Mining Sector Market Overview 2015 – Japan

Overview

Japan is a country with few natural resources that looks to resource-rich nations such as Canada to procure the vast majority of its supply. Japanese trading houses, smelters and mining companies have investments all over the world and import raw materials to Japan for refinement and smelting. Sales of the finished product are to both the domestic manufacturing sectors and international customers. In addition, some Japanese companies sell their outputs directly from foreign mines to foreign buyers.

The Japanese recognize Canada as a stable and low-risk supply source for mineral resources, and in particular for, copper, nickel, gold, silver, molybdenum, zinc, lead, uranium, iron ore, coal, platinum metals group (PMG), tungsten, natural graphite, rare metals, and rare earth elements (REEs). Canada receives positive interest in its mining sector due to its transparency, political stability, and proactive FDI promotion policies. Japanese companies are continually looking for new exploration and development projects and are expected to continue investment into projects in Canada and other countries.

In 2012, the Government of Japan increased the credit line for the Japan Bank for International Cooperation (JBIC) by 10 trillion yen (approximately C$105 billion) to further enable the Japanese private sector to secure strategic natural resources, and expanded JBIC’s mandate to provide financial assistance for certain types of natural resource development projects in developed countries.

In addition, the mandate of the Japan Oil, Gas and Metals National Corporation (JOGMEC) was revised in 2012 to include the provision of support related to coal and geothermal energy development and to strengthen support for oil, gas, and metals development. The amendment also allowed JOGMEC to provide equity investments into the development stage of resources projects.

These important changes have allowed Japanese companies to be increasingly active in the acquisition of natural resources assets, a trend which is likely to continue.
Although Japanese companies are sitting on large cash reserves there is currently a degree of hesitation amongst the major corporations to invest in new projects due to current weakened commodity prices. While many would argue that a low commodity price market represents the best time to buy, Japanese investors tend to be more cautious and would like to be sure that the market is not going to go even lower before making further major investments. As such, several of the majors are focusing on organic growth and on making their existing investments profitable in the face of weak commodity prices. However, this view is not shared by all of the Japanese companies as some are looking for bargains in the current depressed market.

Opportunities exist for junior mining companies with high grade deposits, to seek either off-take agreements or joint venture equity investment. Projects with close proximity to good infrastructure, sound relations with First Nations and aboriginal groups, and with relatively short shipping distances to Japan (notably British Columbia and Alberta) are likely to receive favourable attention. For mining equipment and service providers, opportunities may exist to collaborate on projects outside of Canada.

Canada and Japan are currently involved in negotiations toward an Economic Partnership Agreement (EPA, or Free Trade Agreement). Such an agreement is likely to include provisions which would provide enhanced investment protection for Japanese firms investing in Canada. The successful conclusion of an EPA could generate increased interest from prospective Japanese investors in Canada, which could benefit Canadian companies seeking partners in the mineral resources sector.

**Rare Earth Elements**

China’s restriction in 2010 of the exports of REEs and the resulting spike in prices led Japanese companies to take several measures to decrease or eliminate their dependency on Chinese suppliers or on the mineral resources entirely.

The first measure involved the diversification of the supply of REEs to include imports from a broader range of countries. As a result of this Japan, which used to import over 90% of its rare earths from China, now depends on China for less than 50% of its supply. However the ratio of imports to Japan from China of dysprosium, one of the harder to find REEs, is almost 98%. Japan imported about 609 tons of dysprosium in 2014.

The second tactic has involved significant efforts by the private sector in Japan, supported by government subsidies and tax incentives, to engineer some of the scarcer REEs out of their technologies. Several major electronic component producers and makers of hybrid and electric automotive motors (and the companies supplying the magnets for these motors) have announced successes in creating new components which either eliminate or significantly reduce the usage of dysprosium. Another example was the replacement of cerium with zirconium as a polishing material in the ceramic manufacturing process. Manufacturers have been investing in equipment for zirconia polishing using Japanese government funding and it is anticipated that the demand for the cerium for polishing in Japan may not recover even if the price were to go down further.
Some experts estimate that the industry has reduced its dependence on light REEs by 50% and by 20%-30% for the heavy REEs. Although the overall demand for REEs in Japan increased by 8% in 2014 when compared to 2013, the 2014 domestic usage of REEs was only about 44% of the usage in 2008. The overall demand of REEs in Japan was 14 255 tons in 2014.

Finally, “Urban Mining”, or recycling, has been another tactic used to diversify supply sources. Japan is thought to have significant “reserves” of certain metals in used electronics which could be recycled. Japanese government agencies such as the National Institute for Materials Science (NIMS) are now conducting basic research for separating heavy REEs and some private sector companies have developed commercial recycling technologies using a solvent extraction method. Opportunities may exist for Canadian companies looking to licence or collaborate on recycling technologies.

**Base Metals**

Japan has approximately 20 operating smelters and refineries which process ores such as zinc, lead, copper and nickel. The finished products are sold not only in the domestic market but a significant quantity is exported abroad.

