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Memorandums of Understanding Signed by Kazakhstan to Develop Critical Minerals

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Topics

- WHY AND HOW DO COUNTRIES PARTNER IN CRM SUPPLY CHAINS?
- WHAT ARE THE PARTNERSHIPS?
- WHAT MEMORANDUMS OF UNDERSTANDING WERE SIGNED BY KAZAKHSTAN TO DATE?
- WHAT ARE RISKS AND OPPORTUNITIES?

NOTE: Terminology used to define the materials for energy transition: Critical Raw Materials (CRM), Critical Minerals (CM), Sustainable Raw Materials (SRM), Sustainable Minerals, etc. Lists vary between countries, subject to the needs (for green-energy transition, defence systems, and high-tech applications) and availability of domestic supply

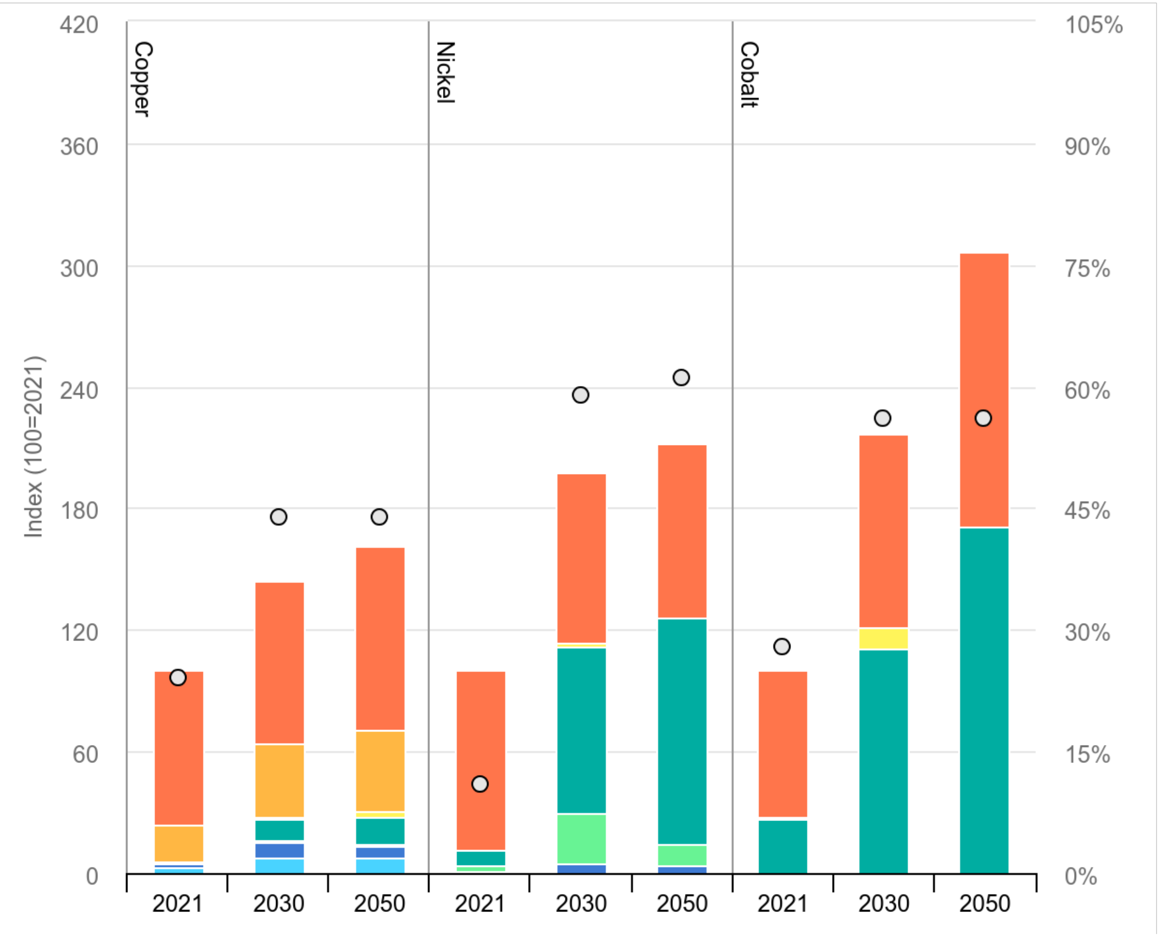
WHY AND HOW DO COUNTRIES COOPERATE IN CRM SUPPLY CHAINS?

