



Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE)

Non-European Country Engagement with Resource-Rich Developing Countries

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List of Abbreviations

Abbreviation	Description
AAMEG	Australia Africa Minerals & Energy Group
AMV	African Mining Vision
ASEAN	Association of South East Asian Nations
ASIO	Australian Security Intelligence Organisation
ASM	Artisanal and Small Scale Mining
ASOMM	ASEAN Senior Officials Meeting on Minerals
AUD	Australian dollar
BRI	Belt and Road Initiative
CAD	Canadian dollar
CEO	Chief Executive Officer
CSR	Corporate Social Responsibility
DFAT	Department for Foreign Affairs and Trade (Australia)
DRC	Democratic Republic of Congo
EGPS	Extractives Global Programmatic Support
EI-TAF	Extractive Industries Technical Advisory Facility
EITI	Extractive Industries Transparency Initiative
EU	European Union
FOCAC	Forum on China-Africa Cooperation
ICMM	International Council on Metals and Mining
IDRAM	Extractive Industries Infectious Diseases Risk Assessment and Management Initiative
IFC	International Financial Corporation
IMF	International Monetary Fund
JICA	Japanese International Cooperation Agency
JOGMEC	Japanese Oil, Gas and Metals National Corporation
JV	Joint Venture
MCI	Mining Contribution Index
NRGI	Natural Resource Governance Institute
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PDR	Peoples Democratic Republic
RRC	Resource-rich Countries
SDG	Sustainable Development Goals
SPGMI	S&P Global Market Intelligence
SSA	Sub Saharan Africa
TICAD	Tokyo International Conference on African Development
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
USA	United States of America
USD	US dollar (currency, \$)
VPSHR	Voluntary Principles on Security and Human Rights

Summary

At the start of the century, three agenda for development were emerging; the Sustainable Development Goals, Climate Change and sustainable use of resources and Mitigating the Resource Curse. The 2003 commodity price boom created the opportunity for resource-rich developing countries to capitalize on their natural resource wealth. By 2017, when the resource boom has retreated to more stable price levels, more than a decade of engagements have been completed between the industrial and resource-rich countries. Progress has been achieved in many areas and the issues facing mineral consumers and producers are now clearly articulated.

This report documents the engagement by industrial countries, Australia, Canada, China and Japan, normally under Official Development Assistance. Overall, two strands of engagement appear from the analysis. The first focuses on the wider governance agenda, to support resource-rich countries better manage their natural resources. The second strand provides direct support from home country governments to their companies operating abroad.

The resource exporting countries (Australia and Canada) are more active in providing support for governance related measures than the resource dependent countries (China and Japan). Australia is further distinguished from Canada, where the former has increasingly moved to funding of other international initiatives (EITI and NRG I for example) to assist resource-rich countries. Canada, while maintaining a strong portfolio of direct project assistance for mineral projects, also provides funding for the wider development agenda. Japan's presence in this area has been limited, and China is noticeable by its absence.

Japan tends to focus more on the business and technical aspects of the mineral sector in its engagements. Through financial and technical support, it directly aids its companies in accessing assets abroad. China, under its Belt and Road Initiative, is also using key investments in infrastructure and energy projects to open up regions for mineral investments.

For the EU to play an effective and credible role in the mineral and development agenda, it would need to undertake resource diplomacy as practised by Australia and Canada. The EU can play an important role in institutional capacity building in raw material producing countries, as does Japan. Funding for multilateral initiatives, operated by institutions such as the World Bank and the IMF is an option. This is particularly useful as the EU's in-house capacity to engage in mining related bilateral projects is limited. It can also fund and support international initiatives such as the EITI, NRG I and IGF that contribute to the acceptance of international standards for transparency and mining practices.

The EU can provide support to its own companies in operating abroad, particularly in developing and incorporating responsible mining practices. In addition, it should consider initiating protocols for monitoring of its company operations abroad.

The research shows that the government oversight, for many industrial countries, of their mining company operations abroad is weak. This is particularly in holding companies to account for their actions in developing countries, assisting home based companies in acquiring the skills for responsible mining practices and in meaningfully addressing the linkages and industrialisation agenda. The EU can provide the much needed consensus and direction here.

The conclusions for the EU from an analysis of its own engagement and that of other industrial countries is clear. The EU needs to take into account the existing instruments available to progress the inclusive growth agenda. It needs to consider efforts already undertaken by others and consider further contributing to such efforts. Working with both the industrial and developing countries, it can make a meaningful contribution to the minerals and development agenda – one from which all parties can benefit.

1. Introduction

In 2000, the United Nation's Millennium Summit's declaration issued eight measures, with key indicators, to improve the lives of the world's poorest people. The [Millennium Development Goals](#) focused on poverty reduction, education, health, gender empowerment, improving child mortality rates and maternal health services, environmental sustainability and developing a global partnership for development.

In 2015, a new set of UN targets (17 goals) were enshrined in the [Sustainable Development Agenda](#), focusing on further reducing poverty, ensuring sustainable practices and development and prosperity for all.

A second international movement around sustainable development, often merging with the discourse on climate change, began to emerge as a priority on global agendas during the same period. The Kyoto Protocol (entering into force in 2005), followed by the failed negotiation of the Copenhagen Accord (2009) and more recent successful negotiation of the Paris Agreement (2015), while directed at climate change, addresses sustainability as the core issue.

The mineral commodity price boom that started in 2003 brought the Resource Curse discussion to centre stage. The 'curse of natural resources' was a phrase that emerged during the last two decades of the 20th century. It centred on the observation that many of the developing countries with abundant natural resources tended to grow more slowly than their resource-poor counterparts. The literature, led by the research from Sachs and Warner (1995, 1999, 2001), Auty (1993, 2001) and Gleb (1988), listed the challenges to growth under the curse as including; Dutch disease, increased incidents of armed conflict, low performance on governance indicators and weak interaction with other sectors of national economies. Thus international engagement and assistance around mining focused largely on mitigating such adverse impacts. Transparency of revenue flows, macro-economic management, revision of mineral codes and regulations focus on improving industrial linkages from the resource sector, technical capacity building and training to indigenize resource management capacity became some of the central pillars of international engagement on raw materials.

These were the three major dialogues in international engagement, related to the mineral sector, developing at the start of the century¹. The first focused on the development agenda. The second on sustainability and climate change and the third focused on the governance of the resource sector.

Engagements around these dialogue were not necessarily between advanced and developing countries. South-South dialogues and collaborations emerged such as the co-learning platforms under the [UNDP South-South Exchange](#) program. There were North-North dialogues, such as the [EU-Japan-US trilateral conference on critical minerals](#). Regional initiatives such as the [Africa Mining Vision](#) emerged, as well as government to government collaborations ([FOCAC](#)) and multi-partner initiatives ([EITI](#)). The list is long and the initiatives indicated here do not mention the plethora of civil society and industry-led collaborations². The discourse around natural resources and development has become much more sophisticated and complex, relative to those seen in the 1980s and 1990s, where economic gains and conflict avoidance were the dominant discussion.

There was a proliferation of stakeholders and issues that resulted in an increase in the number of goals, objectives, tools and approaches within the sphere of international development and mining. This report does not attempt to map this multitude of movements and actions; it focuses on the approach of *third countries in enhancing the mineral sector's contribution to development of resource-rich emerging and development countries*³. The report contextualises these approaches within the larger development agenda. This assists in understanding where previous engagements have focused and guides recommendations for shaping future EU raw material engagements. Raw materials engagement between resource-rich developing and emerging countries and industrial countries and global development institutions is not a standalone engagement – it is part of the wider development agenda. Thus, the main objective of such engagements – mostly under Official Development Assistance (ODA) - is to address poverty and sustainability and the establishment of a well-functioning mineral sectors is seen as (one) of the means of achieving this.

This report reviews the engagements by four non-EU countries: Australia, Canada, China and Japan. Previous research (STRADE [Policy Brief 02/2016](#)) indicated that the United States does not pursue specific

¹ Numerous international initiatives have emerged in the past three decades, here we focus on the three which the authors believe are the most relevant to the discussion on the mining sector and development.

² See STRADE Policy Brief 04/2017 for a list of organization based initiatives.

³ For the remainder of the report, resource-rich country refers to both the emerging and developing countries.

raw materials engagements for addressing mineral challenges in developing countries. Therefore, the country is not covered in this report.

Resource-rich countries refers to both emerging and developing countries that are currently hosting mineral projects that are significant to their economies. Engagements refers to programs or projects under Official Development Assistance (ODA) or other major government strategies of the non-EU countries.

The first chapter briefly outlines the mining and development agenda that forms the basis of analysis of this report. Chapter 2 then looks at one caveat – supporting mineral sector governance. Chapter three analysis the engagements from the industrial country perspective, documenting how these countries, through support for their own firms abroad, support the second caveat for mining and development – the creation of an enabling business environment. Chapter 4 provides a summary of the findings and lessons the EU can learn from the engagements of third countries.

1.1. Mining and development

The International Council on Metals and Mining (ICMM), in its report on the [Role of Mining in National Economies](#) (2016) tracks the significance of the mining sector in 180 countries. The latest report finds that: "It is predominantly in low and middle-income countries that national economic life depends most heavily on mining. And this dependence has been increasing over the last two decades" (2016; pg 2). The report concludes that with the increasing dependence of national economies on mining, the need to have the appropriate framework to govern mineral resources is becoming even more essential. Of the top 50 mineral dependent economies within the [Mining Contribution Index \(MCI\)](#), approximately 75% are assessed to be below satisfactory levels of good governance for the resource sector. While development assistance and engagement has delivered improvements in the resource sector, the sector continues to require further effort.

Mining is expected, similar to other industrial sectors, to contribute to the national economy by generating government revenues (through taxation) and employment (direct, indirect and induced employment and incomes). In addition, when international companies invest in a developing country they are expected to share advancements in technology, governance and business practices. Hence, a 'well-functioning' mining sector can have a positive impact on a country's growth (Figure 1).

