



# JOGMEC's current activities and support measures for stable supply of mineral resources

Japan Organization for Metals and Energy Security

04.07.2023 Ichiro TAKAHARA

# JOGMEC to Strengthen Cooperation with Europe

2011

- **Conference on Critical Materials and Minerals**
- It has been held regularly, with one particular aim being to exchange information on policies governing critical materials, R&D, and other efforts, under a framework of multilateral cooperation between Japan, the US, the EU, Australia, and Canada.

2023

- **Japan-France Meeting**
- In a meeting METI and the Interdepartmental Delegate for Strategic Minerals and Metals Procurement, Benjamin Gallezot, France, it was confirmed that the government agencies, including JOGMEC, will work together on future bilateral cooperation in the field of critical minerals.

2023

- **Japan-Germany Summit Meeting**
  - The main theme of the meeting was economic security. A Joint Statement 1st Japan-Germany Inter-Governmental Consultations was held.
  - For building resilient supply-chain, JOGMEC was nominated as relevant authorities for expansion cooperation in this Joint Statement.

ENACTED to comprehensively and effectively promote economic measures related to ensuring security in the context of changing socioeconomic structures due to increasingly complex international situations.

## ◆ Four Pillars and goals of ESPA

### Supply Chain

Securing a stable supply of goods which have an enormous impact on lives of people or economic activities

### Core Infrastructure

Ensuring the security of critical facilities so that the services provided by critical infrastructure are not affected

### Critical Advanced Tech

Promoting R&D of critical advanced technologies and appropriate use of the results of such R&D

### Non-Disclosure Patent

Preventing the publication or outflow of patent applications for security-sensitive inventions

## Framework

1. **Formulate basic guidelines for securing stable supply of specified key products**
2. **Designate specified key products (designated by Cabinet Order)**
  - Critical Minerals, Semiconductor, Batteries etc have been designated
3. **Formulate concrete plans to secure supply for the private-sector**
  - Currently, METI are taking application about the plans to secure supply. Plan approved companies may receive government support such as subsidies
4. **Government Initiative**
  - In case of the above is difficult, the competent minister may take necessary measures, such as stockpiling.

## Three new measures by JOGMEC

To achieve the target volumes for 2030 and secure stable and resilience of supply chain, JOGMEC strengthened following three measures:

**New challenges from social-  
environmental changes**

**Conventional risks for stable global  
supply**

### Strategy for Battery Supply

**(1) Increase  
maximum equity  
capital support ratio  
from 50 % to 75% for  
specific commodities**  
Battery Metals (Li, Ni,  
Co), REEs, PGMs

**(2) Expand financial  
and tech assistance  
for Beneficiation and  
Refining**  
Create supply chain  
resilience

**(3) Promoting  
Japanese Companies  
investment decision  
by Subsidies**  
Economic Security  
Promotion Act, 2022

110 billion Yen  
(0.79 billion USD)

105.8 billion Yen  
(0.76 billion USD)