WHY?

- To mitigate geopolitical risks and dependencies
- To meet demands of CRM for energy transition to meet the climate goals
- Overcome uneven distribution of the resources of CRMs between countries
- Manage emerging export restrictions on both technologies and minerals in some countries
- To promote high ESG standards in the mining, processing, and recycling sectors and increase recycling of critical minerals

HOW?

- Information sharing and transparency, policy coordination
- Diversification of sources
- Joint research and innovation
- By engaging in various forms of partnerships between countries



In summary, international cooperation is vital to mitigate risks, diversify sources, and secure critical raw materials for sustainable development and economic resilience

Credit: IEA, Total demand for selected minerals by end use in the Net Zero Scenario, 2021-2050, IEA, Paris https://www.iea.org/data-and-statistics/charts/total-demand-for-selected-minerals-by-end-use-in-the-net-zero-scenario-2021-2050, IEA. Licence: CC BY 4.0

WHAT ARE THE PARTNERSHIPS?

- Memorandums of Understanding and Partnership
- Scopes of Work on securing critical minerals
- Critical Minerals Dialogue Frameworks
- Sectoral Working Groups
- Statements, Compacts, Declarations of Intent

IEA Critical Minerals Policy Tracker

Jul 21	Nov 22	Nov 22	Apr 23	May 23	Jul 23	Aug 23	Oct 23	Oct 23	Nov 23	Apr 24
• EU - Ukraine	• EU - Namibia	• **EU - Kazakhstan**	• S. Korea - USA	• Canada - S. Korea	• Chile - EU	• Japan - Zambia	• EU - Zambia	• DRC - EU	• Australia - Indonesia	• **Uzbekistan - EU**

TIMELINE OF CRM MOUs GLOBALLY (EXCLUDING OTHER FORMS OF AGREEMENTS)

EXAMPLE: MINERALS SECURITY PARTNERSHIP (MSP)

- The MSP is a collaboration of 14 countries, and the EU Officially announced June 2022 in Toronto, Canada, at the Prospectors and Developers Association of Canada (PDAC) convention
- MSP partners include Australia, Canada, Estonia, Finland, France, Germany, India, Italy, Japan, Norway, the Republic of Korea, Sweden, the United Kingdom, the United States, and the European Union (European Commission)
- Aim: to catalyse global public and private investment in responsible critical minerals supply chains
- Considers projects along the full clean energy value chain, including recycling
- Focuses on the most relevant minerals and metals supply chains for clean energy technologies (Li, Co, Ni, Mn, Cu, REE, graphite)

Overall, partnerships are essential for promoting sustainability, resilience, and responsible practices in critical mineral supply chains, ultimately supporting global efforts toward cleaner energy and environmental protection

WHAT MEMORANDUMS WERE SIGNED BY KAZAKHSTAN?

Kazakhstan – European Union

- MoU between the Republic of Kazakhstan and the European Union on a strategic partnership on sustainable raw materials, batteries and renewable hydrogen value chains (COP27, November 2022):
  - Closer economic and industrial integration in the strategic value chains of raw materials, batteries and renewable hydrogen
  - Increasing the resilience of raw material, battery and renewable hydrogen supply chains
  - Closer bilateral cooperation on capacity-building, skills and research & innovation
- Roadmap for 2023-2024 on a strategic partnership on sustainable raw materials, batteries and renewable hydrogen value chains (January 2024) includes measures to:
  - Establishing communications to identify and implement joint projects for industrial and investment entities of the EU and Kazakhstan
  - Exchange of experience and best practices in the field of geological exploration of the subsoil, search for resources and exploration of new and secondary deposits
  - Supporting the development of renewable energy in Kazakhstan to decarbonise the energy and industrial sectors, with a special focus on green hydrogen production
  - Improving the resilience of supply chains for raw materials, batteries and renewable hydrogen
  - Development of relations in the industry by harmonising the regulatory framework in the critical raw materials industry and achieving mutual recognition of product quality
  - Cooperation in the field of investment, research and development, skills and capacity building

KZ-EU Road Map

WHAT MEMORANDUMS WERE SIGNED BY KAZAKHSTAN?

