pl/web/premier/projekt-ustawy-o-zapewnieniu-dostepu-do-surowcow-krytycznych-w-tym-do-surowcow-waznych-dla-krajowej-gospodarki>). Legislative work on this act was initiated in January 2025, and the preliminary draft of the governmental regulation is expected to be submitted in May 2025. In the framework of individual state obligations arising from the CRMA, it is planned that the act will introduce, among others, the following solutions:

- ❑ Assessment of applications for recognition of projects as strategic projects (made by the Interministerial Team for NMPP, based on the recommendation of the Chief National Geologist), with subsequent approval by the Council of Ministers;
- ❑ Establishment of a single point of contact within the ministry responsible for the environment (currently the Ministry of Climate and Environment) for strategic projects in the field of mineral extraction, processing and recycling of CRM;
- ❑ Appointment of the Chief National Geologist as the person responsible for the preparation of a multi-annual government programme – NPECRM, to be submitted to the Council of Ministers for approval; the preparation of this programme is to be carried out in close cooperation with the Polish Geological Institute – National Research Institute (PGI-NRI), acting as the national geological survey of Poland;
- ❑ Introduction of a set of activities aimed at appropriate monitoring of risks in the supply chain of CRM, including: creation and maintenance of a list of new and existing projects related to CRM; creation and maintenance of the National Register of Enterprises in Strategic Value Chains, together with appropriate monitoring of their activities; reporting on the status of stocks of strategic raw materials; creation and operation of the Raw Materials Analysis Centre, which is responsible, among others, for assessing the current and future needs of the national economy for raw materials and for monitoring and mitigating the risk of disruptions in the supply of these raw materials;
- ❑ Establishment of national measures for circular economy of CRM, to be included in the National Waste Management Plan 2028, with the creation and maintenance of a database of closed mining waste disposal facilities in cooperation with the state geological survey, together with the possible selection of facilities with the potential to recover critical raw materials;
- ❑ Establishment of administrative fines for entrepreneurs for non-performance or improper performance of individual obligations under the CRMA, and the method of imposing these fines.

This planned law will also establish a permanent mechanism for the preparation of the government document – the NMPP (and its subsequent updating every 5 years), as well as the tasks and principles of operation of the Interministerial Team for NMPP, appointed by the Prime Minister and headed by the Chief National Geologist. The latter would also be the high-level representative of Poland in the European Critical Raw Materials Board established by the above-mentioned CRMA.

NATIONAL MINERAL POLICY OF POLAND *VERSUS* THE CRITICAL RAW MATERIALS ACT

The currently valid NMPP 2050 was adopted by the Council of Ministers in March 2022. Preparation of new NMPP is planned in the near future. It will be aimed at, among other things, ensuring the consistency of this

document with the activities and regulations concerning raw material policy at the EU level (especially the CRMA). The main objective of the new NMPP will be to ensure Poland's raw materials security by building an efficient and effective system for management of all types of mineral raw materials throughout the entire value chain, taking into account Poland's mineral resources. At the same time, it is necessary to take into account, among other things, a sustainable and maximally pro-ecological approach to production of mineral raw materials, in close connection with assumptions of the circular economy and sustainable management of the Earth's resources, in accordance with, among others, Article 125 of the Environmental Protection Law (<https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=wdu20010620627>).

The starting point of this document will be to define the current and forecasted demand for the most important mineral raw materials. This will apply to both critical raw materials for the EU, as well as raw materials designated – according to our own national methodology – as key raw materials for the Polish economy. NMPP is to set the directions of actions necessary to secure access to the mentioned above mineral raw materials, where possible – from domestic sources (mineral deposits, secondary and waste sources), and in the absence of such possibilities – from foreign sources (import from safe sources).

The provisions of this new NMPP must remain in close correlation with, among others, the process of implementing the CRMA in Poland, planned amendments to the Geological and Mining Law, multi-annual plans of the state geological survey, the NPECRM, implementation of system of strategic deposits and institution of anthropogenic deposits, and finally – the plan for international cooperation in the field of geology and raw materials.