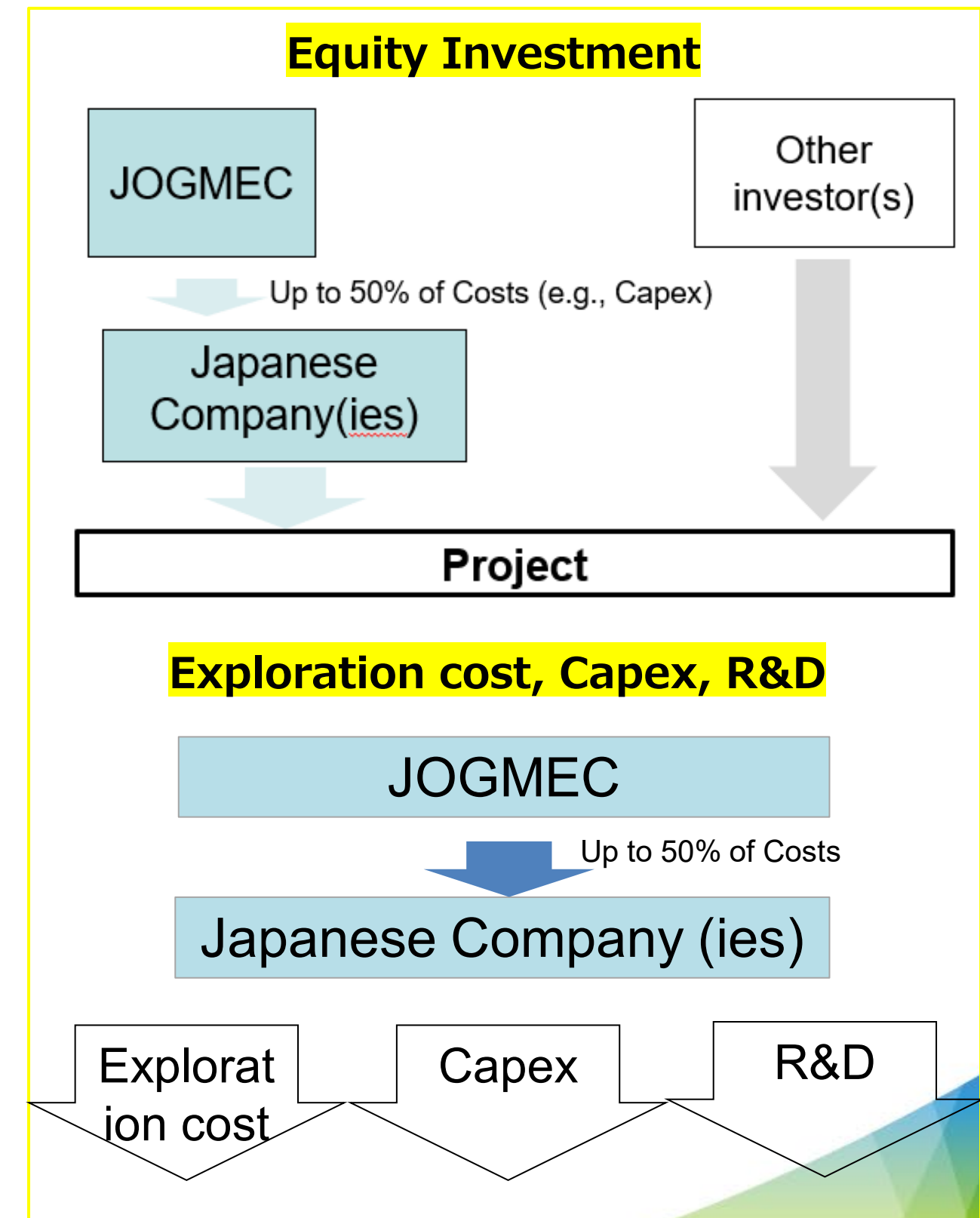
This amount is within the USD 13 billion range of measures taken  
at the Five-Point Plan for Critical Metals Security.

## Measures by ESPA fund

- Equity investment and Capex Support for development and Exploration cost  
Since, Mine development is becoming increasingly difficult and competition for offtake is intensifying
- Capex support for Beneficiation and Smelting  
Increases cost competitiveness, then reduces supply chain dependence on specific countries
- Aggressive R&D support  
Necessity to increase efficiency and lower costs of mineral resource production

## Conditions of Subsidies from ESPA fund

- ✓ For Japanese Company (ies), up to 50 % support
- ✓ Uses for Exploration Cost, Capex, Equity Capital and R&D cost only
- ✓ Commodity Critical Metals (currently limited for followings)
  - **Li, Ni, Co, Mn and graphite (LIB) and REEs (Magnets)**
- ✓ Key Project Criteria:
  - **Secure critical material supply to “Japan” (some portion)**



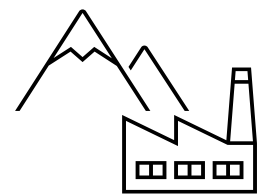
# Overview of “Five-Point Plan for Critical Minerals Security”

G7 Energy Ministers reaffirm the importance of critical minerals in the clean energy transition while preventing economic and security risks, with supporting open and market-based trade in critical minerals, opposing market-distorting measures, and are committed to implement the "Five-Point Plan for Critical Minerals Security."



