The Bilateral Relationship between Japan and Latin America in Non-Ferrous Metals

JOINT STUDY GROUPS’ SEMINAR
7th October 2015

Naoki Kasuya
Deputy General Manager, JOGMEC London Office

Japan Oil, Gas and Metals National Corporation

More than 1,300 years ago (a.c. 698), the first copper mine opened in Japan. Japan had the world largest silver mine called "Iwami", produced 1/3 of world silver in the 17 century. Japan has accumulated good technology, expertise and legislative scheme (i.e. regulations on mine pollution prevention).

"Map of Tartaria" (1570) Abraham Orterius Drew An area of Japan is indicated as "Minas de plata" (Silver Mine)

Silver Chogin Oval Shaped Coins (Bunroku Sekishu-chogin, Otoriosame-chogin, Gokuyo-chogin)
Japanese Presence on Usage of Metals in the world

Japan is the 3rd largest economy in the world, mainly strengthened by our high-tech manufacturing industries.

Japan is one of the biggest users of mineral resources in the world

GDP Top 6 Countries

Japan’s usage ratio of world metals (2012)

Japan's usage ratio of world metals (2012)

Japanese Dependence on Metals Imports from Latin America

Japan heavily depends on mineral resources imports.

From Latin America, Japan imports substantial amount of Lithium, Copper, Zinc and Lead.

Particularly, Chile is the origin of 86% of Lithium carbonate and 50% of copper concentrates used in Japan.

Japan's import ratio by country (2014)
Japan has started investing into Chilean mining sector since 1980’s.

The value of Japan’s investment increased recently, mainly because Caserones and Sierra Gorda came on stream. Japan was the biggest investor in Chile in the decade of 2003-2012.

Japan boosted Chilean economic growth and job creation through our investment.

Achieves "Win-Win" bilateral relationship between Chile and Japan

Japan’s investment value and ratio in Chilean mining

source: Chilean Foreign Investment Committee

Japanese Investments in Chilean Mining Sector

JOGMEC’s activities for Metal & Mining Sector

JOGMEC is the national company that implements Japanese government’s energy and mining policy.

Annual budget of approx. $20 Billion, fully funded by the Japanese government.

JOGMEC conducts a wide range of projects to promote mining business overseas.

- Joint Venture Exploration
- Financial Assistance
- Mine Pollution Prevention, etc.
JOGMEC invests in metals & mining projects globally

- JOGMEC invests in 51 metals & mining projects with various international partners.
  - 29 joint venture exploration projects with major/junior mining companies
  - 22 financial assistance projects; capital investment, loan and debt guarantee

JOGMEC works closely with our partners to achieve win-win relationship in mining.

**Latin America (11)**

- 29 joint venture exploration projects with major/junior mining companies
- 22 financial assistance projects; capital investment, loan and debt guarantee

**North America (8)**

**Asia (10)**

**Africa (10)**

**Oceania (12)**

**total 51 projects**

---

JOGMEC's joint projects in Latin America

- JOGMEC runs various projects in Latin America.
  - 11 projects under our investments consist of 4 joint venture exploration projects and 7 financial assistance projects
  - Additional 4 technology development supports such as minor metal recovery from tailings are ongoing as well as 1 mine pollution prevention activity in Peru

**Joint Venture Exploration (4)**

**Financial Assistance (7)**

**Technology Development and Technical Support (4)**

**Mining pollution prevention (1)**

**Peru (5)**
- La Yegua, Cu Mo
- Sumi, Cu Mo
- Quebrada, Co
- San Rafael Mine
  - Mining pollution prevention

**Argentina (2)**
- Inmaculada, Cu
- Salar de Olaroz, Li

**Brazil (2)**
- Araxa, Nb
- Araxa mine

**Chile (4)**
- Caserones, Cu
- Sierra Gorda, Cu
- Esperanza, Cu
- Atacama Mine

**Mexico (2)**
- Los Gatos, Zn,Pb
- Salar de Uyuni

**Bolivia (1)**
- Salar de Uyuni

**Japan Oil, Gas and Metals National Corporation**
Case 1: Copper mining projects in Chile

- 2014 became a memorial year for Japan because both Caserones and Sierra Gorda have started operation. Caserones is jointly owned by Pan Pacific Copper and Mitsui while Sierra Gorda is owned by Sumitomo Metal Mining, Sumitomo and KGHM. The total amount of copper production from the both projects is equivalent to over 20% of the Japanese annual copper imports.
- JOGMEC has provided a loan for Caserones since Japanese company acquired the mining concession in 2006. We also provide debt guarantees for both projects as part of their financial arrangements.
- Both projects are successfully on track by gathering the strength of all the stakeholders including project teams in Chile, Japanese companies and governmental organizations such as JOGMEC.

Opening ceremony of Caserones, Aug 2014
Opening ceremony of Sierra Gorda, Oct 2014

Case 2: Contribution to Mine Pollution Prevention in Peru

- In Peru, JOGMEC provides various technical supports to contribute in the field of mine pollution preventions based on knowledge obtained from Japan's extensive experiences. Technical supports provided are:
  - Dispatching advisors of mine pollution policies to the government since 2009
  - Providing technical training through on the job trainings to the engineers of the government since 2012
  - Hosting annual seminars on mine pollution prevention
Summary

1. As one of the biggest users of mineral resources in the world, Japan imports huge amount of mineral resources from Latin America.

2. In return, Japan has been investing a lot in Chile and the other Latin American Countries. JOGMEC also provides technical support on mine pollution prevention measures in Peru.

3. Latin America and Japan enjoy win-win relationship through the corporation in the mining sector. The stronger cooperation between Latin America and Japan would contribute to the stable supply of mineral resources to the world.

Welcome to Copper 2016 in Kobe, Japan

The 9th International Copper Conference, Copper 2016 will be held at "Kobe International Convention Centre" in Kobe, Japan, from November 13 to 16 in 2016.

http://www.copper2016.jp/
Thank you for your attention!