European Policy Brief

Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE)
No. 02 / 2016

Non-EU Country Engagements with Raw Materials Producing Countries

24 August 2016
Laura Cramphorn, Masuma Farooki
SNL Financial Ltd.

Funded by the Horizon 2020 Programme of the European Union

STRADE is an EU-funded research project focusing on the development of dialogue-based, innovative policy recommendations for a European strategy on future raw materials supplies. In a series of policy briefs and reports the project will offer critical analysis and recommendations on EU raw materials policy.

This policy brief is part of a series of research articles and reports to be produced under STRADE. This brief reviews current raw materials engagements undertaken by advanced third countries with resource rich countries, with the aim to categorize the nature of such engagements.

Introduction

Australia, Canada, China, Japan and the United States of America (USA) have differing requisites for accessing global markets for raw materials. On one end of the spectrum is the USA, with very limited raw material based or targeted engagements, and at the other end is China, where raw materials are packaged with infrastructure, trade and financial agreements. Between the two extremes lie Australia, Canada and Japan, focusing on targeted support for their own private companies, to develop well governed, rules based mineral sectors in third countries.

This policy brief summarizes engagements undertaken by these advanced countries and China, with raw materials producing partners in developing countries, examining the differing motivations and hence the tools chosen by each. The review examines options to inform the European Union's (EU's) approach for strengthening its own strategic raw materials based dialogues and external policies. The selected countries partner with the EU through various dialogues, both bilateral and multilateral.

Table 1: Percentage share of country in global production & in imports, 2014

		Copper	Nickel	Iron Ore	Lead	Zinc
Australia	Production	5.2	12.4	35.3	15.2	11.6
	Imports	0.1	1.0	0.0	1.1	3.1
Canada	Production	3.8	12.1	2.2	0.1	2.6
	Imports	0.5	2.2	1.0	10.1	6.4
China	Production	8.8	5.1	9.4	43.5	35.1
	Imports	37.6	19.3	61.3	30.0	16.9
Japan	Production	0.0	0.0	0.0	0.0	0.0
	Imports	17.1	18.8	10.4	4.0	8.3
USA	Production	7.5	0.2	2.6	7.7	6.1
	Imports	0.2	0.4	0.6	0.0	0.1
European Union	Production	4.5	2.5	1.4	3.6	5.4
	Imports	16.7	20.6	9.8	26.4	40.1

Source: SNL Metals & Mining and Comtrade <accessed 15th July, 2016>

As the STRADE project aims to provide recommendations for the EU on its raw materials based engagements, it is prudent to examine its partner country engagements, and see what guidance these partnerships can provide[1].

Resource Endowment

Domestic natural resource endowment is found to be a major driver for shaping the engagement of the reviewed countries.

Table 1 shows the share of global production and imports for the selected countries. The differences between 'share of production' and 'share of imports' indicate the reliance on external supply. For example, Australia accounts for 5.2% of global production but only

[1] These lessons applicable for the EU will be examined in more detail in a report, to be published later this year.

0.1% of global imports of copper, indicating low levels of reliance on international supply. Canada, with a similar profile for copper, nickel and iron ore, is dependent on imports for lead and zinc. Japan, like the EU, is dependent on imports for all five minerals.

The profiles of raw materials therefore suggest that Australia, Canada and the USA rely less on international raw materials supply than Japan, China and the EU. These differences have an impact on how each country approaches its engagement with third countries, although there are some differences within each group as well.

Linking endowment with engagement

Resource endowment and a country's dependence on international trade to secure raw materials supply influence the chosen avenue of engagement; ranging from financial, and other forms of direct support for private companies; efforts to create and expand access to the mineral sectors in other countries; efforts to support 'well-governed'[2] mineral sectors in other countries so their private actors are able to operate under stable and transparent regulations; and finally addressing larger development goals related to the extractive sector, such as revenue management and job creation.

The resource rich countries tend to focus their efforts on creating access to well governed markets to enable their private sectors to establish themselves in third countries. In contrast, import dependant countries tend to focus their diplomatic efforts on creating direct and indirect participation in third country mineral sectors.

Both Australia and Canada are resource rich, meaning their domestic production addresses most supply security concerns; together they account for 31% of global mineral exports of the five major minerals (see Table 1). Both countries promote their mining and ancillary companies abroad as well as exporting their human capital.