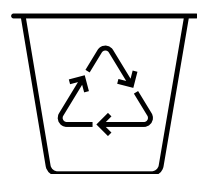
## Point 1: Forecast Long-term Supply and Demand

Analyze the medium- and long-term supply-demand outlook for critical minerals essential for energy transition based on expertise from both mining producing and consuming industries; Request IEA establish an internal taskforce and undertake the analysis and verification to facilitate this work;



## Point 2: Develop Resources and Supply Chains Responsibly

Promote co-investment efforts (including those of MSP, etc.) on resource and supply chain development based on high ESG standards in cooperation with like-minded countries, with 13-billion-dollar fiscal support across the G7 countries;



## Point 3: Recycle More and Share Capabilities

Establish initiatives at global level to facilitate the environmentally sound management and recycling of e-Waste among developing countries and like-minded countries with advanced technologies; Extend a similar approach to recycling of lithium-ion batteries and rare earth magnets in the future;



## Point 4: Save with Innovations

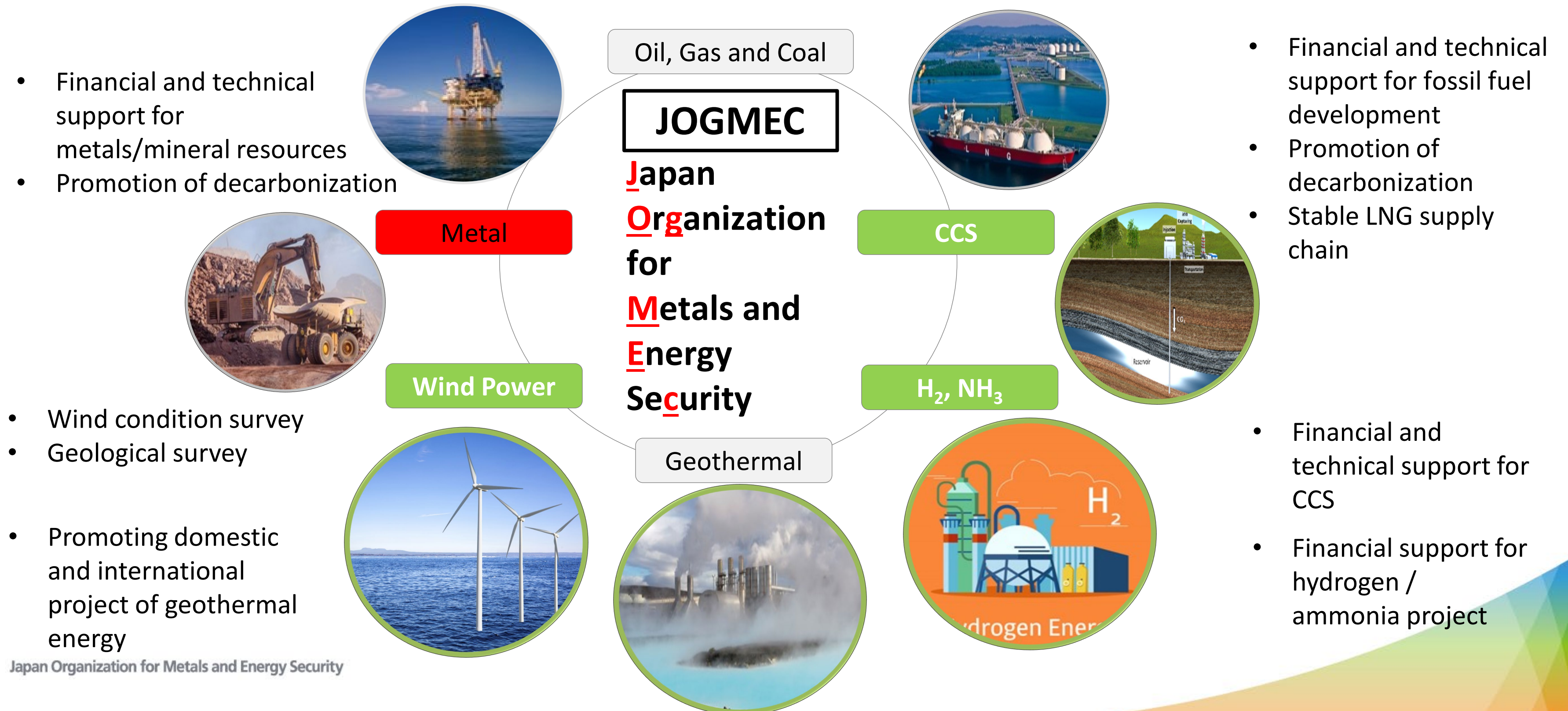
Promote innovations in resource-saving and substitute technologies for critical minerals based on the industrial situation of each country; Share information on such R&D efforts in expanded Conference on Critical Materials and Minerals;