Government documents on the functioning of the Government Plenipotentiary for the NMPP (with the planned abolition of this position) and the Interministerial Team for the NMPP (<https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WMP20230000147>) (planned corrections to the scope of activities with the appointment of the Chief National Geologist as the Chairman of this team) are being amended. The above-mentioned Interministerial Team will be a key governmental body that provides the basic guidelines for the preparation of NMPP of Poland and approves the final draft of this document. The draft policy will be developed mainly by the Ministry of Climate and Environment, with significant support from the raw materials policy working group within the Earth Resources Management Council – an advisory body appointed by the Minister of Climate and Environment (<https://dziennikurzedowy.mos.gov.pl/dzienniki-urzedowe-z-2024-r/kwiecien-czerwiec/zarzadzenie/poz-24-zarzadzenie-ministra-klimatu-i-srodowiska-z-dnia-10-kwietnia-2024-r-w-sprawie-powolani/>), and by the PGI-NRI as the Polish Geological Survey (PGI). The new NMPP has to be closely coordinated with other government policies, especially with energy policy (which is currently undergoing changes due to energy transformation), environmental policy, development policy, etc. Its draft should be ready in the fourth quarter of 2025, while the final document is expected to be adopted by the Council of Ministers in 2026.

PLANNED CHANGES TO THE GEOLOGICAL AND MINING LAW, WHICH MAY AFFECT THE DEVELOPMENT OF CRITICAL RAW MATERIALS PRODUCTION IN POLAND

The first coherent regulation concerning the principles of geological and mining activities in Poland was the Geological and Mining Law of 4 February 1994. After 17 years, it was replaced by a new act – the Geological and Mining Law of 9 June 2011. In the following years, this Law was the subject of eight major and more than 30 minor amendments, which were often *ad hoc*, random and fragmentary measures or solutions. These were certainly not attempts to develop a coherent system for managing the Earth's interior, including the mineral resources within it. In its current form, the Law seems to be highly inconsistent and very difficult to apply, unfortunately creating opportunities for exploiting legal loopholes.

Pursuant to the Geological and Mining Law of 9 June 2011 (as amended) (<https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=wdu20111630981>), licensed activities in the Earth's interior are as follows: 1) exploration and identification of mineral deposits; 2) extraction of mineral deposits; 3) underground tankless storage of substances; 4) underground storage of waste; 5) underground storage of carbon dioxide. Concessions for the exploration, documentation and extraction of mineral deposits covered by mining property of the State Treasury, as well as for the storage of substances, waste and carbon dioxide, are granted by the Minister of the Environment (in these cases, it is also necessary to obtain an agreement on the establishment of the mining usufruct/mining lease), and for other types of activities – by the Marshal of the Voivodeship or Head of the District. In the case of concessions for the exploration and documentation of mineral deposits covered by mining property of the State Treasury, an open-door procedure is generally applied (when applying for such a concession, competing applications for the same area may be submitted), only in the case of hydrocarbons a tender procedure is also possible (tenders announced by the concession authority for specific concession blocks).

Licensing procedures are also subject to a number of detailed requirements (agreements, opinions, financial guarantees, etc.), as well as to appropriate environmental and land-use decisions, which are often the elements that determine whether a concession can be granted.

In 2024, conceptual work began on fundamental changes to the Geological and Mining Law. Extensive consultation with the geological and mining community was conducted, combined with the collection of applications for proposed amendments to the Act. In total, over 1,000 proposals for changes to the provisions were submitted, which were then analysed by the Earth Resources Management Council and the Department of Geology at the Ministry of Climate and Environment. Priorities and the main areas and scope of planned changes have recently been established. In particular, they should concern clarification of the scope of mining ownership of the State Treasury and the principles of payments to the State Treasury for the use of state-owned mineral resources, simplification of the structure of the geological administration, simplification of concession procedures (to a certain extent), introduction of two alternative

ways of concession procedures for all minerals covered by mining ownership of the State Treasury – maintenance of the current open-door procedure and – additionally – introduction of a tender procedure for the areas designated by the concession authority (this would apply in particular to metal ores), maximal electronicization of concession procedures, clarification of the principles of the designation of strategic mineral deposits, correction of some rates of concession fees, exploitation fees and increased fees, and finally – correction of the list of tasks of the national geological survey.

A possible next stage in the changes to the law on geological and mining activities is to start work on a proposal for a completely new legal solution under the working name “Code for the Management of the Earth’s Interior”, to replace the current Geological and Mining Law. This new legal act, in the form of a code, would cover not only the management of resources (mineral deposits, underground waters, geothermal energy), but also other uses of the Earth’s interior (storage, disposal, tourist traffic), including those that have not yet been regulated, in a comprehensive and compatible manner.