Whilst China has vast mineral wealth, it is also import dependent for a number of major minerals (see Table 1). The Chinese strategy for ensuring access to global minerals has been aggressive and direct; the 'Resource Financed Infrastructure' model and guaranteed buy-back schemes are the most focused interventions seen amongst the countries under review.

Japan, like China, has a highly developed international resource supply strategy as it is highly dependent on imported raw materials to support its large manufacturing industry. In 2013, Japan was the world's third largest manufacturing economy[3]. It runs a sophisticated outreach programme targeting its domestic firms in accessing and developing resources abroad (including financial support) and in resource rich countries to promote Japanese exploration companies.

The USA, an outlier in this group, tends to rely on its domestic mineral potential and nearest geographical neighbours for resource security, namely Canada and Mexico. In addition, its inward facing strategy sees investment in mineral substitution and recycling.

Desired engagement outcomes

While all countries analysed here conduct some form of resource diplomacy with resource rich developing countries, the desired outcomes of such engagements differ greatly. The USA's inclusion of resource diplomacy as a tool is in the pursuit of overarching foreign policy goals. Australia and Canada present their diplomatic efforts as development assistance; however, these efforts usually result in opening up third country markets to Australian and Canadian companies. China's more directed and focused resource diplomacy strategy moves it closer to supply security, whilst also enabling China to establish its mainly state owned companies in resource rich third countries. Japan uses resource diplomacy to ensure Japanese companies become 'gatekeepers' of geological activities and data within developing countries to strengthen its own security of supply.

The countries under study promote themselves internationally, aiming to locate their companies as the preferred partners for external mineral sector opportunities. In addition to promoting their companies abroad, they also look to export their expertise in the industry, with the aim of embedding their companies in the nascent industry and positioning them as the partner of choice for leading expansion. On one side of the spectrum the Australian, Canadian, Chinese and Japanese governments intervene to provide support (on differing levels) for their private sectors, on the opposite end of the spectrum, the USA pursues a non-interventionist policy and provides very little support for its mining related private sector operating abroad.

The following sections in the brief outline the challenges and opportunities faced by each country, seeking to categorise engagements, with concluding remarks focusing on what would be relevant for the EU.

---

[2] The concept of what constitutes 'well-governed' is a contested one, and is examined in a policy brief published later this year.

[3] https://www.mapi.net/blog/2015/09/china-solidifies-its-position-world%E2%80%99s-largest-manufacturer

Australia

Australia focuses on supporting its mining and ancillary companies to expand abroad and is working to position itself as the partner of choice in mining projects. Its mining heritage and knowledge forms the core of its engagement strategy with other resource rich countries.

Creating enabling environments for private actors

Australia largely carries out external interventions under the Australian Department of Foreign Affairs and Trade (DFAT), which undertakes 'Economic Diplomacy' missions, concentrating on building the capacity of national ministries and promoting Australian companies as experts. With the election of the Abbott government in 2013, Australia's department of International Development, Australian Aid, reduced its geographical mandate and budget[4]. The strategy has seen a shift towards Australia's closest geographical neighbours, including Pacific Island states and Southeast Asia.

The government's priorities have supported Australian mining and ancillary companies to establish themselves and expand market share within resource rich countries. The government also seeks to promote the Australian mining industry as the world leader in a range of disciplines including research and development, health, safety and environment, mining technology and equipment, all of which will help to export Australia's mining industry across the world. Given the mining governance structure in Australia, where individual states such as Western Australia and Queensland are largely independent in how they manage and govern their mineral sectors, individual provincial governments often lead the way in promoting their states and companies at international forums.

Economic diplomatic missions

On the federal level, support is more diffused. DFAT, for example has supported the African Minerals Development Centre in Addis Ababa, Ethiopia with a grant of USD 5 million[5]. This project is funded with the aim of improving knowledge and governance within the African Continent and partners with other international donors such as Canada and the European Union.