## Point 5: Prepare for Supply Disruptions

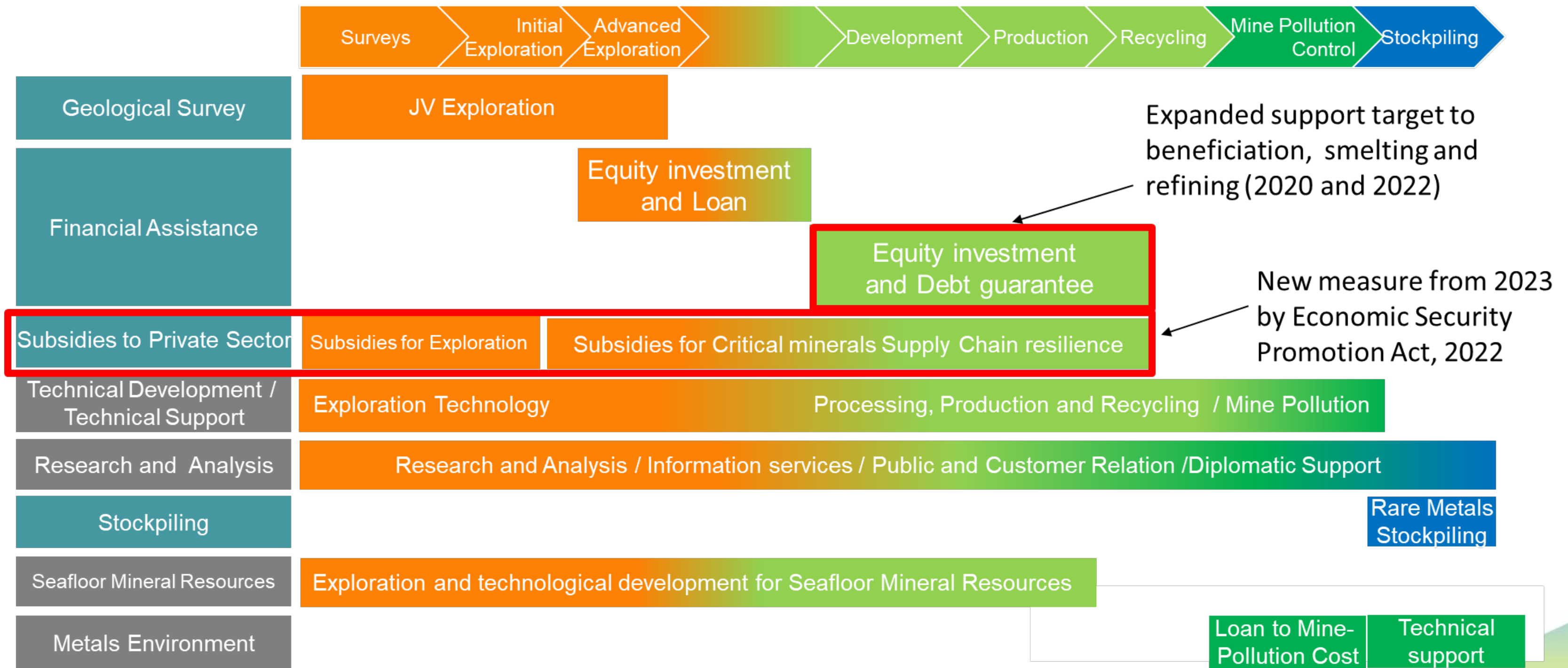
Welcome IEA's initiatives to develop the "Voluntary Critical Mineral Security Program" for short-term disruptions of critical minerals and provide IEA with possible information;

JOGMEC is a government-affiliated organization to secure a stable and economical supply of natural resources for Japan



# Support Scheme map for Metals Sector

JOGMEC provides a wide range of support to help Japanese companies mitigate risks, based on so-called JOGMEC Act and Economic Security Promotion Act





Thank you.