Figure 1 Asset transformation - from subsoil assets to development



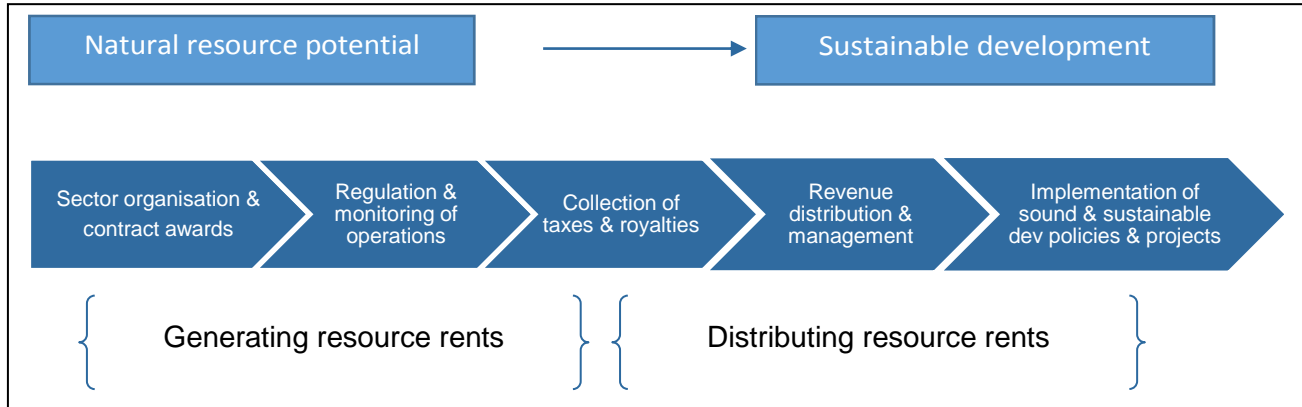
Source: ICMM, 2016

A range of factors can weaken mineral assets delivering higher standards of living. Figure 2 indicates the extractive industry value chain that leads from natural resource potential to sustainable development. From the exploration and contractual stages at the very start of any mining project, to the regulation and monitoring of operations, collection of taxes and royalties, and the effective distribution of these revenues, to allow for implementation of sound sustainable development, completes the chain. Governments need to effectively manage the entire value chain, for mining to contribute to development. The focus of raw material engagements by industrial countries, within the development assistance context, has been to support resource-rich developing countries address these challenges and barriers and support the interaction of mining companies with the rest of the economy.

The national barriers or issues that can mitigate these impacts have been well studied. These include revenue management and accountability; armed/violent conflict over mineral rents; institutions lacking the

capacity to monitor and manage companies operating in the mining sector; and the lack of capacity in the industrial sector to capitalize on the opportunity to develop linkages from the sector.

Figure 2 The extractives industry value chain



Source: World Bank, 2013

The two caveat of mining and development that are addressed in this report can be broadly defined as those that fall under governance (with the assumption social, environmental and human rights issues are addressed through regulations and implementation) and under business environments (that address the more economic side of the equation).

Raw material based engagement, from a developing country perspective, is based on the premise that engagements with industrial countries will assist them in harnessing their natural resource sector to contribute to development. While the partner country may also receive some benefit from such engagements (access to raw materials, business opportunities for its firms etc.) the central beneficiary is expected to be the resource-rich country.

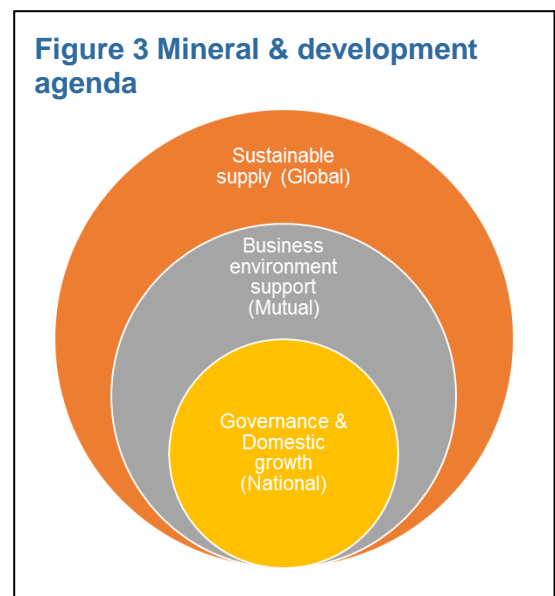
Figure 3 presents three set of objectives for industrial countries to pursue raw material engagements with resource-rich countries. The first is associated with addressing domestic growth and is largely focused on achieving minerals and development aims. The central beneficiary is the resource-rich country.

The second looks at improving the market/business environment for the operations of companies. Such improvements help both the resource-rich countries as well as the third country companies operating in these jurisdictions. Thus the beneficiaries are both sets of countries.

The third focuses on supporting a sustainable availability of minerals at a global level. This addresses the larger global community, which benefits both producers and consumers of minerals. The final level can be considered as the culmination of the engagements at the other two levels.

Before the report moves to mapping engagements under these objectives, it is important to acknowledge that different regional priorities exist for Latin America, Sub Saharan Africa and Southeast Asia within the mineral and development agenda.⁴

Figure 3 Mineral & development agenda

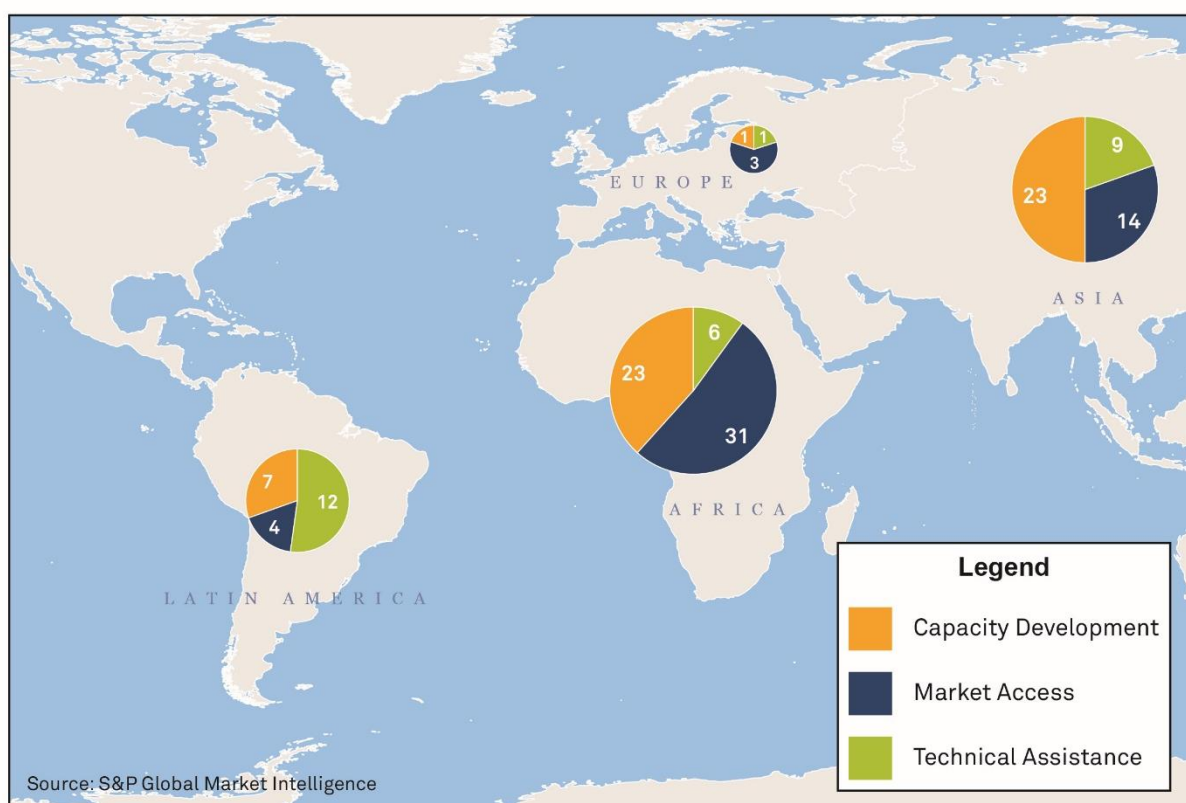


⁴ [Aligning EU cooperation with resource-rich developing and emerging countries' needs](#) (STRADE, 2017) provides a detailed discussion of these by issue and country.

1.2. Regional priorities of resource-rich countries for raw materials

During the commodity price boom (2003-2011), resource-rich countries in Latin America, Sub Saharan Africa (SSA) and Southeast Asia all took steps to realize the benefits of high commodity prices whilst mitigating the dangers presented by the resource curse. The 'starting-point' for each region was different; hence each faced different domestic challenges and their development priorities differed. As noted in a previous STRADE research ([Report 02/2017](#)) Africa received nearly 45% of the total number of raw material engagements under ODA, followed by Asia with 34%, Latin America with 17% in 2014. Within the regional split, by level of assistance expenditure, Africa accounts for the greatest share with 69% compared to Asia, which received 25%, Latin America with 6% and Europe with 0.3%.⁵ Figure 4 shows the categories for raw materials engagement under ODA.

Figure 4 Map of raw material official development assistance objectives by recipient



Source: SNL Metals Consulting (2016)

Latin America. Of the three regions, Latin American countries can be considered the most advanced in terms of their legislation maturity and linkages to the rest of the economy. As a consequence of their long(er) mining history, their challenges stem from legacy environmental impacts and local community engagement and human rights. Chile, Colombia and most recently Peru have on-going development of country mining visions, focused on ensuring the sustainability and inclusiveness of their mining industries. Colombia for example, through the [Proposals for a Shared Vision on Mining in Colombia Roadmap](#) has focused its resource governance agenda on establishing an inclusive mining sector that can generate post conflict socio-economic opportunities (Dialogue Group on Mining in Colombia, 2015). As a result, the development agenda within the region over the past decade has placed a greater emphasis on addressing the socio-economic conflicts that have arisen from mineral activity.

ODA based engagement in Latin America focus more on technical assistance, specifically projects that aim to improve the operating practices of existing mines in these countries. Nine out of the twenty three projects identified in Latin America support the uptake of 'International Best Practice'. For example, the 'SecMinStratEI' project by the German government in Chile looks at the environmental impacts of mining old

⁵ The interventions analysed are taken from the OECD's Creditor Reporting System (CRS), and focus on engagements made in 2014, the most recent year with full coverage of raw material engagements available.

deposits, including tailings facilities. Other projects, including projects run by Spain in Peru and Argentina look at Health & Safety procedures in mining and local community engagement. These types of engagements tend to be inexpensive as they are often narrowly focused and rely largely on the expertise of the donor country and address a receptive and technically adept recipient.

Sub-Saharan Africa. SSA countries witnessed substantial foreign investment into the exploration and mining sectors; often labelled as the 'least-explored' mining region in the world, the focus was on developing nascent mineral resources. The major challenge in African countries was around dated/ineffective mining legislation. Coupled with its history of mining revenue used for funding conflict, revenue transparency and management were also a high priority. Finally, using mineral investments to drive wider economic growth and the development of an industrial sector were high on national agendas.

A central focus of resource-rich SSA countries during the commodity boom had been on the establishment of regional resource governance structures focusing on revenue management and sustainable development of the mining industry. Most notably, in 2009 the African Union adopted the [African Mining Vision](#) (AMV). The vision laid out the framework to use the regions mineral resources as a catalyst for broader economic development and the establishment of a thriving African market.