Kazakhstan – UK

- Kazakhstan - UK Memorandum of Partnership in the Field of Minerals (March 2023):
  - Facilitate closer cooperation on research and innovation
  - Build capacity and knowledge-sharing between the parties
  - Promote and work towards securing supply chains of Critical Minerals, encouraging investment and commercial partnerships
  - Promote the adoption of high ESG standards in the mining sector in Kazakhstan
  - Promote experience sharing and R&D collaborations between academia and industry to facilitate innovation in the supply chain
- Kazakhstan – UK Road Map for a strategic partnership in critical minerals (March 2024):
  - Kazakhstan’s basic cooperation principle: Raw materials in exchange for technology and entry into the global value chain
  - Important step built upon the Memorandum of Understanding

WHAT MEMORANDUMS WERE SIGNED BY KAZAKHSTAN?

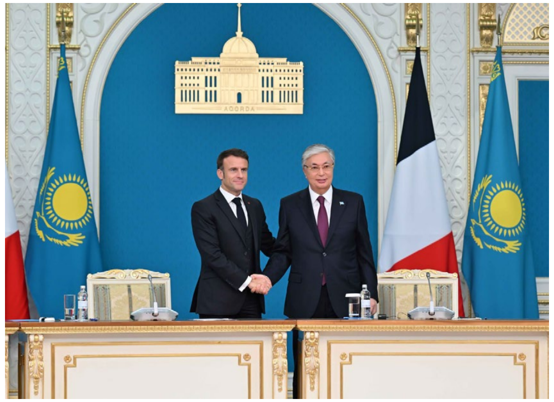
Kazakhstan – US (C5+1 Format)

- C5+1 Critical Minerals Dialogue (announced September 2023):
  - Participants: the United States and Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan
  - C5+1 Critical Minerals Dialogue is to harness the region's abundant mineral resources and promote critical mineral security
  - The CMD represents a broader U.S. strategy to counter China's dominance over critical mineral supply chains
  - Kazakhstan President Tokayev described critical minerals as the "new oil"
  - Inaugural meeting of the C5+1 Critical Minerals Dialogue (CMD) (February 2024)
  - It represented the first step in implementing the CMD
  - The United States emphasized opportunities through the Minerals Security Partnership and Partnership for Global Infrastructure and Investment
  - Central Asian governments shared their interest in developing investment opportunities in critical minerals that meet the highest environmental, social, and governance standards

WHAT MEMORANDUMS WERE SIGNED BY KAZAKHSTAN?

Other Partnerships, Perspectives and Projects

- Kazakhstan - France Joint Declaration on Strategic Minerals (November 2023):
  - The presidents also signed an agreement on the establishment and operation of the French Development Agency Group in Kazakhstan, a contract on a joint venture for a project to build wind power plants with a total capacity of 1 GW with an energy storage system, and an investment agreement on the production and maintenance of railway locomotives and rolling stock, and components for railway equipment in Kazakhstan
- President Tokayev at Boao Forum for Asia: Critical minerals exploration and production – a promising area of Kazakhstan-China cooperation (April 2024)
- Declaration of intent for EU-EBRD technical support:
  - Two CRM projects of Tau-Ken Samruk: Tungsten deposits of Northern Katpar and Upper Kairakty and Lithium extraction from the salt marsh of the Aral Sea
- South Korea and Kazakhstan agreed to expand bilateral cooperation on key minerals and major infrastructure projects (April 2023):
  - The sides said they are optimum partners in major minerals and agreed to work more closely to ensure a stable supply
  - Kazakhstan is rich in rare metals and other minerals. It has the world's largest number of chrome deposits and the second-largest number of uranium reserves, while South Korea has advanced technologies and manpower to develop them
- Lithium Consortium:
  - Represented by German companies Knauf Gruppe, GP Günter Papenburg AG and German Institute of Lithium (ITEL)
  - Aim - development and production of lithium from deposits in Kazakhstan
- HMS Bergbau AG - Plans to invest $500-700 million in a lithium mining project in the East Kazakhstan region



Тау-Кен Самрук
НАЦИОНАЛЬНАЯ ГОРНОРУДНАЯ КОМПАНИЯ

HMS BERGBAU AG

Kassym-Jomart Tokayev and Emmanuel Macron at a press briefing. Photo credit: Akorda.

WHAT ARE RISKS AND OPPORTUNITIES FOR KAZAKHSTAN?