# (ref)Overview of JOGMEC

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**Government  
(Policymaking)**



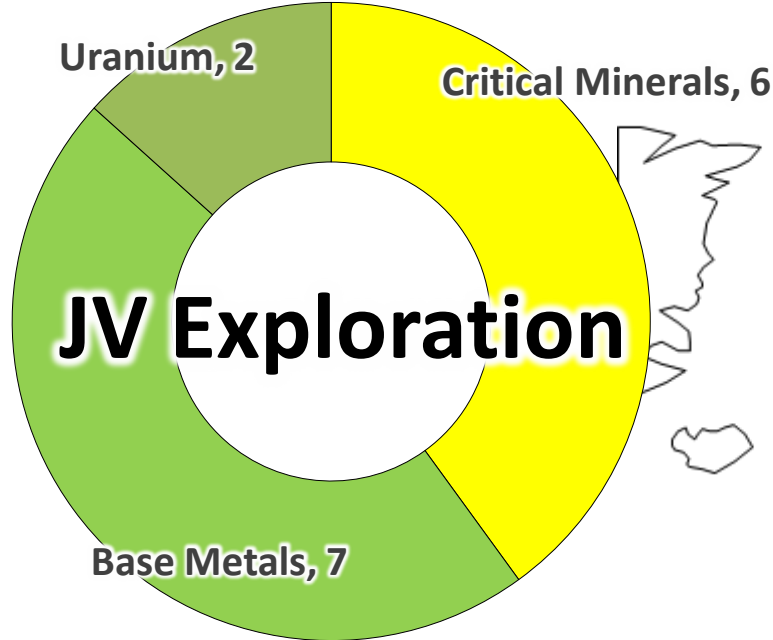
**JOGMEC  
(Implement policies  
related to natural  
resources area)**

**Financial and  
Technical support**

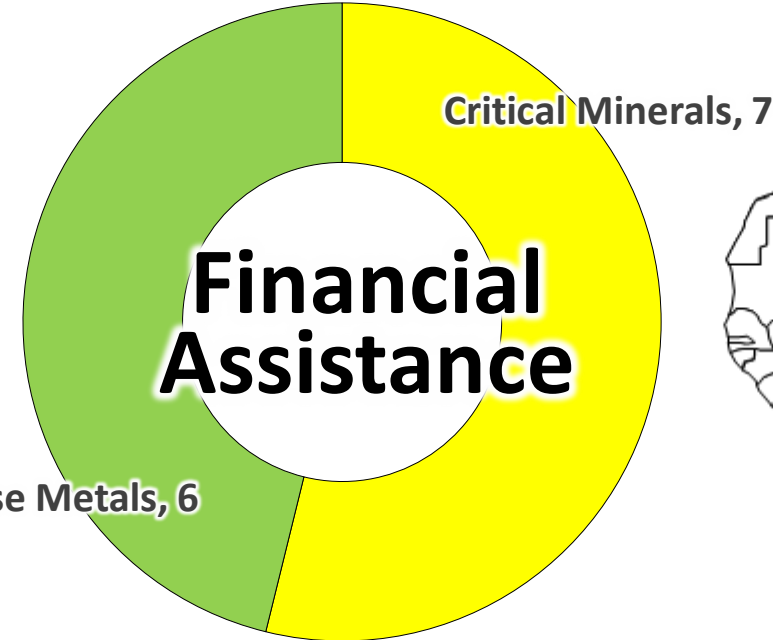
**Japanese  
Private Companies**

Established	2004 Japan National Oil Corp (JNOC) and Metal Mining Agency of Japan (MMAJ) merged
Capital	1,300 Billion Yen (Mar, 2023) approx. 9.3 Billion USD
Expenditure Budget	1,696 Billion Yen (2022 FY) approx. 12.1 Billion USD
Numbers of Employees	930 (as of July 1, 2022)
Overseas Offices	13