Africa has the largest ODA raw material engagements in 2014, both by number and by expenditure. The mining industry in this region is comparatively less developed than in Latin America. Capacity development projects, especially those that focus on governance, are more expensive than technical assistance projects as they entail more holistic and long term development, and often include cooperation and training of multiple stakeholders. For example, the Canadian funded project 'Effective Governance of Mining and Gas Impacts'⁶ in Mozambique, has a total expenditure of USD 0.8 million. It addresses socio-economic, environmental and governance and transparency issues in the country's mining industry. The project required cooperation with and support for multiple government actors, including the Ministry of Mineral Resources, the Ministry for the Coordination of Environmental Affairs and the Ministry for Women and Social Affairs.

Southeast Asia. Southeast Asia has a mixed set of challenges; while countries such as Indonesia and Philippines had benefitted from international investments before the commodity boom, their focus turned towards the creation of downstream linkages (smelting and refining). Other's such as Lao PDR were faced with the environmental impacts of increased mining activity, and enforced a moratorium on mining to allow the government to create the appropriate monitoring and enforcement capacities. Papua New Guinea, again with a long history of mining was facing issues similar to Latin America; community conflicts and environmental damage. Overall, given the population density in the region, addressing the safeguard of community rights is a major priority for most countries.

Some Southeast Asian countries do not look towards their mineral sector as a major driver of economic growth. Cambodia, Lao PDR, Myanmar, Vietnam and Thailand are focusing on manufacturing (capitalising on their relatively low wage rates) as driving their economic growth rather than mineral resources. For example, Thailand, in May 2016, ordered the closure of its only active gold mine (Chatree – operated by the Australian firm Kingsgate Consolidated), citing environmental and health concerns to outweigh the economic benefits from the operations⁷.

The recipient countries in Asia have a comparable ODA project breakdown to those in Africa. Many of the raw material engagements in Asia have been driven by the potential of mineral resource endowment as a tool for development. For three of the largest recipient countries in Asia; Afghanistan, Mongolia and Myanmar, development of the countries' ability to manage its natural resources is seen as a tool to bring economic development and political stability. As a result, these countries have been the recipients of comprehensive capacity development programs in 2014. One example is the 'Myanmar-Australia Partnership for Reform'⁸. This USD 38 million three year project aims to develop Myanmar's institutional and governance strength in order to facilitate the peace-building process through greater political stability. Australia is assisting Myanmar to comprehensively reform its natural resource management, including training key governmental staff and reforming and developing the country's Ministry of Mines. Projects of this nature are understandably expensive and time intensive.

In the next chapter, the report documents the major engagements for supporting governance in resource-rich developing and emerging countries by the four non-EU countries.

⁶ <http://www.acdi-cida.gc.ca/cidaweb%5Ccipo.nsf/projEn/D000115001>

⁷ As of November 2017, the case is [under arbitration](#) under the Thailand-Australia Free Trade Agreement

⁸ <https://mohinga.info/en/profiles/activity/MM-FERD-ID3669/>

2. Engagements to support governance in the mining sector

As stated in the introduction, at the start of 2003 global development initiatives were addressing a host of challenges facing resource-rich developing countries. Governance was a major theme underlying a number of these challenges from taxation and accountability to regulatory and administrative issues. Thus, the number of ODA projects that looked at improving governance was quite large. While there has been significant improvement on the governance indicators for most resource-rich countries, there is more to be achieved.

Governance-centred engagements are contextualised for a particular country and focus on domestic and national challenges it faces. Such engagements are largely driven by the resource-rich country itself and engagement by third countries will often be under development assistance programs. The intended primary beneficiary is the former.

Objective: The improvement of the mineral sector governance and regulations, to have a well-functioning sector that can contribute to the development aims of the government.

External & internal drivers: Country governments internally drive the agenda for these engagements. The push is to deliver growth and capitalise on the potential contribution of the mining sector to growth. Resource-rich developing country governments are seeking assistance to accomplish 'well-functioning' mining sectors in terms of governance.

There are international drivers for this agenda as well, although more indirect and limited. These emerge from the international community and institutions, often translated through international codes of conduct and principles, focusing on supporting well governed mineral sectors where the government plays an active role in managing its mineral resources.

Actions: The primary actions focus on improving the functioning of the mineral sectors. The most commonly identified national level needs can be illustrated by the objectives of the Extractive Industries Technical Advisory Facility⁹, managed by the World Bank, which divides these between advisory services and knowledge management (Table 1). Four areas of national level issues have been identified under advisory services; contract negotiations, capacity building, and technical assistance for regulatory frameworks and licensing/tendering. Knowledge management mirrors these advisory services, focusing on providing good practices and supporting knowledge sharing activities.

Table 1 EI-TAF objectives

Rapid response advisory services	Knowledge management
Contract negotiation for extractive industry transactions Where legally feasible, mutually-agreed dispute mediation	Providing a framework of good practices and discussion of issues. Such issues to cover relevant material for making extractive industry resources available to private investors
Short-term capacity building for members of the beneficiary country's negotiation teams, including studies to prepare for negotiations	Gathering and disseminating lessons of experience based on advisory services provided. Included publications, workshops, conferences etc
Technical assistance in support of a specific extractive industry transaction under review. Update the policy, institutional, fiscal, legal and regulatory frameworks (including mining and hydrocarbon codes and licensing registers). This includes revenue management and benefits sharing across levels of government and community	Preparing studies, reports, policy notes and other documents related to such activities.
Technical assistance on structuring extractive industry licensing rounds, public offerings (tender/auction), and competitive and transparent tender packages.	

⁹ The EI-TAF was a funding mechanism to support resource-rich developing countries in the governance of their natural resource sector. Although the program was closed at the end of 2015, its objectives are still relevant today.

Source: *Implementation completion memorandum, 2016*¹⁰

The review of the three countries presented in this section focuses on the use of ODA funding and tools for the improvement in governance and accountability of national governments, as well as assisting other stakeholders in providing support. China is not included in this chapter as it does not support governance activities and chooses instead a bundled approach, which is discussed in detail in the next chapter.

2.1. Australia

Australia largely carries out external interventions under the [Australian Department of Foreign Affairs and Trade \(DFAT\)](#). Australia's department of International Development, Australian Aid, reduced its geographical mandate and budget post 2013¹¹. This has also been mirrored by a shift towards Australia's closest geographical neighbours, including Pacific Island states and Southeast Asia.

The Australian government has committed USD 8.3 million for extractive sector development assistance over the 2017-2018 period. The raw material engagement has increasingly moved towards 'multi-donor' platforms and away from bilateral assistance projects. The majority of the funds spent/committed are for improved transparency and for the management of natural resource revenue. Notable commitments from the Australian government are as follows:

Extractives Global Programmatic Support (EGPS) Multi-donor Trust Fund. Australia is the largest donor of the multi-donor fund, which also includes Canada, EU, Finland, Germany, Norway, Switzerland and the UK. The World Bank manages the fund. Australia has committed AUD 11 million (USD 8.6 million) to the fund for the 2015–2020 period. The funds' overall objective is to support resource-rich countries in using their natural resources for poverty alleviation, shared prosperity, economic diversification, and sustainable economic growth. The fund replaces the support previously provided through the EITI Multi-donor fund and the Extractive Industries Technical Advisory Facility, (which were closed in 2015).

Nearly 75% of the funding is used to support EITI implementation. The EGPS has also supported improving the knowledge base on mineral legislation (through the [Africa Mining Legislation Atlas](#)) and training for African law students working in the mineral sector.

IMF Topical Trust Fund on Managing Natural Resource Wealth. The [fund](#) delivers technical assistance to developing countries for managing the macro economic and fiscal impacts of resource revenue. Australia has committed AUD 5 million (USD 4 million) for the 2011–2017 period. Other donors for the fund include European Commission, Kuwait, the Netherlands, Norway, Oman and Switzerland. Australia is currently finalising its support for the second phase of the program, launched by the IMF in 2016.

Twenty-six countries have benefitted from the funds assistance so far. Most of these are African countries, followed by Asia-Pacific (Indonesia, Lao, Mongolia, PNG and the Solomon Islands).

EITI: Australia has committed more than AUD 20 million (USD 15.7 million) in funding for the EITI, since 2007. In 2017, its support for EITI comes through contribution to the Extractives Global Programmatic Support Multi-donor Trust Fund. On 6 May 2016, the Australian Government announced it would implement the EITI domestically.

Natural Resource Governance Institute and Transparency International. Australia committed just under AUD 2.5 million (USD 1.97 million), for the 2015–2017 period to the NRG. An additional AUD 300,000 (USD 236,100) was committed to Transparency International Australia, which works with the private mining sector to improve transparency and regulations for awarding mining permits, licenses and contracts. The main countries of engagement have included Niger, Kenya, Mongolia, Cambodia and Indonesia.

The Kimberley Process. Australia was the chair of the Kimberley Process in 2017, being the sixth largest producer of diamonds (by weight). As chair, it committed to lead a comprehensive review of the Kimberley Process to strengthen the international standard across the entire diamond value chain.

Voluntary Principles on Security and Human Rights: The Australian government released its National Plan on Voluntary Principles in 2016, and aims to work with its private sector and government to implement these plans.

¹⁰ <http://documents.worldbank.org/curated/en/674011485750573897/pdf/112322-WP-P115110-PUBLIC-EITAFICMFinalDec.pdf>

¹¹ <http://www.lowyinstitute.org/issues/australian-foreign-aid>

While the Australian government appears to have stepped back from targeted direct project support, it provides support to other Australian organisations to conduct more direct engagements. The most notable of these include the following:

[Australia-Africa Partnerships Facility](#). The facility is managed by Cardno Emerging Markets (Australia) Pty Ltd on behalf of the Australian Government. It provides support for mining governance, including DFAT's support for the Mining for Development (IM4D) program, which ran from 2011 to 2015. The facility covered research and support on mining legislation; resource surveys; public financial management of natural resources; environmental and social assessments; skills assessments and training.

[Australia Awards](#). This is a series of International scholarships and fellowships administered by DFAT. It is meant to provide opportunities for people from developing countries, particularly in the Indo-Pacific region. The award allows individuals to undertake full time undergraduate or postgraduate study at participating Australian Universities and Technical and Further Education (TAFE) institutions.

[Council on Australia Latin America Relations \(COLAR\)](#). The Council's objectives are to inform and influence corporate Australia, and assist in developing government policies to enhance Australia's economic, political and social relations with Latin America. It also seeks to support Australia's broader economic and diplomatic objectives in the Latin American region as well as fostering engagement between Australia and Latin America actors. COLAR's 2016-17 grants included funding for establishing a Centre of Excellence in Sustainable Mining in Borgata (AUD 44,000 – USD 34,600).