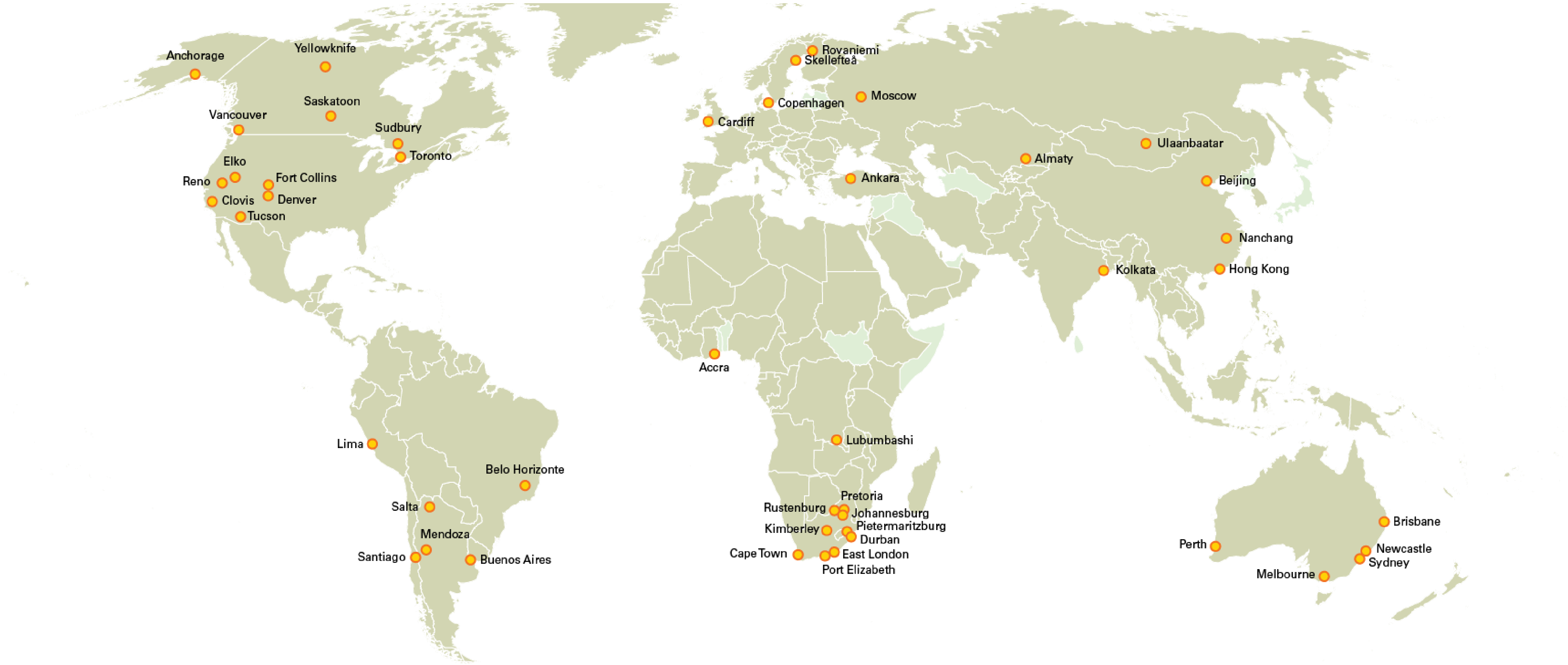
RISKS

- Inability to maintain a stable political, legal, tax and investment climate vital for investment
- Insufficient capacity or competency of the state to control a booming portfolio of CRM projects
- Mining and processing critical minerals can have significant environmental impacts
- Social risks include conflicts with local communities, human rights violations, and labour issues
- Rapid technological advancements can render certain critical minerals obsolete or less essential
- Volatile CRM prices due to supply-demand imbalances, technological advancements, and geopolitical events

OPPORTUNITIES

- Enhanced market access and trade globally.
- Access to expertise and technology
- Joint efforts attract investment in critical minerals projects
- Partnerships encourage responsible mining practices
- Kazakhstan can position itself as a reliable supplier of critical minerals and a strategic partner
- Support the transition of Kazakhstan to a low-carbon economy
- Job Creation and Economic Growth
- Geopolitical risks and trade disputes mitigation

SRK Office Locations



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