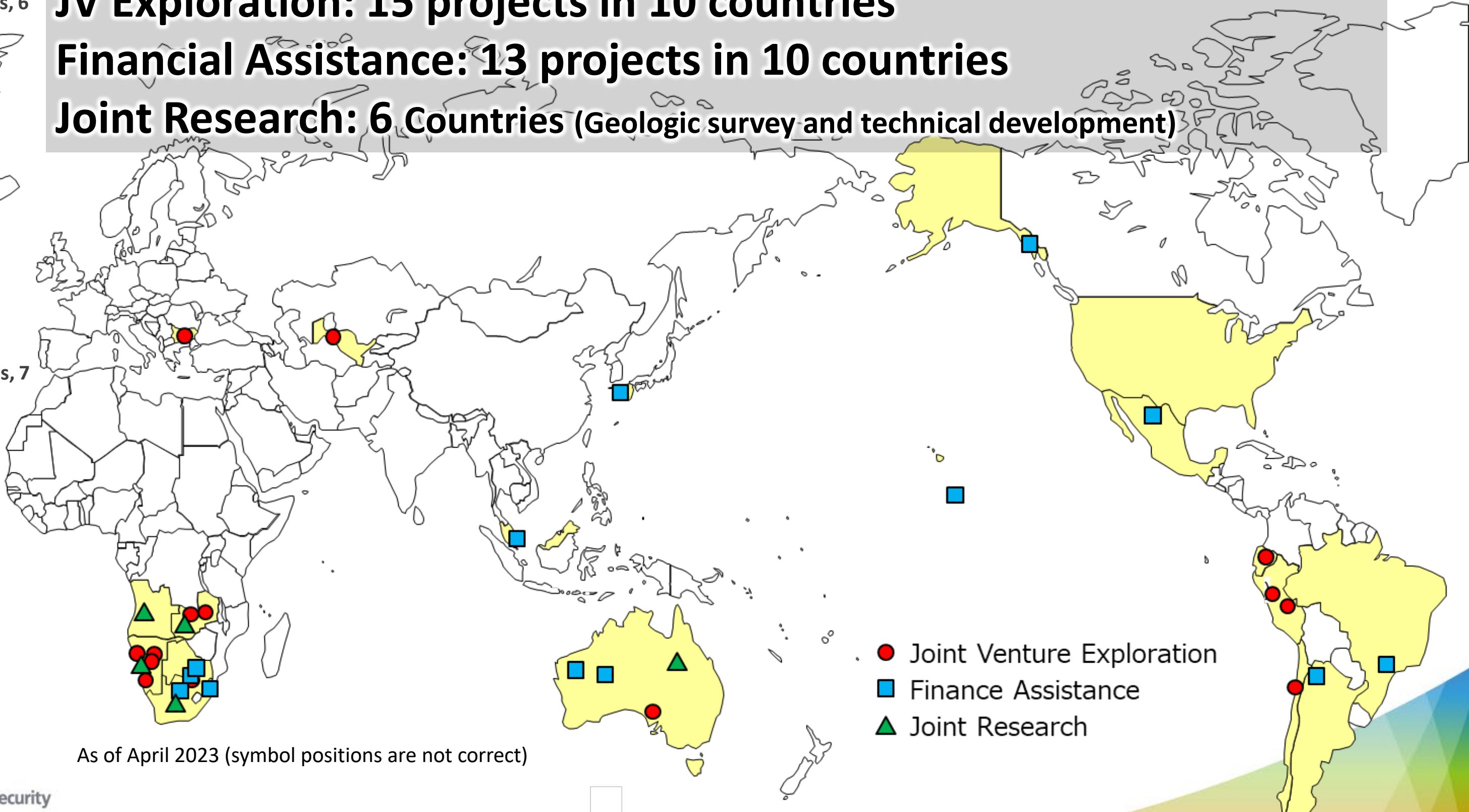
# JOGMEC Metals Sector's current global activities



**JV Exploration: 15 projects in 10 countries**  
**Financial Assistance: 13 projects in 10 countries**  
**Joint Research: 6 Countries (Geologic survey and technical development)**