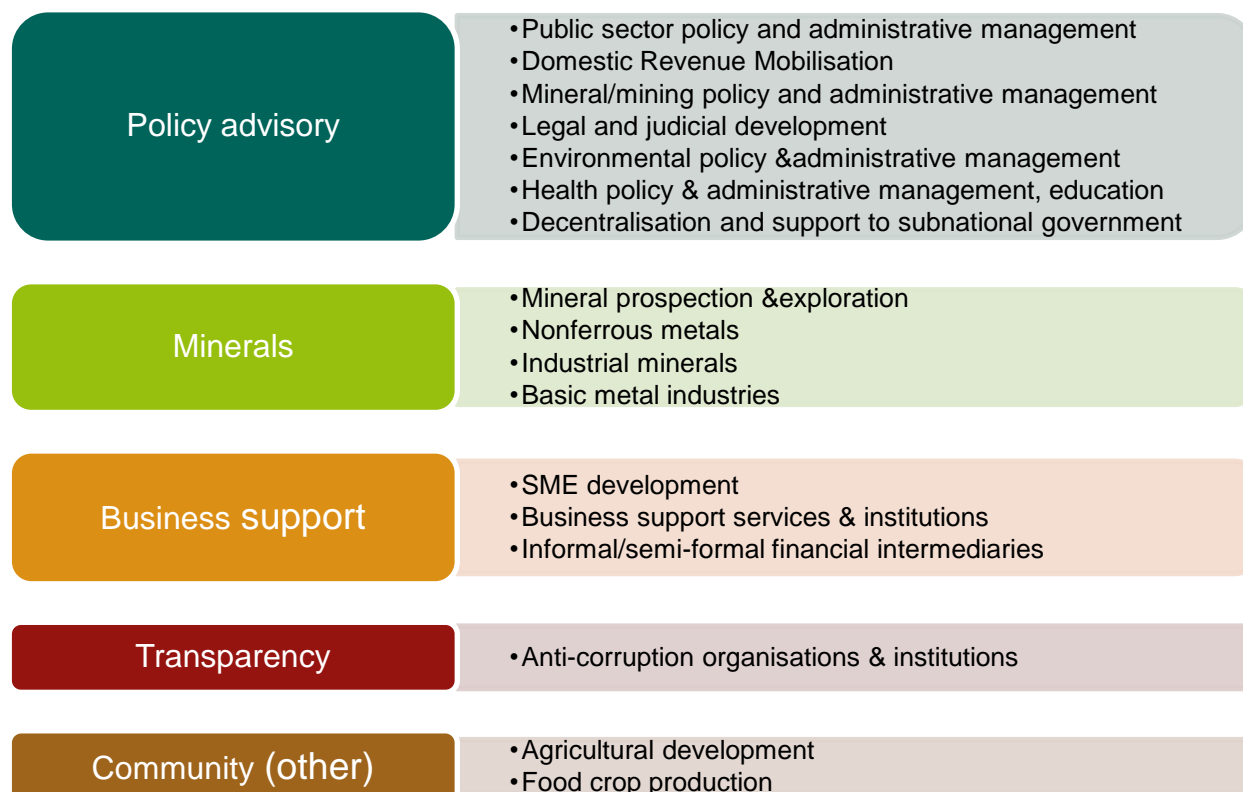
[Australian Volunteers for International Development](#). Managed by DFAT, in partnership with other organisations, it reimburses Australian volunteers working with government departments in developing countries. The estimated budget for the entire project in 2017–2018 was AUD 42.6 million (USD 33.5 million), with approximately 950 volunteers in 26 countries. 97% of the volunteers were working in the Indo-pacific region. We could not identify the proportion of these volunteers working within the mining sector.

[Minerals and Energy for Development Alliance](#). Builds on work of [IM4DC](#) and engages with the alumni (IM4DC ceased activities in June 2015) – M4DLink (m4dlink.org) website supported by Australian Aid funds. Their area of focus includes organising study tours and workshops on topics such as ASM and transfer pricing.

2.2. Canada

Canada, like Australia, is positioning itself as the leader in sustainable and transparent mining practices. Canada's development assistance is more diverse than that of Australia and with a stronger project component. The bulk of Canadian funding has gone towards mineral and development projects (76% or CAD 213 million for projects starting in 2013). Figure 5 indicates the segments, related to mineral sector assistance, which Canadian programs have focused on.

Figure 5 Canadian assistance in the mineral sector by category



Source: SNL Metals Consulting (2017)

Canada was one of the founding members of the EITI. The government also contributed over CAD 10 million (USD 8 million) to support the Transparency Trust Fund (operated by the Inter-American Development Bank). The fund is a technical multi-sector fund supporting countries implement natural resource transparency standards in Latin America.

Apart from these projects that have focused exclusively on mining policy and administration improvements, most projects have multiple objectives from SME development, environmental impacts management, vocational and technical training.

Near CAD 37 million (USD 30 million) have been made available for initiatives that contribute to supporting governance and responsible mining practices. This includes the following initiatives:

- Support for responsible business conduct in the extractive sector (2013-2015; CAD 1 million; USD 0.8 million)
- Building Responsible Mineral Supply Chains for Development in Africa (2014–2020; CAD 15.8 million; USD 12.6 million)

11% (CAD 32 million; USD 26 million) of Canada's contributions have been towards projects that support or engage on international codes of conduct in the mining sector. These have included:

- Extractive Industries Transparency Initiative in Tanzania
- Effective Governance of Mining and Gas Impacts in Mozambique
- Sustainable and Inclusive Communities in Latin America
- International Forum on Mining, Minerals, Metals and Sustainable Development (IGF)
- Canada's development assistance focus has mostly been on Latin American countries, followed by Africa. Projects have included the following:

Table 2 Examples of Canada's Official Development Assistance Projects

Region	Program
The Andean regional initiative: Peru, Bolivia & Colombia	Provide governments and communities' access to resources to help identify, plan, and manage social and environmental dimensions of extractive development projects.
Colombia	Strengthening Rural Associations in Areas Affected by Resource Extraction Initiative.
Peru	Improving Environmental Management of Mines & Energy Strengthening Natural Resources Management in Key Regions Prevention of Conflicts Over the Use of Natural Resources.
Ethiopia	Strengthening Ministry of Mines in mining sector in governance and management. Assist the education sector to prepare citizens to benefit from employment opportunities in the extractive sector.
Mozambique	Skills based training for employment in mining and in oil and gas. Effective Governance of Mining and Gas Impacts.
Tanzania	Improving the financial systems within the Tanzania Minerals Audit Agency. Strengthen the management, coordination, and governance of the gas sector energy sector capacity building
Indonesia	Sustainable Development of Artisanal and Small-Scale Gold Mining.
Mongolia	Improve the quality, stability and transparency of Mongolia's mining-related legislation, policies and regulations through the funding of the Program Support Facility (PSF) in Mongolia.

Source: Summarised from Government of Canada [webpage](#) (January, 2018)

2.3. Japan

Japan has been referred to as the 'quiet diplomat'; often acting as a bridge between the East and West in international engagements. Thomas Feeny (JICA UK) describes the Japanese approach as follows¹²:

Its Official Development Assistance (ODA) has in many ways become Tokyo's main foreign policy tool, utilised as a form of investment, a confidence-building measure, a solution for bilateral problems, a manifestation of economic power and global leadership, and as a tool for buying power and influence in various international organisations.

The [Japanese International Cooperation Agency](#) (JICA) is the implementing arm for Official Development Assistance (ODA), for the government of Japan. As such, it carries the primary responsibility to facilitate and carry out assistance based engagements on raw materials on behalf of the government. There are a number of sectors JICA covers including support for health, education, governance, peace-building, gender and environmental management. Japan's financial support for international development is through bilateral assistance (managed by JICA) and through multi-lateral assistance (contributions to the UN and the World Bank).

JICA's funding model is based on an investment from the government of Japan: USD 79.9 billion capital contribution by March 2017. JICA operates as an 'investment fund', using the capital contribution from the government to fund some of its operations, including raising funds through the issuance of bonds in international markets. Grants and ODA for a minority of JICA's spending, with most of JICA funding provided as finance for projects, and receives returns on its investments.

Mining forms a very small part of Japan's ODA and finance programs, most of such work is carried under JOGMEC (discussed in the next chapter).

In the 2009-2021 period, most projects funded by JICA have been in the energy rather than the mining category¹³, with only 3.5% of its total bilateral assistance going to the Industry, Mining and Construction sector in 2015¹⁴. This funding was mostly for training, which included the following (2015-2017):

¹² <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7618.pdf>

- [Training](#) for ASEAN Senior Officials Meeting on Minerals (ASOMM)'s working group on Mineral Database
- [Training](#) on Geological Information Management for Mineral Exploration, Africa
- [Training](#) Metal-Mining Development Administration, global.

Africa appears to be the only region where mineral engagement and development are specifically addressed, although it remains a low priority on the agenda.

Japan's main platform for engagement has been through the Tokyo International Conference on African Development (TICAD), with the sixth conference was held in Kenya in 2016. Through the TICAD platform, Tokyo engages with African heads of state directly, allowing for a shared agreement and prioritisation of development agenda. The [Nairobi Declaration](#) focused on promoting structural economic transformation, addressing health systems and social stability. The mineral sector was included under economic diversification and industrialisation, although it was not signalled out as an area of priority. Mining is mentioned in the context of declining global commodity prices as an emerging challenge. The focus is on funding value addition in the mining sector (through beneficiation) and supporting diversifying economies away from mineral dependence.

In Latin America and the Caribbean, Japanese ODA has focused on supporting democratisation and economic reform as well as environmental issues. Mining does not register on the wider Japan-Latin America agenda. The only connection that could be identified was the funding for infrastructure projects that assist in enhancing the energy efficiency of mining projects. The commodity sector has instead been supported by private sector actors from Japan (Mitsubishi, Mitsui, Marubeni, C. Itoh, and Sojitsu), who own equity in Latin American assets. JICA's assistance to the Latin American region has decreased over time, as more countries reach middle-income status.

JICA's region specific activities and initiatives are outlined in 2016 in Table 3. There were no specific cases where Japan was found to take a major lead in supporting international codes of conduct, other than its funding for multilateral initiatives managed by the UN and the World Bank. However, Japan is more heavily involved in the refined metals production and consumption, relative to mineral production itself. Japan's role within the refined sector is discussed in a future STRADE report on EU's engagement with industrial countries.