MAIN ELEMENTS OF ACTIVITIES AIMED AT IMPROVING THE INVESTMENT CLIMATE IN POLAND IN THE FIELD OF RAW MATERIALS

Detailed rules of licensing procedures have undergone significant changes over the last several years, and the currently applicable concessions are governed by various legal bases. The variability of the legal conditions and their complexity have been significant factors contributing to the establishment of several arbitration proceedings against the Polish State. Although the current regulations guarantee full openness to all investors in formal and legal terms (in the case of hydrocarbons there is an additional qualification procedure that allows the entity to proceed), this was because in recent years there have been – allegedly – reported cases of favouring domestic companies with the participation of the State Treasury. Such situations cannot be allowed to continue. All potential investors, whether they are domestic state-owned companies, domestic private entities, or foreign investors from Organization for Economic Co-operation and Development (OECD) countries, should be treated equally in concession procedures conducted under the Geological and Mining Law.

The Polish state should create conditions and incentives for intensifying the exploration of metal ores and other potential sources of CRM, which can be conducted by domestic and foreign entities, based on the current results of geological survey research, as well as the results of the NPE-CRM, which are planned for implementation in the next few years.

Classifications and documents used in international practice related to geological and mining projects should be harmonized with those required in the procedures used in Poland under the Geological and Mining Law. This will require some legal and procedural changes. For example, access to geological information owned by the State Treasury should be free of charge during the exploration and documentation phase, but should be paid for when moving to

the exploitation phase. In the case of mineral deposits covered by mining ownership of the State Treasury, their resources and reserves should be reported not only according to the Polish resource classification, but also according to the UN Framework Classification (<https://unece.org/sustainable-energy/united-nations-framework-classification-resources-unfc>). This should be correlated with an appropriate correction of the qualification system of competent geologists in the field of mineral deposits. For the same group of state-owned mineral deposits, bankable feasibility studies (instead of the current document called “deposit development project”) should be introduced. This would facilitate obtaining external funding for such geological and mining projects, and would also allow to include properly the geological and mining assets in the company’s assets in accordance with international accounting standards (<https://www.ifrs.org/issued-standards/list-of-standards/ifrs-6-exploration-for-and-evaluation-of-mineral-resources/>).

In accordance with the provisions of the CRMA, the development of mineral deposits related to mining projects recognized as strategic projects should be associated with real facilitations in the context of land use planning processes. To some extent, this should also be the case for other mineral deposits recognized as strategic mineral deposits under the current Geological and Mining Law.

THE ROLE OF THE POLISH GEOLOGICAL INSTITUTE – NATIONAL RESEARCH INSTITUTE IN THE IMPLEMENTATION OF THE CRITICAL RAW MATERIALS ACT IN POLAND

The PGI-NRI fulfils a dual role in Polish geology. On the one hand, it is a scientific institute (one of the oldest Polish scientific institute, founded in 1919) that conducts research in the field of geology. At the same time, under the Geological and Mining Law (<https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=wdu20111630981>), it performs the tasks of the Polish Geological Survey (PGS). According to Article 162 of this Law, the PGS initiates, coordinates and performs tasks aimed at studying the geological structure of the country, in particular for the renewal of the country’s mineral raw materials base, as well as the determination of the resources and reserves of mineral deposits. This means that PGS’s permanent task is both to conduct studies on its own initiative in search for mineralization that may indicate accumulations of useful mineral deposits of economic importance, and to collect all geological information from the activities of exploration companies. In other words, the geological exploration of the country and the gathering of knowledge on the occurrences of mineral deposits is a permanent task of the PGI-NRI as PGS, carried out in cooperation with academia and mineral industry.

Economic development requires the preparation of medium- and long-term forecasts and analyses of the international and domestic demand for mineral commodities and the identification of their sources of supply. This is one of the basic conditions for ensuring the country’s mineral security. Ensuring the mineral security also requires the development of scientific research and geological work as well as close cooperation between industry and science.

The economic development of the country requires an extensive knowledge of the mineral resources needed by industry. Therefore, the PGI-NRI (like the geological surveys in other countries) conducts extensive research into the field of exploration and prospecting of mineral deposits such as hydrocarbons, metal ores, and industrial, construction and marine minerals.