In case of individual countries, DFAT have provided training to the Ethiopian Ministry of Mines on revenue management and co-funded a Strategic Minerals Sector Assessment to inform future interventions in the country's minerals sector. The Turkish Government approached the Australian Government to conduct as investigation into recent mining disasters in the country including a road map for the policy and regulatory reform of the industry. DFAT estimated associated procurement from Australian firms related to the study will be in excess of USD 76 million. In addition, the University of Queensland is expected to establish the Australia-Turkey centre for Mining Excellence in Ankara to act as a resource for Australia to help lead the Turkish industry in best practice.

In Argentina, DFAT supported junior Australian mining companies to gain exploration licenses. Initially, public opposition to mining in some areas prevented the award of exploration licenses to foreign companies. The Australian embassy, together with DFAT, worked with Argentine universities, companies, and mining chambers to promote Australian companies as the world leader in sustainable mining practises to overcome public opposition. The department hosted a number of public events and seminars on the topic. These efforts eventually led to five Australian companies being awarded exploration licenses in recent years. This has significant market penetration opportunities for exploration companies, in a country where 75% of areas with significant mining potential remain unexplored.

DFAT interventions largely combine development initiatives with international diplomacy and trade agreements. The approach is similar to the Chinese approach of packaging engagement (discussed in a later section), although the strength of the interventions are more dissipated across the sectors relative to China's focused approach.

Development diplomacy

Australia through DFAT also funds development assistance projects. In Liberia, DFAT funds Building Markets International (an NGO), through which the government is helping mining companies to meet local content requirements. Through Building Markets International, 128 businesses have won over 2,000 contracts worth USD17 million and created 364 full-time jobs[6].

[4] http://www.lowyinstitute.org/issues/australian-foreign-aid

[5] http://www1.uneca.org/ArticleDetail/tabid/3018/ArticleId/1958/Australia-Prime-Minister-commits-initial-5-towards-African-Minerals-Development-Centre.aspx

[6] http://dfat.gov.au/trade/economic-diplomacy/case-studies/Pages/case-studies.aspx

Canada

Similar to Australia, Canada conducts economic diplomacy with resource rich developing countries in an effort to support the participation of Canadian businesses in external markets. Over 100 Canadian mining and exploration companies currently operate outside of Canada, with an estimated market value of USD78 billion. Canada's strategy is presented under the auspices of its development priorities; being a leading mining economy; providing development assistance to resource rich countries seems like a logical priority. However, its strategy can also be seen as economic diplomacy focussed on creating access to countries with underexplored mineral potential.

Promoting sustainable mining

Canada's external interventions in the mineral sector are largely through Public Affairs Canada, which seeks to position Canadian businesses as strong development partners. In addition to funding public institutions and conducting its own economic development programs, Public Affairs Canada has also entered into Public Private Partnerships with private mining companies to fund Corporate Social Responsibility (CSR) projects in the developing world. This includes Lundin for Africa Partnership, Lundin Mining's CSR arm, with a grant of USD4.5 million for projects in Ghana, Mali and Senegal. It has also provided USD5.6 million for a partnership between NGO Plan Canada and IAMGOLD for project affected communities in Burkina Faso. However, these programmes have received a vast amount of criticism from industry watchdogs about not being forthcoming with the actual expected outcomes of funding[7].

Canada, like Australia, is positioning itself as the leader in sustainable and transparent mining practices. It was one of the founding drivers of the Extractive Industries Transparency Initiative (EITI); it has contributed over USD 10 million to support the Transparency Trust Fund, which is a technical multi-sector fund supporting countries implement natural resource transparency standards. With a high number of Canadian exploration and mining companies in developing resource rich countries (57% of public mining companies are listed on the Toronto Stock Exchange[8]), Canada's funding of transparency initiatives appears to be motivated to strengthen governance in developing countries, to ensure a lower risk exposure for its companies.

Development diplomacy

The Canadian International Resources and Development Institute (CIRDI), a collaborative project between the University of British Columbia (UBC), Simon Fraser University (SFU) and École Polytechnique de Montréal (EPM), also directs external Canadian raw materials engagement. The centre funds projects in developing countries to aid governance and state capacity to manage natural resources. The centre currently has thirteen ongoing projects with a combined budget of USD 24.5 million.

China

Relative to the resource independent countries, a different approach is taken by China. China's fast paced growth over the last twenty years has informed its heavily directed engagements with other resource rich countries. The Chinese government (federal and provincial), state institutions such as the Chinese Import Export Bank and State Owned Enterprises, often work together in raw materials based engagements.