Table 3 JICAs official development assistance focus by region (2016)

Region	Focus	¥ Million	EUR Million
Middle East & Europe	Supporting Inclusive Growth for Regional Stability	155,983	1,158
East Asia & Central Asia	Toward Stability and Sustainable Development in a Geopolitically Important Region	66,825	496
South Asia	Contributing to Dynamic Growth in the Region That Serves as the Centre of the Indian Ocean-Rim Economic Region	322,957	2,398
Africa	Toward Transforming the Economic Structure and Building Resilient Societies in Africa	129,821	964
Latin America & the Caribbean	Addressing Global Issues and Economic Infrastructure Development That Supports "Quality Growth"	39,378	292
Southeast Asia & the Pacific	To Contribute to Improved Regional Connectivity, Reduced Disparities, and "Quality Growth"	413,697	3,072

Source: JICA Annual Report (2016)

¹³ https://www.jica.go.jp/project/english/subject/energy/09_1.html

¹⁴ <http://www.oecd.org/dac/financing-sustainable-development/development-finance-data/statistics/resourceflowstodevelopingcountries.htm>

3. Supporting Business and Market Development

Part of the domestic growth agenda focuses on creating a regulated mineral sector environment, where access to geological information, licensing registers, contract negotiations can be conducted with some semblance of certainty. Supporting the improvement of such a business environment assists resource-rich developing countries to create business environments that attract international exploration and mining companies. The better the environment, the more interest will be shown by international companies who operate with adherence to international best practice standards and responsible mining tenants. The creation of such an environment also serves industrial countries in supporting the utilisation of business opportunities for their own firms operating abroad.

International mining companies, while basing major investment decisions primarily on the ore body/asset, consider the risk to their investments from political, legal and fiscal regimes, before making a final commitment. This is where the international ranking of mining jurisdictions, such as the [Fraser Institute's annual survey](#), survey, [ResourceStocks World Risk Survey](#) and the [Mining Journal World Risk Report](#), shape mining investment perceptions. While each survey/ranking covers a host of indicators, these can be summarised by the Fraser Institute's policy factor focus outlined in Box 1. Companies, all ore bodies considered equal, would prefer to operate in more rather than less stable environments. Industrial countries would prefer well-regulated business environments for their international firms to operate.

Objective: The business and market development agenda is to assist resource-rich countries, such that they create enabling environments for international mineral businesses to operate without undue risk.

External & internal drivers: The drivers can be considered 'internal' from the perspective of the third countries seeking to support their firms abroad. This covers strategies to create access to markets as well as enabling rules based business environments for their companies abroad.

The business environment engagements tend to be part of larger bilateral treaties on trade, investment and taxation. More specific to the mining sector, where the 'rules for operations' for companies in their home countries are more stringent than the operating environment in target countries, engagement will often focus on upgrading the latter. For example, Australian overseas development assistance will tend to mirror regions where Australian mining companies are active. The engagement will focus on improving mineral regulations and capacity of mineral authorities. This is meant to facilitate the operation of Australian companies, steadying the business environment in which they operate.

For some resource-rich countries, large-scale mining projects funded by foreign investment can often be the largest investment within the economy. This can also be the cause of disputes and conflicts between the government and the mining companies. Therefore, diplomatic engagement to offer as much protection to companies operating abroad becomes important for industrial countries. As global price levels have receded since 2011, resource-rich country governments have seen an accompanying fall in the revenues generated through royalties and taxes. Given the reliance on mineral revenues, governments have been pushing mining companies for higher tax returns. The extreme case of this was in March 2017, when the Tanzanian government levelled charges of under reporting of gold production against [Acacia Mining](#). The company was served a tax notice of USD 190 billion as a result. At the time of the writing of this report, the two parties remain in negotiations to resolve the dispute. Tanzania

Box 1: Policy indicators assessed by Fraser's survey

1. Administration, interpretation, or enforcement of existing regulations
2. Environmental regulations (stability of regulations, consistency and timeliness of regulatory process, regulations not based on science)
3. Regulatory duplication and inconsistencies (includes federal/provincial, federal/state, inter-departmental overlap, etc.)
4. Legal system (legal processes that are fair, transparent, non-corrupt, timely, efficiently administered, etc.)
5. Taxation regime (includes personal, corporate, payroll, capital, and other taxes, and complexity of tax compliance)
6. Uncertainty concerning disputed land claims and areas to be protected as wilderness, parks, or archaeological sites, etc.
7. Infrastructure (includes access to roads, power availability, etc)
8. Socioeconomic agreements/community development conditions (includes local purchasing or processing requirements, or supplying social infrastructure such as schools or hospitals, etc.)
9. Trade barriers (tariff and non-tariff barriers, restrictions on profit repatriation, currency restrictions, etc.)
10. Political stability

Source: Fraser Institute Annual Survey of Mining Companies 2016

may be an extreme example, but increases in royalties and taxes have been considered recently (although not all have gone ahead) in a number of other countries (Ghana, South Africa, DRC, Western Australia, Brazil).

3.1. International projects from companies based in industrial countries

The basis for projects by industrial country based companies in resource-rich emerging and developing countries can be distinguished under two approaches. First is to pursue exploration and mining activity in diverse regions to ensure global mineral supply does not become overly dependent on single producing countries. This approach does not assume that mineral production will be transferred from host country to home country, i.e. an Australian company producing zinc in Africa, will export that production to Australia. The objective is that overall global markets remain adequately supplied. Australia and Canada, as well as the EU Member States, operate largely on this principle. The vertical integration (where mining, smelting and refining operations are under the same company) is limited within the mining companies listed at the Australian, Toronto and London stock exchanges.

The second approach is a more integrated one, where companies mostly from China and Japan operating smelters and refineries directly link/acquire mineral assets to ensure they have stable supply lines. This does not preclude Chinese and Japanese firms from procuring minerals from the spot/global markets. However, acquisition of assets by these firms displays greater signs of vertical integration relative to Australian and Canadian firms.

The differing approaches tend to reflect the distinction between resource producing and resource dependent third countries. Australia and Canada, with a significant domestic mining sector, look towards engagement in resource-rich countries to support their mineral related companies operating abroad. For China and Japan, which are resource dependent countries, the motivation to operate abroad is partially driven by access to supply. For these countries, global supply security is to ensure production takes place in diverse countries, thereby mitigating regional risk of supply disruptions.

A further distinction to draw is between exploration and mining activity. Of the countries discussed here, Japan is the only government actively engaged in activities that support exploration. China tends to focus on operating projects, with Canada and Australia focused on business environments that can support exploration. While Canada hosts the largest number of exploration companies on the Toronto Stock Exchange, this is from the distribution of industry risk capital rather than policy initiatives. The motivation for exploration companies differ from mining companies, in seeking projects in resource-rich developing countries. The drivers for exploration are discussed in a separate STRADE report (forthcoming).

Figure 6 provides a profile for the geographical presence of operations of non-EU mining companies. This refers to the total projects from exploration and mining companies, head quartered in the countries under review, in 2016. A company is considered Australian, for example, when its headquarters are in Australia. The figure includes all projects, whether they are currently active or inactive. Of the nearly 10,000 projects included in this analysis, Canadian companies account for the largest number of projects (64%), followed by Australia (30%), China (5%) and then Japan (2%).

In terms of regional divide, companies tend to prefer to operate within/near their home territories. Canadian based companies are most active in North America (69%), Australian and Chinese companies in Asia-Pacific; 74% and 89% respectively. Japanese companies also favour Asian-Pacific (62%).

Australia. Australian companies are most active in Asia-Pacific, which includes Australia. The largest external destination is Africa, followed by Latin America.

Canada: The largest number of Canadian companies operate within North America followed by Latin America. Africa is the third largest destination for projects.

China: Data for China should be considered incomplete, as only the companies listed on major stock exchanges are included here. Chinese presence outside of Asia-Pacific is limited and tends to favour the US & Canada. While there are Chinese owned projects in African countries, given the opacity around reporting from State Owned Enterprises, we do not have a clear picture of the extent of such projects in Africa.

Japan: As with China, most Japanese companies are operating in Asia-Pacific, followed by Latin America and the Caribbean and North America.

However, as with most things, the devil is in the detail. A 'project' can include both exploration and production assets, that are covered by the S&P Global Market Intelligence data. Therefore, to

distinguish the nature of operations, we further breakdown the data by the classification of company (

Table 4). Companies are categorised as Junior, Intermediate and Majors, based on the following classification:

Major - A company with adjusted annual nonferrous mining-related revenue of at least \$500 million, which is considered to have the financial strength to develop a major mine on its own.

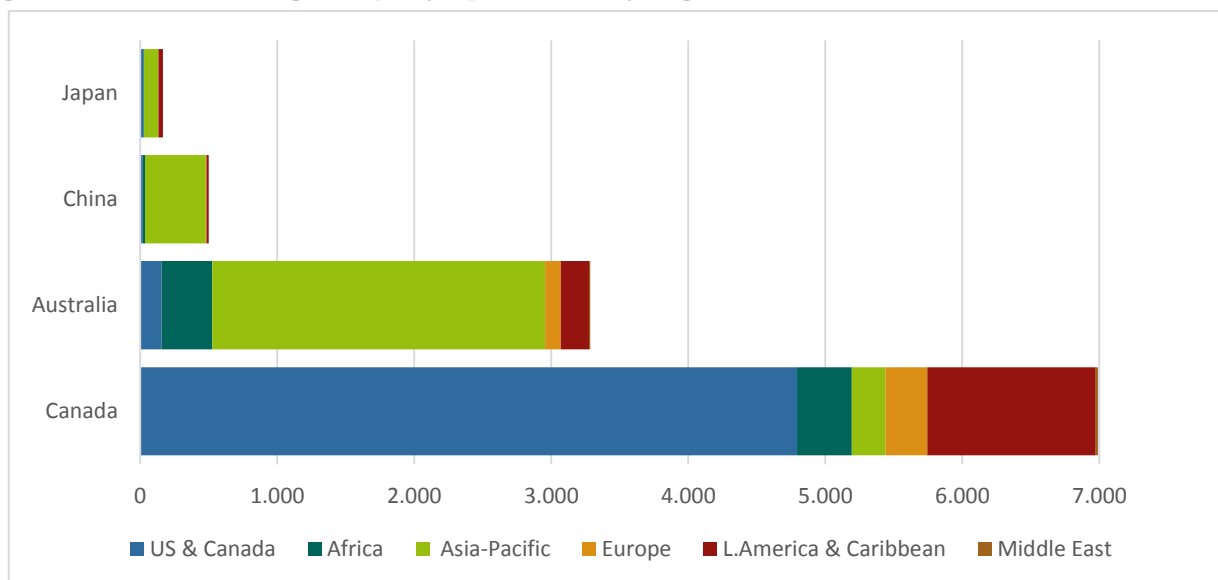
Intermediate - Based primarily on a company's adjusted annual revenue, with at least \$50 million in annual nonferrous revenue but less than the \$500 million major-company threshold.