Current knowledge of mineral reserves and resources is constantly changing as a result of conducted research and new discoveries of mineral deposits, and the introduction of new extraction technologies and new geological theories and models on the formation of mineral deposits. The steady growth of the world's mineral resources is related to the dynamic resource theory (Szamałek, 2011) based on Hotelling's paradigm. Through research, geologists are constantly identifying new areas favourable for exploration and making discoveries of new mineral deposits. The geological information collected is the basis for PGI-NRI to prepare a special periodic publication "Bilans perspektywicznych zasobów kopalin Polski" (Balance of prospective mineral resources – in Polish) (the latest edition – Szamałek *et al.*, 2020). It is a unique scientific book on an international scale in terms of its scope, containing preliminary identification of mineral deposits. No similar monograph, with the same scope of detailed geological information, is published and available to the public in other countries (Szamałek *et al.*, 2021). Since 1993, "Bilans perspektywicznych zasobów kopalin Polski" (Balance of prospective mineral resources – in Polish) has been fully available to the public, and since 2011 it has been provided in digital form (<https://www.pgi.gov.pl/oferta-inst/wydawnictwa/serie-wydawnicze>). Each mineral raw material is described in "The Balance of prospective mineral resources in Poland" (2020) according to a unified standard information in the following order:

- ❑ Name of the mineral;
- ❑ Types of deposits known worldwide and their genesis;
- ❑ Global and national resources and sufficiency of the mineral;
- ❑ The criteria used to identify and determine deposits;
- ❑ Additional criteria used to identify prospective areas, according to the author's knowledge and experience (if any used);
- ❑ Description of geological regions and units of occurrences of prospective resources in Poland;
- ❑ State of geological exploration of prospective resources in Poland;
- ❑ Assessment of the volume of resources and their changes in the period since the publication of the previous Report;
- ❑ Conclusions and recommendations for further exploration activities.

This monograph is important and useful for sustainable national economic development planning. Exploration and development of mineral deposits are a long-term and capital-intensive processes requiring well-considered and rational decisions. Therefore, the implementation of the CRMA requires the preparation of an action plan based on the current state of knowledge and the identification of priority locations and types of critical minerals predestined

for detailed geological exploration and subsequent possible development of deposits to obtain the necessary mineral raw materials.

NATIONAL PROGRAMME FOR THE EXPLORATION OF CRITICAL RAW MATERIALS

According to Article 19 of the CRMA, EU Member States are required to prepare national action programmes (plans) to ensure the secure and sustainable supply of critical raw materials. The Minister of Climate and Environment (responsible for geology in Poland) commissioned the PGI-NRI to prepare a draft *National Programme for the Exploration of Critical Raw Materials*. By decision of the Director of the PGI-NRI, a special team of specialists in economic geology and geological exploration was appointed to develop the NPECRM project.

For more than 70 years, PGI-NRI has collected information on documented mineral deposits, including for CRM. Based on the information, the characteristics of minerals in the category of resources and reserves used for the production of critical raw materials, and the regions of known deposits, are shown on maps. The information is available online, including for foreign investors https://www.pgi.gov.pl/images/surowce/2022/pdf/mineral_resources_of_poland_2022.pdf.

Of the raw materials considered critical according to the CRMA, the following were produced in Poland: helium, refined copper, feldspar raw materials and coking coal, as well as marginal amounts of nickel sulphate and PGM slime. The draft NPECRM refers to all critical raw materials included in the EU CRMA. Minerals described more extensively are only those that: 1) can be sources of CRM, 2) have been preliminarily documented, 3) for which subsequent stages of geological exploration and economic analyses may indicate their potential for economic exploitation. The draft NPECRM contains over 400 pages of text (with figures) and a number of appendices with maps.

According to the draft NPECRM, the potential mineral sources of the following critical raw materials are considered as the highest priority for exploration work, taking into account the current and future needs of Poland and the EU:

- ❑ Copper;
- ❑ Platinum group metals;
- ❑ Coking coal;
- ❑ Helium;
- ❑ Feldspar raw materials;
- ❑ Natural graphite;

Other mineral raw materials with a high probability for discovery of new mineral deposits and/or expansion of the existing resource base in Poland include:

- ❑ Barite and fluorite;
- ❑ Phosphate rock;
- ❑ Silicon metal (quartzites as a possible source);
- ❑ Brines as a potential source of boron, strontium, lithium and magnesium;
- ❑ Nickel and cobalt.

According to the draft NPECRM, geophysical surveys, geochemical mapping and drilling (with detailed mineral

and chemical analyses of drill cores) are planned to be carried out over the next few years.

Public acceptance (or lack thereof) of mining investments is a key and critical element in the success of mining projects. This is why it is so important to conduct long-term, anticipatory activities with local communities and NGOs to gain their agreement and consent to the development of mineral deposits through rational dialogue. The draft NPECRM also addresses these issues to some extent. Moreover, it draws attention to a number of conditions that may limit or prevent the implementation of both geological exploration and development, including environmental constraints (protected areas), access to infrastructure, etc.