Bundled engagement

China's Resource Financed Infrastructure (RFI) and "packaged" Infrastructure Deals (where the infrastructure in question is ancillary to extraction of resources, such as port and rail infrastructure), creates a packaged model of development, resource diplomacy and promoting its private sector abroad simultaneously. This approach has been generally well received by African governments.

China EXIM Bank started to finance such deals in 2004, with more recently the Chinese Development Bank becoming the main lender. Other East Asian countries have followed suit, with South Korea also adopting this model in the last half decade.

Under the model, China provides loans to developing countries for large scale infrastructure projects, with the loan repaid, up to a decade later, in commodities. Although this model has not been well received by civil society and others due to its lack of transparency, among governments in Africa there has been far more positive reception. The model allows developing countries to leverage their natural resources directly, something they were previously unable to accomplish.

---

[7] http://www.theglobeandmail.com/news/world/in-africa-canadas-economic-diplomacy-is-nothing-new/article15626046/

[8] http://mining.ca/resources/mining-facts

China has usually negotiated preferential terms that see Chinese firms contracted to construct the associated infrastructure and gives Chinese firms a 'foothold' in the host economy, with potential for new contracts to be agreed.

RFI deals have been heavily criticised for the lack of transparency surrounding the details of the deal agreed. For example, in 2006 China and the Democratic Republic of Congo (DRC) signed the largest RFI deal with a USD 6 billion funding agreement, USD 3 billion for mine development and associated infrastructure for the SICOMINES project in Southern DRC[9] and an additional USD 3 billion for unassociated infrastructure projects. The project has up to 6.8 million tonnes in proven resources of copper and cobalt. However, since 2008 no official figures have been released as to the agreed amount of raw material to repay the loan. The project has been plagued with problems surrounding lack of clarity within and lack of support from the DRC government, and production at the mine has been delayed by four years, leading to criticisms about wider economic benefits of the deal for DRC citizens. Whilst, no doubt an interesting model, it involves a long lead time, dependent on however long mine production takes to come 'online'; this is usually in excess of eight years. The strategy, therefore, has long term aims to bolster supply stability, rather than medium to short term goals.

Japan

JOGMEC (Japan Oil, Gas and Metals National Corporation) is the Japanese government agency mandated with ensuring a stable supply of mineral resources for the country. In addition to its domestic offices, it has thirteen overseas offices in Africa, Europe, Asia, Oceania, North and South America. The agency is funded by the Japanese Ministry of Economy, Trade and Industry. It aims to enable stable access for Japanese industry to raw materials that are integral to Japan's sophisticated manufacturing industry.

Targeted business support for private actors

The agency will fund and implement geological surveys through a Joint Venture (JV) model. The JV model presents an opportunity for host country companies to partner up with and therefore learn from a Japanese company with extensive experience, offering additional value for the partner country. The survey results are then made available to the partner country in which the survey is being conducted and to Japanese companies who are involved (either wholly owned or through JV models). This enables Japanese companies first right of refusal to potential mineral resources and to apply for exploration and production licenses. The model ensures Japanese companies become 'gatekeepers' of geological information throughout the process.

Perhaps the most persuasive way in which the Japanese government ensures its industry has access to raw materials is by providing equity capital and loans for Japanese companies with interests in projects outside Japan, specifically for high risk projects. This allows Japanese companies to develop deposits that may not necessarily be exploited by other commercial entities.

In addition to equity loans, JOGMEC also offers liability guarantees for development funds lent by private financial institutions to Japanese companies. This engagement makes raising capital for large scale mine developments attractive for private lending companies and again contributes toward direct ownership and management of deposits and operations.

JOGMEC initiatives seek to reduce some of the risk associated with developing deposits abroad and make it easier for companies to raise capital for higher risk projects. This provides Japanese companies with a competitive edge, gaining access to deposits abroad to support a direct and sustainable supply of raw materials for Japanese industry.