Junior - This category mainly includes exploration companies, with principal means of funding exploration is through equity financing. Some companies may have limited revenues below the \$50 million intermediate-company threshold and are aspiring producers.

Government - Consists of wholly government-controlled entities operating primarily in the national or provincial/state interest rather than as private entities. To be included, the company must be commercially oriented; S&P generally excludes direct exploration efforts by government-related geological surveys. A few exceptions—such as Chile's state-owned Codelco—have been classified as major, intermediate, or junior companies rather than as government entities because they operate more like private companies than government agencies.

Other Company - Includes all other companies that do not fit the criteria for one of the previous four categories.

Figure 6 non-EU mining company operations by region



Source: S&P Global Market Intelligence as of November 25, 2017

Table 4 Company profile by country of headquarters (no of projects)

Company profile		US & Canada	Africa	Asia-Pacific	Europe	L. America & Caribbean
Major	Australia	6	1	22	-	3
	Canada	95	-	-	8	25
	China	-	2	4	-	-
	Japan	-	-	-	-	-
Intermediate	Australia	2	17	119	1	5
	Canada	159	15	35	19	49
	China	-	-	67	-	3
	Japan	-	-	-	-	-
Junior	Australia	88	252	1351	75	132
	Canada	2018	147	104	148	543
	China	-	-	-	-	-
	Japan	-	-	-	-	-
Other Government	Australia	-	-	-	1	-
	Canada	-	-	-	-	-
	China	1	3	103	5	4
	Japan	14	3	59	1	15

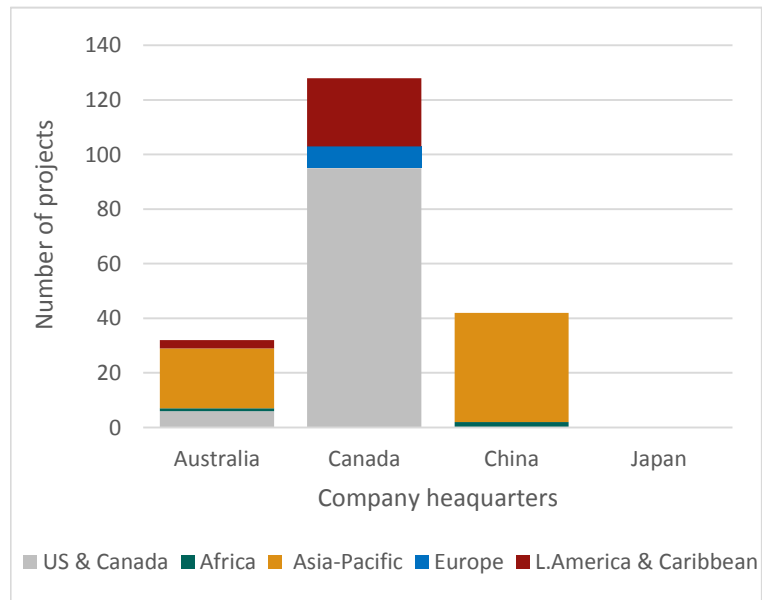
Source: S&P Global Market Intelligence, as of November 25, 2017

3.1.1. Majors

Majors are defined as companies with at least USD 500 million in revenue. Excluding coal producers, there were 135 companies fitting this criteria in 2016. These companies tend to be multiple commodity producers (although there are some iron ore or gold only producers included in the list). Majors would include large companies such as Vale S.A., BHP Billiton Group, Rio Tinto and Corporación Nacional del Cobre (CODECO).

Majors will be involved in both production and exploration and will have multiple assets in various countries. In terms of global supply, these 135 companies account for nearly 30% of global production for minerals (excluding coal). The top 15 companies alone are responsible for 15% of global production.

Figure 7 Projects by company headquarters (Majors)



Source: S&P Global Market Intelligence As of November 25, 2017

The major destination for the projects from the four countries are in the OECD region (Figure 7).

Canada is home to the largest number of Majors in this analysis. While most Canadian Majors have projects within North America (74%), the second most common destination is Latin America (20%). They have a limited presence in Europe (6%).

Australia is the second largest country that is home to Majors, and after Asia-Pacific (69%), these companies have operations in North America (19%) and Latin America (9%). Africa only hosts 3% of these projects.

China has just six Majors headquartered in its jurisdiction, with most of them operating within Asia-Pacific.

Japan does not have any Majors listed in its jurisdiction. This relates to the vertical integration of most Japanese mining and refining companies, and is discussed further below.

Given the size of Majors, these firms tend to have well-functioning government relations departments, and manage most interactions with country governments (both host and home) with limited external assistance required. Most ICMM members are Majors. These firms are also most likely to adhere to international codes of conduct and best practices, and are active on most raw material dialogues within the international community.

3.1.2. Intermediates

Also referred to as Mediums, these companies have revenue shares between USD 50-500 million. Most mining companies fall under this category. Of the 332 companies in this category in 2016, S&P data indicates they account for less than 6% of global value of mineral production (excluding coal). These companies will tend to be single mineral commodity producers, with a limited number of operating assets.

Again, Canada is home to the largest number of Intermediates in our sample, with 57% of the projects from these companies in North America. The next regional destination is Latin America (18%) followed by Africa (13%). 7% of the projects are located in Europe (Figure 8).

Australia based Intermediates tend to operate in Asia-Pacific (83%), followed by Africa (12%).

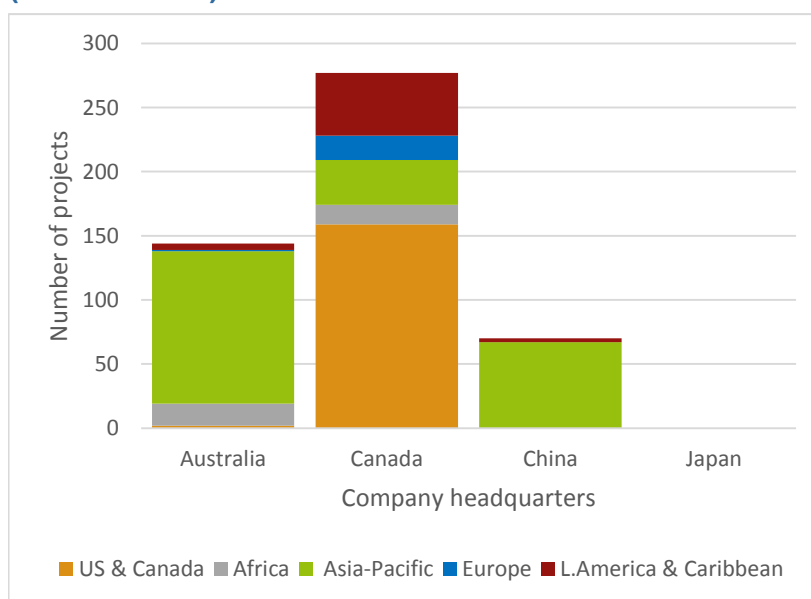
China based Intermediates have an overwhelming majority of their projects in Asia-Pacific.

Similar to Majors, there are no Japanese based Intermediate mining companies, listed in the S&P database.

Intermediates will have a more diverse background in terms of their management, and it is therefore difficult to draw a profile of such firms. They can involve extremely experienced mining engineers and management, as well as those with more limited experience. These companies also have limited internal funding and their ability to comply with voluntary best practice standards can vary. As such, their ability to engage with both host and home governments will also differ, based on the experience of their management team.

These companies do require assistance, particularly in exploring new markets and setting up operations. Host governments, can provide support through financial funding, provision of technical information, market information and other business development schemes. The examples discussed under Chapter 2 are largely applicable to these companies.

Figure 8 Projects by company headquarters (Intermediates)



Source: S&P Global Market Intelligence as of November 25, 2017

3.1.3. Juniors

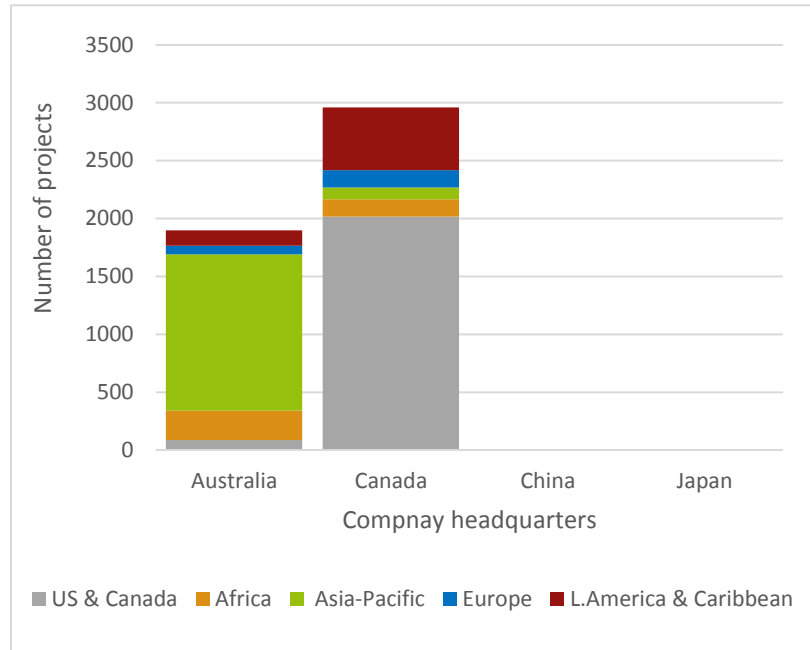
Juniors have reported revenue flows below USD 50 million and are most likely to be exploration companies. These companies comprise a mix of strategies – some may choose to exploit their discoveries and take the project to full mine development while others may choose to sell their finds to other larger mining companies. Juniors play an important role in the mineral supply cycle, as they identify future projects to build the pipeline for both Majors and Intermediates.

Canadian based Juniors, after North America, have the most number of projects in Latin America (18%), followed by Africa and Europe (both 3%).

Australian based Juniors are more diverse, with 71% of projects based in Asia-Pacific, followed by Africa (13%), Latin America (7%) and North America (5%).

S&P did not classify any Chinese or Japanese based firm as a Junior company.

Figure 9 Projects by company headquarters (Juniors)



Source: S&P Global Market Intelligence as of November 25, 2017

3.1.4. Other companies/Government

This category includes companies that are not classified under the other three categories, as well as state owned enterprises. Almost all Japanese companies in our sample fall under the 'other' category. This relates to their integrated business operations; they are not purely mining companies. For example, Mitsubishi Corporation, while it owns a number of operating copper and iron ore projects, is also a refiner and a producer of manufactured goods. As with Majors, the immense financial and management capability of these firms limits the assistance they require in engaging with host governments. Given Japan's industrial strategies, these companies have a strong relationship with their own government.