The draft NPECRM consists of chapters dedicated to individual CRM, but also includes important chapters on a number of important issues such as:

- ❑ Management of CRM in Poland;
- ❑ Current resources and reserves of minerals for production of CRM;
- ❑ Outline of the geological structure of Poland in relation to the mineral potential;
- ❑ Current status of work on the assessment of the mineral prospects for CRM;
- ❑ Selected regional geological analyses.

The draft NPECRM will be the basis for the preparation of the government programme of the same name, planned for the years 2026–2033, with planned total budget of 38–40 million euros, to be approved by the Council of Ministers.

DIRECTIONS OF DEVELOPMENT OF INTERNATIONAL COOPERATION IN THE FIELD OF GEOLOGY AND RAW MATERIALS

Poland shows a constantly growing dependence on supplies of mineral raw materials from abroad to meet domestic demand for most of them. Although Poland is relatively rich in sources for the production of many raw materials, and domestic production of some of them is significant, over 70 mineral raw materials (including 28 critical ones) are completely in deficit, with demand being entirely covered by imports. Moreover, the value of imports of mineral raw materials to Poland is constantly increasing and recently exceeded PLN 120 billion (including: fossil fuels over PLN 70 billion, and metallic raw materials over PLN 35 billion) (<https://min-pan.krakow.pl/wydawnictwo/ksiazki/gospodarka-surowcami-mineralnymi-w-polsce-w-latach-2014-2023/>). This is why the development of its international cooperation in the field of geology and raw materials – in various areas of this cooperation, implemented in agreement with the Ministry of Foreign Affairs and other ministries or government agencies – is so important in the context of improving Poland's mineral resource security.

The first important field of this cooperation is the cooperation between the PGI-NRI and the geological surveys of other countries. In the European dimension, this is mainly cooperation within the EuroGeoSurvey (EGS), especially within the framework of joint EU geological projects, in particular educational projects carried out in third countries (an example of this is the series of PanAf-Geo projects). Bilateral cooperation with the geological surveys of non-EU European countries (especially Ukraine and the Balkan countries) and many non-European coun-

tries, in particular selected countries in Africa, Latin America and Central and South-East Asia, is also becoming increasingly important. In this respect, the PGI-NRI has concluded numerous cooperation agreements, which have already been translated or have the potential to be translated into real geological work, especially exploration operations (an example is the research recently carried out in Mongolia).

Activities aimed at providing real support to companies with Polish capital (both state and private ones) in exploration and reconnaissance work, and, in the future, perhaps also the next phases of mining projects (with possible future production of CRM, but also technological cooperation), are the second important area of such international cooperation. Such support would be provided by the PGI-NRI in cooperation with other Polish research units. Ultimately, such activities, combined with the promotion of the potential of Polish institutions in this area, as well as the possible launch of appropriate financial support instruments, are aimed – in the medium term – at developing supplies (imports) of CRM from so-called secure sources, as well as diversifying the directions of these supplies. To some extent, this also applies to geological studies of seabed in terms of mineral deposits, especially metal ore deposits.

It should be clearly stated that Poland actively participates in the development and implementation of the EU raw materials policy, in particular in the areas related to critical and strategic raw materials described in the EU CRMA. The EU High-Level Raw Materials Policy Conference, organized by the Ministry of Climate and Environment in Kraków on 6 May 2025, is the most important example of such involvement undertaken during the Polish Presidency of the EU Council in 2025.

FINAL REMARKS

Introduction of Critical Raw Materials Act in May 2024 resulted in numerous new obligations on EU Member States regarding various actions to develop supplies of 34 critical raw materials, but especially of 17 strategic raw materials. In-depth analysis has shown that the implementation of CRMA in Poland requires the adoption of an appropriate domestic act on ensuring access to CRM, which will take into account also raw materials important for the national economy. It is planned that this new domestic act will also introduce permanent mechanism of preparation of the National Mineral Policy of Poland. The currently valid National Mineral Policy of Poland will be replaced in the coming year by a new one, which will take into account all issues resulting from introduction of CRMA and its implementation in Poland.

The provisions of this new National Mineral Policy of Poland must remain in close correlation not only with CRMA provisions, but also planned amendments to the Geological and Mining Law, introduction of multi-annual plans of the state geological survey, preparation, acceptance and commencement of the National Program for the Exploration of Critical Raw Materials, implementation of system of strategic deposits and institution of anthropogenic deposits, as well as the plan for international cooperation in the field of geology and raw materials. These are to be also closely correlated with actions aimed at im-

proving investment climate in the field of raw materials production in Poland. It should also allow to develop Polish production of some critical raw materials from primary and secondary sources, also through the supporting instrument of strategic projects according to CRMA.

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Barite. Strawczynek near Kielce.
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