Interest from Japanese trading houses and mining companies tends to be focused on the west coast of Canada, particularly in British Columbia, due to the proximity of the deposits to shipping ports and the relatively short shipping distance to Japan.

In 2014, over C$924 million in copper ores and concentrate were exported from Canada to Japan, making copper Canada’s fourth dollar value export to Japan. Japanese trading houses, mining companies and smelters have invested in several projects in British Columbia and in Quebec, for resources such as molybdenum, copper, zinc, lead and aluminum.

**Precious and Alkali Metals**

Japanese companies continue to look for new high-grade PGM deposits to develop, to meet ongoing high demand in Japan. JOGMEC is collaborating with a Canadian junior to undertake PGM exploration in Quebec.

**Iron Ore**

Canada exported nearly C$338 million in iron ores and concentrate to Japan in 2014. A major Japanese trading house has been invested in an iron ore project in Canada for over 20 years, and there is interest from trading houses and Japanese steel makers in new projects. The merger in October, 2012 of Nippon Steel Corporation and Sumitomo Metal Corporation formed on of the world's largest steel makers and may present additional opportunities for Canadian iron-ore producers.

**Other Major Commodities**
Coal

Japan is Canada’s largest coal export destination, and the majority of the coal exported is coking coal for use in the steel making industry. Canada exported over C$1.5 billion dollars of coal to Japan in 2014, making coal Canada’s second most valuable export to Japan that year.

The contribution of nuclear power to Japan’s energy mix was basically eliminated in the wake of the Fukushima accident. At the time of writing (April 2015) there were no nuclear reactors operating in Japan, and the cost of generating electricity using expensive natural gas and oil imports has led Japan into a trade deficit situation. In response to these significant challenges, Japan has increased its dependence on coal for electricity production. Japan’s electric utilities have increased their usage of coal-fired power plants; three new coal-fired plants came on line in 2013 and there are nine other new coal-fired plants either being planned or under development. Japan’s thermal coal imports in 2013 and 2014 were approximately 1.3% higher than 2012 levels.

Both the government and private sector have made statements indicating a desire to increase thermal coal imports from Canada to Japan. In some cases this is being done to diversify coal exports from countries on which Japan is heavily dependent for thermal coal such as Australia. A major electric utility announced in early 2014 that it would increase its imports of coal from North America to reduce its reliance on other suppliers. The utility is Japan’s third largest consumer of thermal coal and it intends to nearly double its imports of North American coal to represent 5% of its total imports. Other trading houses have revealed similar plans to diversify their supplies.

The scale of the new opportunities for thermal coal may depend on the final ratio of nuclear power in Japan’s evolving energy mix.

Uranium

Several Japanese energy companies and trading houses have investments in uranium projects in Saskatchewan and are involved in uranium exploration and development in Canada.

Further opportunities for investment may be significantly impacted by the final role nuclear energy plays in Japan’s energy mix. Japan’s Prime Minister has consistently called for the swift restarting of existing nuclear reactors to ease the burden on the Japanese economy and support his growth strategy. The Nuclear Regulation Authority (NRA, the country’s independent nuclear watchdog established in September 2012 in the wake of the Fukushima accident) is currently assessing the possible restart of some of Japan’s 48 idled nuclear reactors against enhanced nuclear safety standards. In September 2014 the NRA gave its formal go-ahead for the restart of two reactors at the Sendai nuclear plant in Kyushu. Local authorities also gave their approval for the restart of both units in early November 2014. In addition, in February 2015 the NRA granted its approval for required safety upgrades for two reactors at the Takahama facility in Fukui Prefecture prior to their restart. However, no specific date has been set for the restart of any of the afore-mentioned reactors.
The weight of nuclear power in Japan’s future energy policy will remain heavily dependent upon the outcome of the review process conducted by the NRA. The government is expected to announce shortly a new “Basic Energy Plan” to outline broad energy policy orientations.

Although Canada is home to substantial Japanese investments in uranium mines and continues to offer further investment potential, the Non Resident Ownership Policy (NROP) will continue to act as a deterrent. The final text of the Canada-EU Trade Agreement and the impact on projects in which Japanese firms are partnering with Europeans may lead to new opportunities.

Canadian Mining Suppliers

Some Japanese companies are active in operating mines abroad where they hold majority or full ownership in a project and are involved in the development and/or operation of the mines. Opportunities may exist for Canadian mining service and equipment providers to partner with these Japanese firms on their projects outside of Canada.

Challenges for Canadian Companies

In spite of their view of Canada as a secure and stable supplier of mineral resources, Japanese investors continue to harbor some concerns regarding investment into the resources sector in Canada. Questions remain regarding the availability of infrastructure (electricity, rail and road transportation, and access to ports), the long shipping distances to Japan for some jurisdictions, the environmental assessment processes, First Nations and aboriginal dimensions, as well as the expected demand for skilled labour and associated concerns over labour shortfalls. Canadian companies seeking investment from Japanese partners should be prepared to address these challenges when interacting with Japanese investors.