Development diplomacy

JOGMEC, on behalf of Japan, uses soft diplomacy for engagement. In 2013 and subsequently 2015, JOGMEC hosted J-SUMIT (Japan-Africa Mining & Resources Business Seminar), a two day event with over 2,000 attendees, including stakeholders from government and industry from Africa and Japan. The workshops aim to promote Japanese mining technology to accelerate natural resource development in Africa[10] and build business relationships.

JOGMEC also hosted the Japan-Africa Ministerial Meeting for Resources Development, which focussed on delivering economic and social development to Africa through promotion of Africa's natural resources and collaboration between the Japanese and African Governments. This event was only attended by government stakeholders from Africa and Japan. In 2015, the event changed its name to Japan-Africa Ministerial Partnership for Resources Development (JAMP).

[9] http://www.reuters.com/article/congodemocratic-mining-china-idUSL8N0ZN2QZ20150708

[10] http://www.meti.go.jp/english/press/2013/0522_02.html

During the event in 2013, JOGMEC committed USD 2 billion to train 1,000 natural resource personnel in Africa between 2013 and 2018. In addition, the Japanese minister of Economy, Trade and Industry met separately with nine resource ministers from African countries on a one-to-one basis that aimed to strengthen relations and activities within the two countries.

The United States of America

In contrast to the outward and engaging role taken by Australia, Canada, China and Japan, the USA does not attempt to engage on an international stage to either gain preferential access to raw materials on the global market or to promote USA mining companies as a 'partner of choice' internationally.

Passive engagement

The USA employs a passive strategy that relies on a 'laissez-faire' model, allowing the global market to enable the expansion of USA mining companies and access raw materials supply where needed. In cases where there are constraints, the country has chosen international fora to settle disputes and create access to markets, such as the World Trade Organisation (WTO). For example, to counter the high Chinese export taxes on rare earth elements (REE) that were restricting supply, the USA (together with the EU and Japan) filed a case against the government through the WTO. The final ruling against China has probably led to a more stable global supply of these minerals.

Through the development of shale gas, the USA is becoming increasingly energy independent, and as a consequence of the REE crisis of 2013, there is a domestic push for the USA to rely more on its own resources. The USA is actively pursuing a strategy to harmonise and increase the speed of permitting within the USA. Currently, the permitting system differs across USA states, leading to severe delays in mine construction and production. With potential investors complaining about the myriad of permits required before mining can begin[11], current efforts are focussed on internal issues. Reforming the permitting system to allow for increased harmonisation between state's procedures, leading to increased exploitation of domestic resources and security of supply, is a major focus for USA stakeholders.

Development diplomacy

The USA's approach to resource diplomacy is on much smaller scale relative to its peers and largely a tool to achieve larger foreign policy goals. It has supported capacity building in the natural resource sector of Afghanistan. A USAID programme aims to enhance the Afghanistan Ministry of Mines ability to successfully run tender processes for mining concession areas. There has been worry that government capacity to compliantly award exploration licenses has meant that partisan groups could gain control of mining areas and use small-scale operations to finance their activities. Therefore, in this respect, the USA is carrying out wider state building and within its own foreign policy agenda, supporting the Afghanistan mineral resource sector as one the tools with which to do this.

Concluding remarks

The first policy brief[12] in the STRADE project detailed EU engagements with resource rich countries, using 'policy dialogues' with the aim to secure preferential or free trade agreements to secure its mineral supply. Japan also uses a similar approach of dialogues, centred on events, conferences and workshops. However, the intended outcome of these engagements is not to secure supply through trade agreements, but to ensure Japanese actors are actively involved in the exploration, production and exportation of minerals in third countries and to secure supply through these means.

While policy dialogues between the EU and resource rich countries contain rhetoric of commitment and capacity building of partner country mineral sectors, there has been no financial commitment from the EU. In contrast, Japanese engagements contain large financial commitments to support developing countries' natural resource sectors.

The EU funded geological surveys through the SYSMIN project in the 1980s through to the early 2000s. Information from completed surveys' was then passed onto partner governments and made available to the wider market; it could therefore not be guaranteed that European companies were awarded exploration licences or were involved in the project through to production. The Japanese approach, on the other hand, where results are only made available to partner governments and Japanese companies, ensures a more competitive edge for the latter.