Most Chinese companies in our sample tend to be government owned, accounting for nearly half of the Chinese based firms included in this analysis. Again, given the size of these firms and their connections with their own governments (regional or central), these Chinese companies tend to benefit from the Belt and Road Initiative, discussed later in this chapter.

The next sections outline the industrial country support to their companies operating abroad. The support is meant to be mutually beneficial to both the home country companies as well as the host country mineral sector business environments.

3.2. Australia

In 2013, Australia's offshore mining investment accounted for 29% of its Foreign Direct Investment stock abroad. In addition to the federal government, state governments such as those of Western Australia and New South Wales, will also provide direct support for their mining sector abroad. Australia's major form of support for its mining sector abroad comes from economic diplomacy. The approach supports the development of an economic environment abroad, such that its companies can compete and flourish in other

countries. The approach is a mixture of support to host countries to improve regulations, as well as assistance to home companies operating abroad.

Economic diplomacy with governments focuses on supporting resource-rich countries through aid for trade programs and also capacity building. Satchwell and Redden, (2016) summarise the key elements of this effort as follows:

- Building institutions for, and governance of the resources sector
- Develop infrastructure to support resources development and economic growth
- Ensure robust fiscal policy and competitiveness measures
- Facilitate local content to stimulate local businesses and jobs
- Spend the financial returns from resources wisely
- Transform resource wealth into broad, inclusive socioeconomic development
- Gain community support for Australian companies and responsible resource development.

Support for Australian companies has moved towards working with independent associations, to pursue business opportunities in resource-rich countries. The [Australian Africa Minerals and Energy Group](#) (AAMEG) is perhaps the most active group.

Established in 2010 and formally incorporated in April 2011, the purpose of the group is "is to be the peak industry organisation, providing support to the Australian minerals and energy industry active in Africa, enhancing the industry's capacity to become a world leader in delivering successful mining outcomes and economic development in Africa." AAMEG's primary stakeholders are Australian companies (exploration, mining, service and equipment suppliers). It does have an Associate Membership category for African Governments.

AAMEG's engagement takes the form of government relations, community relations (social license to operate), and training for improving host government capacity. AAMEG functions as a liaison body, with a focus on communication and engagement. Interestingly, most of AAMEG engagement is with the Australian government and its foreign missions, and while it recognises the importance of African partnerships, it is Australia centric. Some of the actions undertaken by AAMEG include:

1. Investment climate reviews of Ghana and Liberia
2. Advice to Australian companies on legislative change in Tanzania (2017)
3. Collaborative work on Extractive Industries Infectious Diseases Risk Assessment and Management Initiative (IDRAM Initiative) with the Centre on Global Health Security at Chatham House and USAID (2012).
4. Workshops on foreign bribery and corruption, cyber security, personnel security for its member operating in Africa.
5. Coordinates a Security Working Party, with support from Australian Security Intelligence Organisation (ASIO) and Department for Foreign Affairs and Trade (DFAT) to address responses to security concerns for operations in Africa.
6. Produced handbooks/guidelines on
 - Social Aspects Management Handbook (July 2015)
 - Voluntary Principles on Security and Human Rights Implementation Toolkit for Major Project Sites
 - 50 pieces of advice to an official who is engaged in the negotiation of mining contracts (produced by the IM4DC)
 - Social Responsibility in the Mining and Metals Sector in Developing Countries.
7. Guidance for member companies on how to incorporate elements of the Sustainable Development Goals into corporate strategy
8. Workshops on issues relevant to the challenges of operating in Africa, at the Africa Down Under Conference in Perth.

The AAMEG is not directly involved in the establishment of international codes of conduct, however it does support its members in understanding what these codes imply and encourages their support in incorporating such standards. The organisation has focused on the following:

1. OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (ratified by Australia in 1999)
2. Extractives Industry Transparency Initiative (implemented by Australia in May 2016).
3. Voluntary Principles on Security and Human Rights (“VPSHR”).
4. Sustainable Development Goals (“SDGs”)⁹, particularly Goal 17, to “Implement effective and targeted capacity-building in communities within the mine impact area in order to support the national implementation plans for the sustainable development goals”.

3.3. Canada

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 emerging and developing countries. The improvement in general regulations and environment are covered under development assistance programs, discussed in the previous chapter. Here the report outlines the two main strands of Canadian engagement directed at its companies operating abroad.

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 Exchange¹⁵). The Canadian government needs to address a legacy of historical and current incidents occurring around Canadian company operations in developing countries. A 2009 report ([CSR: Movements and Footprints](#)) found Canadian companies to be involved in one in three incidents related to conflicts around mining operations. 60% of incidents around poor community relations involved Canadian firms, 40% of conflicts around environmental contamination or degradation and 45% of the occasions involving unethical and unlawful behaviour.

In its [2017 submission](#) to the UN Committee on the Elimination of Racial Discrimination, a coalition of civil society actors¹⁶ argued that Canadian companies continue to be implicated in human rights violations. These included racially discriminatory environmental damage; harm to health; forced displacement; failure to obtain free prior informed consent of indigenous people and violent and criminal persecution of human rights defenders.

Reflecting these concerns the Canadian government has specifically addressed the Corporate Social Responsibility (CSR) issue facing its companies operating abroad. The Canadian initiative is pursued under two programs: the Canadian Extractive Sector Strategy and the Corporate Social Responsibility (CSR) Strategy, [Doing Business the Canadian Way](#). Ben Chalmers, the Vice President of sustainable development of the Mining Association of Canada comments on the benefits of the two: “They project the Canadian brand abroad and they give a single face to the Canadian mineral industry... The better we are at that, the more foreign countries will want to work with Canadian mining and exploration companies”¹⁷.

The Canadian Extractive Sector Strategy focuses on the key strengths of the Canadian mining sector and uses trade and investment agreements to support its companies abroad. The key elements of the extractive sector strategy include¹⁸:

- Leveraging trade and investment agreements to provide more of the certainty and predictability that Canadian businesses need in order to invest and operate abroad
- Advocating for improved governance and regulatory frameworks abroad and sharing best practices
- Increasing training in Canadian missions abroad to support the extractive sector

¹⁵ <http://mining.ca/resources/mining-facts>

¹⁶ Earthrights international, University of Toronto (International Human Rights Program) and Mining Watch Canada

¹⁷

<http://www.miningandenergy.ca/mines/article/government-launches-new-strategy-to-promote-canadian-mining-abroad/>

¹⁸ http://www.international.gc.ca/trade-agreements-accords-commerciaux/topics-domaines/other-autre/csr-strat-message_rse.aspx?lang=eng

- Expanding stakeholder linkages to ensure the government is responsive to the needs of the extractive sector.

The Enhanced Corporate Social Responsibility (CSR) Strategy, announced in 2014, lays out the expectation from Canadian companies operating abroad, to follow the same values in their host countries. While not legally binding, the strategy is based on assisting Canadian companies to strengthen their CSR practices and provide benefits from their operations to host communities and governments. Relative to the extractive sector strategy, the main tool for the CSR strategy is the use of Canada's diplomatic network. Key elements, amongst others, include:

- Strengthen support and training of Canadian missions abroad to support CSR initiatives and best practices in the extractive sector, particularly in identifying problematic issues before they escalate.
- Missions abroad to have a dedicated CSR Counsellor, who focus on issues specific to the community relations of Canadian extractive firms working in their jurisdictions. This role would also include dispute resolution and mediation where required.
- Canadian companies working in alignment with CSR guidelines to be eligible for enhanced support from the Canadian economic diplomacy. Companies that do not meet CSR best practices will see their government support withdrawn.

In December 2017, the Canadian government announced plans to create an independent office to oversee Canadian company activities in the mining and oil and gas sectors abroad. While few details are available on the exact particulars of this agency, it is purported to have an "advisory and robust investigative mandate," according to a representative¹⁹ for the Canadian Trade Minister. This would make Canada the only country with a government agency that specifically monitors its mining company operations abroad.

3.4. Japan

The [Japan Oil, Gas and Metals National Corporation](#) (JOGMEC) 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. JOGMEC supports the Japanese mining sector abroad through financial, information and technical assistance (see Figure 10). The areas of support include the following.

Directly support private sector exploration. Through Joint Ventures (JV) with the mining authorities in resource-rich countries, as well as private sector firms initial exploration activities. In 2015, JOGMEC conducted JV's in 35 regions of 21 countries, including 8 new countries. Projects that are shown to have potential are transferred to Japanese companies. Uranium projects receive particular attention for funding. In more recent years, JOGMEC has also turned its attention to supporting sea-floor evaluation for sulphides and cobalt-rich ferromanganese crusts.

The agency will fund and implement geological surveys through a 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.

Provide financial assistance to Japanese companies. Provides equity capital and financing for Japanese companies involved in exploration, asset acquisition investments and liability guarantees for development funds. For example, in 2015 ¥3.5 billion (USD 0.54 billion) were provided to Japanese exploration companies in Mexico and Alaska (USA). The assistance is meant to overcome financial challenges in acquiring operating assets and resources for Japanese companies. This is in line with Japan's strategy to be self-sufficient for base metals (copper and zinc) to 80% or greater and strategic rare metals to 50% or greater by

¹⁹ <https://uk.reuters.com/article/us-canada-resources-ombudsman/canada-to-create-overseas-mining-watchdog-early-in-2018-idUKKBN1E700N>

2030. Note the self-sufficiency here refers to metals and not minerals and involves recycling, increasing efficient consumption (including alternative materials development) and strategic inventory systems²⁰.

Diplomatic engagement with resource-rich countries. Through participation in international conferences as well building bilateral relations with resource-rich developing, emerging and industrial countries. In 2015, this included agreements with Kazakhstan, Uzbekistan, Zimbabwe and Ethiopia to for collaboration on surveys and further cooperation. Apart from agreements, JOGMEC also directly funds projects, such as Botswana’s Geological Remote Sensing Centre.

Supporting technological development. JOGMEC, relative to other countries reviewed here, is directly involved in research and development projects on metallurgical technologies. This has included projects on bioleaching and recovery of rare earths through recycling. JOGMEC, through targeted calls for proposals, funds other institutes to carry research in mineral and metal technologies.

Data collection and provision. The Metal Resources Information Centre, established in 1968, collects and distributes information on mineralogy, geology, mineral regulations and other relevant information to Japanese companies. In 2015, this included demand-supply balance, price movements, import-export trends and recycling rates and material flows for 32 mine products. Such studies are available to the industry on JOGMEC’s [webpage](#).