Equity Capital: 4 projects  
 Loan: 8 projects  
 Debt Guarantee: 1 projects



- Joint Venture Exploration
- Finance Assistance
- ▲ Joint Research

# Geological Remote Sensing Centre in Botswana

- ① JOGMEC signed MOU\*s concerning geological remote sensing projects in Botswana with 12 countries of SADC\*\*.
- ② JOGMEC's international cooperation in HR development in the center contributes to self-sustaining development in the mining sector
- ③ JOGMEC surveys resource potential in the center and promotes investment by Japanese companies
- ④ To date, HR development has been provided to a total of 2,229 people in 16 countries. (as of March 17, 2023)



# Outline of Rare Metals Stockpiling System

## Designated Mineral Commodities : 35 mineral commodities including rare metals

\* Japanese government chooses the mineral commodities to be actually stockpiled from the list.

Groups Minerals to be stockpiled based on the JOGMEC Ministerial Ordinance

Period	IA Alkaline group	IIA Alkaline earths group	IIIB Rare earths group	IVB Titanium group	VB Vanadium group	VIB Chromium group	VIIA Manganese group	VIII Iron group (Period 4) Platinum group (periods, 5,6)	IB Copper group	IIBA Zinc group	IIIA Aluminum group	IVA Carbon group	VA Nitrogen group	VIA Oxygen group	VIIA Halogens	Noble gases		
1	1H Hydrogen															2He Helium		
2	3Li Lithium	4Be Beryllium									5B Boron	6C Carbon	7N Nitrogen	8O Oxygen	9F Fluorine	10Ne Neon		
3	11Na Sodium	12Mg Magnesium	For rare earths, 17 elements are counted as one mineral								13Al Aluminum	14Si Silicon	15P Phosphorous	16S Sulfur	17Cl Chlorine	18Ar Argon		
4	19K Potassium	20Ca Calcium	21Sc Scandium	22Ti Titanium	23V Vanadium	24Cr Chromium	25Mn Manganese	26Fe Iron	27Co Cobalt	28Ni Nickel	29Cu Copper	30Zn Zinc	31Ga Gallium	32Ge Germanium	33As Arsenic	34Se Selenium	35Br Bromine	36Kr Krypton
5	37Rb Rubidium	38Sr Strontium	39Y Yttrium	40Zr Zirconium	41Nb Niobium	42Mo Molybdenum	43Tc Technetium	44Ru Ruthenium	45Rh Rhodium	46Pd Palladium	47Ag Silver	48Cd Cadmium	49In Indium	50Sn Tin	51Sb Antimony	52Te Tellurium	53I Iodine	54Xe Xenon
6	55Cs Cesium	56Ba Barium	57-71 Lanthanoid	72Hf Hafnium	73Ta Tantalum	74W Tungsten	75Re Rhenium	76Os Osmium	77Ir Iridium	78Pt Platinum	79Au Gold	80Hg Mercury	81Tl Thallium	82Pb Lead	83Bi Bismuth	84Po Polonium	85At Astatine	86Rn Radon
7	87Fr Francium	88Ra Radium	89-103 Actinoids	For platinum group elements, 6 elements are counted as one mineral.														

Lanthanoids	57La Lanthanum	58Ce Cerium	59Pr Praseodymium	60Nd Neodymium	61Pm Promethium	62Sm Samarium	63Eu Europium	64Gd Gadolinium	65Tb Terbium	66Dy Dysprosium	67Ho Holmium	68Er Erbium	69Tm Thulium	70Yb Ytterbium	71Lu Lutetium
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<b>Selection criteria</b>	<ul style="list-style-type: none"> <li>• Level of dependence on politically unstable countries, the expected level of increase in demand in major consumer countries, and others</li> </ul>
<b>Target days for stockpiling</b>	<ul style="list-style-type: none"> <li>• To be decided in consideration of geopolitical risks and the importance of each mineral commodities for the industries</li> </ul>
<b>Information control</b>	<ul style="list-style-type: none"> <li>• For economic security of the country, information about actual stockpiling amounts and the locations of the warehouses are not publicly disclosed.</li> </ul>