JOGMEC also has the capacity to lend and to provide financial guarantees, while the European Investment Bank (EIB) works separately from the EU's raw materials engagement arm. As detailed in the previous Policy Brief (No 1, 2016), the EIB is a financial institution that is owned and run by the 28 member states of

[11] http://thehill.com/blogs/congress-blog/energy-a-environment/262339-time-for-the-us-to-address-its-mineral-dependence-problem

[12] http://stradeproject.eu/index.php?id=7

the EU. It has expressed interest in financing mining projects, having financed thirteen projects between 2000 and 2010. However, unlike the facility provided by JOGMEG, the EIB does not provide financing or financial guarantees solely to European companies.

Subsequent deliverables under STRADE will explore whether the relationship between the EIB and the European Mining Industry can be strengthened and whether the EIB can become a more specialised lending institution that prioritises the European mining industry.

Australia and Canada’s strategy of supporting their companies abroad, and exporting their experience and expertise is based on promoting an image of an advanced mining economy and therefore the authority to advise developing countries on how best to manage their own sector. Presently, the EU is not viewed, or promoted, as an area of mining excellence and therefore would struggle to emulate Australian and Canadian model.

Australia supports its companies abroad by selling the Australian industry as the partner of choice, an approach the EU has not taken. There are areas where the EU is seen as being incredibly advanced, namely mining equipment and R&D, where it could consider similar interventions to further its reputation.

China and the EU have different historical relationships with the African continent. China has always promoted the potential of the African content in business partnerships and has not intervened in domestic affairs, whilst most traditional development partners, such as the EU and the USA, have pursued development assistance alongside intervention in domestic policy.

Currently, the EU's external engagement is quite similar to the USA’s in terms of not seeking an active role in creating enabling conditions for its private sector to expand abroad and relying on market forces to do this. However, as various other models have been explored in this policy brief, the EU could look towards the Australian, Canadian, Chinese and Japanese approaches to further the development and expansion of its mining industry abroad and relieve concerns about securing a sustainable supply of raw materials into the EU.

Project Background

The Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE) addresses the long-term security and sustainability of the European raw material supply from European and non-European countries.

Using a dialogue-based approach in a seven-member consortium, the project brings together governments, industry and civil society to deliver policy recommendations for an innovative European strategy on future EU mineral raw-material supplies.

The project holds environmental and social sustainability as its foundation in its approach to augmenting the security of the European Union mineral raw-material supply and enhancing competitiveness of the EU mining industry.

Over a three year period (2016-2018), STRADE shall bring together research, practical experience, legislation, best practice technologies and know-how in the following areas:

1. A European cooperation strategy with resource-rich countries
2. Internationally sustainable raw-material production & supply
3. Strengthening the European raw-materials sector

Project Identity

Project Name	Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE)
Coordinator	Oeko-Institut; Doris Schueler, Project Coordinator, d.schueler@oeko.de
Consortium	
Öko-Institut e.V.	OEKO-INSTITUT E.V. – INSTITUT FUER ANGEWANDTE OEKOLOGIE Merzhauser Strasse 173, Freiburg 79100, Germany
SNL Financial	SNL Financial (AB) Olof Palmes gata 13, Se -111 37, Stockholm, Sweden
projekt consult – Member of GFA Consulting Group	PROJEKT-CONSULT BERATUNG IN ENTWICKLUNGS-LAENDERN GMBH Laechenstrasse 12, Bad Vilbel 61118, Germany
University of Dundee	UNIVERSITY OF DUNDEE Nethergate, DD1 4HN Dundee, United Kingdom
GEORANGE	GEORANGE IDEELLA FORENING Box 43, Mala 93070, Sweden
University of the Witwatersrand, Johannesburg	UNIVERSITY OF WITWATERSRAND JOHANNESBURG Jan Smuts Avenue 1, Johannesburg 2001, South Africa
DMT	DMT-KAI BATLA (PTY) LTD P.O Box 41955, Craighall, 2024, South Africa
Funding Scheme	This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689364 Funded by the Horizon 2020 Programme of the European Union
Duration	1.12.2015 – 30.11.2018
Budget	EU funding: €1 977 508.75
Website	www.STRADEproject.eu

The views expressed in STRADE Policy Briefs are those of the respective author(s) and do not necessarily reflect the views of all the STRADE Consortium members. The European Union is not responsible for any use made of the information in this publication.