Japanese Companies and Government Organizations of Interest

Trading Houses

- Itochu Corp.
- Sumitomo Corp.
- Sojitz Corp.
- Toyota Tsusho Corp.
- Tokyo Boeki Steel & Materials Ltd.
- Iwatani Corp.
- Material Trading Company
- Mitsubishi Corp.
- Mitsui & Co., Ltd.
- Marubeni Corp.
- Hanwa Co., Ltd.
- Okaya & Co., Ltd.
- Alconix Corporation

Mining and non-ferrous metal companies
• Mitsui Mining & Smelting Co., Ltd.
• Dowa Metals & Mining Co., Ltd.
• Sumitomo Metal Mining Co., Ltd.
• Furukawa Metals & Resources Co., Ltd.
• JX Nippon Mining and Metals Co., Ltd.
• Mitsubishi Materials Corp.
• Nittetsu Mining Co., Ltd.
• Toho Zinc Co., Ltd.
• Pan Pacific Copper Co., Ltd.
• Pacific Metals Co., Ltd.
• Overseas Uranium Resources Development (OURD)

Rare Earths sector
• Taiyo Koko Co., Ltd.
• Santoku Corp.
• GS Yuasa Technology Ltd.
• Osaka Asahi Co., Ltd.
• Shinetsu Chemical Co., Ltd.
• Hitachi Metals Ltd.
• Dilichi Kigenso Kagaku Kogyo Co., Ltd.
• Prime Earth EU Energy
• Renault-Nissan Purchasing Organization
• Asahi Pretec Corp.
• Chuo Denki Kogyo
• Chuden Rare Earth Co., Ltd.
• Toyotsu Rare Earth Corp.
• Honjyo Kinzoku
• AGC Seimi Chemical
• Shinko Chemical
• JSR Corporation
• Nippon Yttrium Co., Ltd.
• Anan Kasei
• Kureha Corp.

Ceramics
• Nippon Sheet Glass
• Nippon Electric Glass
• Toto
• Asahi Glass
• Tokai Carbon
• Nippon Carbon
• Showa Denko K.K.
• Shinetsu Chemical Co., Ltd.
• Kyocera
• Central Glass Co., Ltd.
• Ibiden Co., Ltd.
• Denki Kagaku Kogyo K.K.
Iron ore and coal
• Nippon Steel & Sumitomo Metals Corp.
• JFE Steel Corp.
• Kobe Steel Ltd.
• JFE Shoji Trade Corp.
• Mitsui Matsushima Co., Ltd.
• Tokyo Electric Power Co., Ltd.
• Kansai Electric Power Co., Ltd.
• Kyushu Electric Power Co., Ltd.
• Tohoku Electric Power Co., Ltd.
• Chubu Electric Power Co., Ltd.
• Hokuriku Electric Power Co., Ltd.
• Hokkaido Electric Power Co., Ltd.

Government Organizations and Industry Associations
• Ministry of Economy, Trade and Industry
• Japan Oil, Gas and Metals National Corporation
• Japan Bank for International Cooperation
• Japan Mining Industry Association
• Japan Society of New Metals
• Japan Aluminum Association

Key Events
PDAC: The Embassy of Canada to Japan normally sends a Trade Commissioner to PDAC each year. The Trade Commissioner provides Japanese delegations with guidance on their activities at PDAC, and well as providing introductions to / arranging meetings with Canadian companies and federal, provincial and territorial governments. Canadian companies with an interest in Japan are encouraged to meet with the Trade Commissioner to receive a country briefing and discuss possible investment attraction strategies.

2015 Mining Seminar in Tokyo: The Embassy of Canada to Japan is tentatively planning a Mining Investment Seminar in Tokyo in October/November 2015 to take place either before or after China Mining. The seminar will provide Canadian companies an opportunity to present their projects to a large audience of Japanese investors. A B2B networking event will allow for further discussion and follow up.

Visits to Japan: Canadian mining companies or mining suppliers wishing to visit Japan to meet potential investors, buyers or research collaborators are welcome to contact the Trade Commissioners at the Embassy at any time of the year. The Trade Commissioner Service is able to provide guidance and advice as clients of the Trade Commissioner Service prepare to visit Japan, and then to arrange for meetings with Japanese companies during the visit.

Government of Canada Contacts in Japan for the Mining Sector
Canadian companies are invited to contact the Trade Commissioners below for further information on potential Japanese investors and upcoming mining related events:
Embassy of Canada to Japan, Tokyo

Mr. Curtis Ajmani, First Secretary (Commercial) and Trade Commissioner
Email: Curtis.ajmani@international.gc.ca

Mr. Hiroyuki Kunitake, Trade Commissioner
Email: hiroyuki.kunitake@international.gc.ca

May 2015