Developing human resource. JOGMEC provides for its staff to lecture and engage with Japanese students and workers to encourage more nationals to join the mineral sector. This is in recognition of the labor shortages in Japan in the sector.

Figure 10 JOGMEC's metals resources development support (2016)

Assisting exploration, development and production of non-ferrous metals & minerals		Preparatory stage & basic exploration	Exploration	Development	Production
Financial assistance	Subsidies for overseas field surveys		→		
	Equity capital and loans for exploration		→		
	Liability guarantee			→	
	Equity capital contribution for asset acquisition			→	
Intelligence assistance	Collection, analysis and offering of information	→			
Technical assistance	Overseas geological survey		→		
	Joint basic exploration scheme		→		
	Technical development/technical support		→		

Source: Summarized from JOGMEC Annual Report (2016)

3.5. China

The Chinese approach to engagement in general, and to raw materials in particular, can be classified as Commercial Diplomacy. Engagement is packaged as a trade, investment, infrastructure and low-cost financing assistance for Chinese firms, often termed as partnerships.

The People's Bank of China, China Development Bank and the Export-Import Bank of China are some of the largest financial institutions providing finance for projects in resource-rich countries. Classified as total official finance, China's assistance was value at USD 354.3 billion over 2000-2014. In comparison USA official finance over the same period was USD 394.6 billion. The sectoral breakdown of this finance is provided in Figure 11.

²⁰ <http://www.japanmetalbulletin.com/?p=5575>

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.

In December 2003, Beijing issued the first White Paper entitled "China's Policy on Mineral Resources", stating that, "The Chinese government encourages domestic enterprises to take part in international cooperation in the sphere of mineral resources, and in exploration, exploitation and utilization of foreign mineral resources." (IOSC 2003) This could be viewed as official launch of China's "Going Out" strategy.

During the 2003-2011 commodity boom, China's main approach was through the 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). This created a packaged model of development, resource diplomacy and promoting its private sector abroad simultaneously. China EXIM Bank started to finance such deals in 2004, with more recently the Chinese Development Bank becoming the main lender.

Under the model, China provided loans to developing countries for large-scale infrastructure projects, with the loan repaid, up to decades later, in commodities. Well received by most African countries, the model received less positive responses from civil society due to the lack of transparency of such deals.

While most critics focused on the access to resources part of the RFI model, others quietly noted that the provision of infrastructure as the underlying aim for such projects. Chinese mineral investments in Africa, remained small, compared to other third countries active in the region. The Chinese drive to provide infrastructure projects related to its need to create foreign opportunities for its domestic firms.

In 2015, China announced its Belt and Road Initiative (BRI) that takes a different approach to the RFI. The central pillar of the BRI is extensive investment into infrastructure and energy projects, across 70 countries (Figure 12).

China's approach to raw material engagement is packaged with larger programs, such as its [Belt and Road Initiative](#) (BRI), unveiled in 2013. The framework for outward investments, with infrastructure at its core, promotes the connectivity of Asia,

Figure 11 China's total official financing, USD billion (2000-2014)

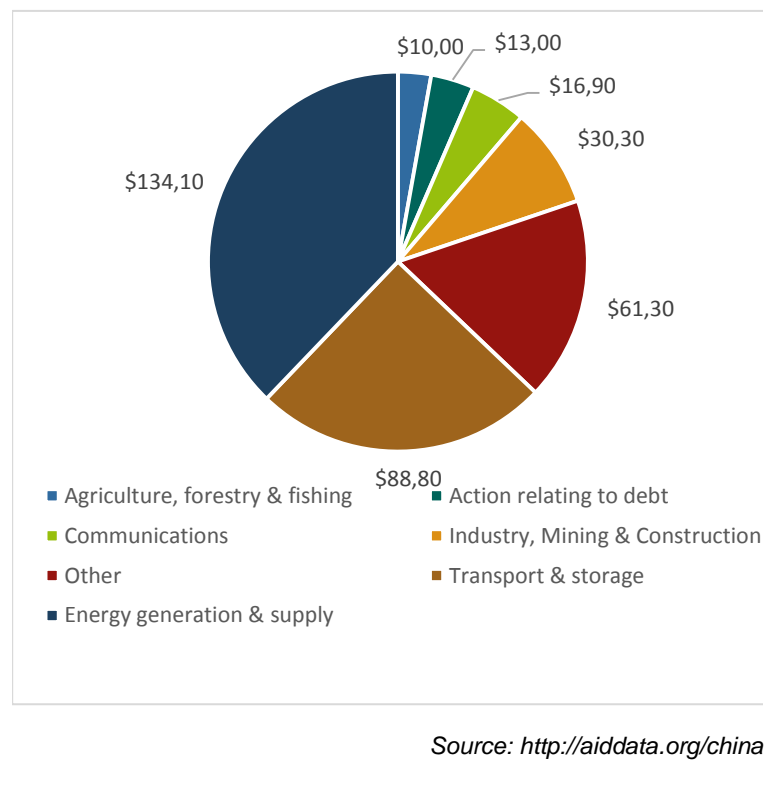
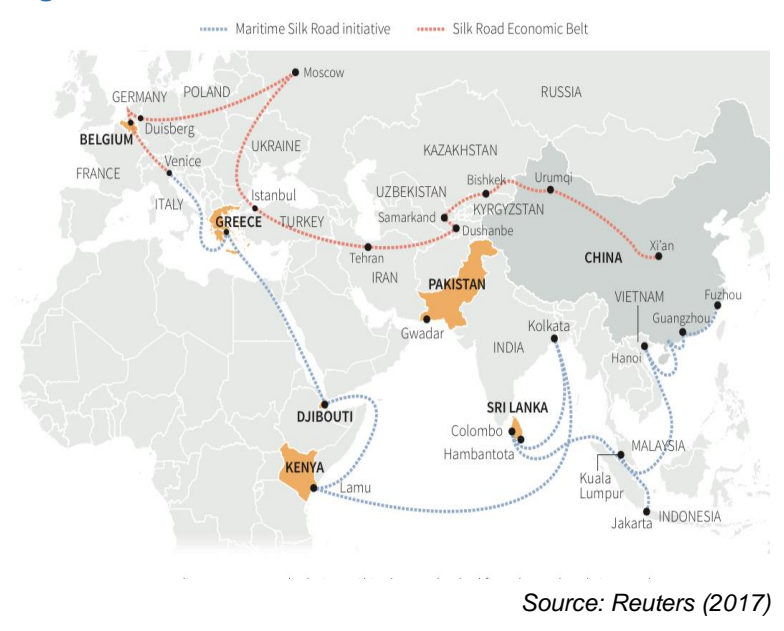


Figure 12 The Silk Road economic belt



Europe and Africa. BRI focuses on 70 countries, and promotes investments in projects for power generation, transport, water and telecommunications. The Chinese state council has urged 'capable firms' to invest in agriculture and high technology manufacturing sectors, while investments in the natural resource sector (mining, oil and gas) are being asked to make 'prudent assessments' before investing²¹. Mineral projects, while not specified within the project headlines, are part of the investments taking place under the initiative.

Compared to the RFI model, where African countries were the main beneficiaries, the BRI is more regionally diverse. In 2017, six mineral resource projects had been identified under the BRI, one each in Australia, Madagascar, Philippines and three in Russia. Southeast Asia is expected to receive investments, particularly in nickel, bauxite, copper and coal.

The BRI should be considered as a set of guiding principles (Figure 13), it directs the priorities for investment, for both public and private sector Chinese companies. The Chinese government has initially committed USD 1 trillion to the project, with estimates suggesting USD 6 trillion will be required to support the project over the next 15 years. China plans to provide USD 4 trillion, the remaining coming from private sectors and commitments from other multilateral development banks (such as the Asian Development Bank).

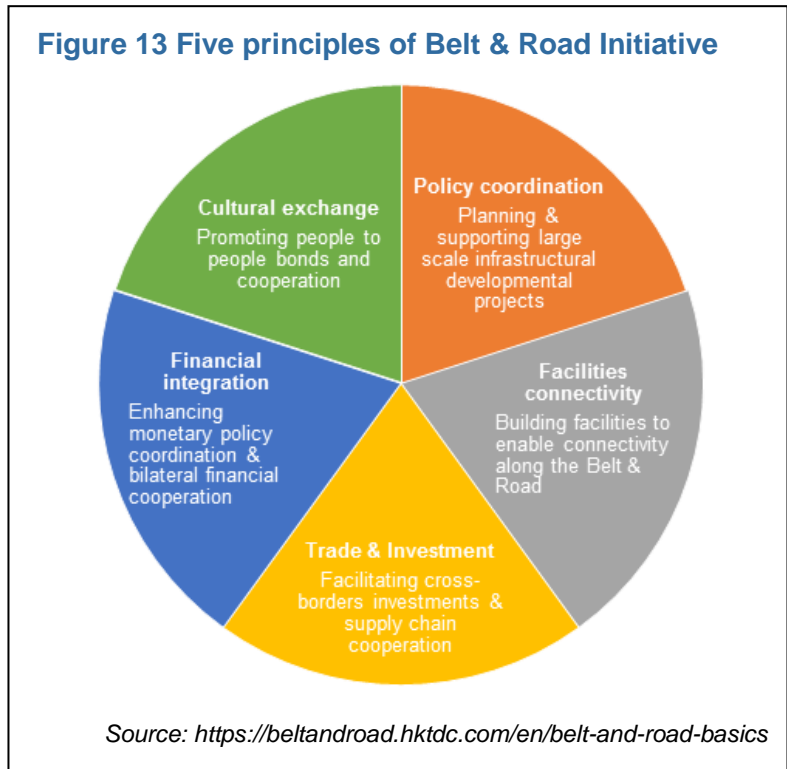
The BRI is both an investment tool as well as an assistance tool. China has traditionally not differentiated between assistance (in terms of grants and aid) and investments in these countries. China considers these different parts of the same engagement.

The BRI is considered as a network rather than a cohesive strategy. This provides the initiative flexibility to adapt to 'win-win' partnerships that can fall under the banner of BRI while in reality they are part of bilateral relationships. As Shepard (2017) notes:²²

The BRI can ultimately be deduced to a series of unconnected but nonetheless related bilateral trade and development deals which China is making either one-on-one or group+1 with countries and political blocs across Asia, Europe, and Africa. There is no overarching structure, no membership protocols, no moralistic brow beatings, no predefined set of standards that BRI participants need to uphold in unison ... Each country or bloc negotiates on their own terms, and deals can be structured in accordance with each set of particular parameters.

China's approach towards international codes of conduct has been to 'listen and learn' and then adapt these to suit its own needs. It is important to remember when most of the international codes of conduct were being put together (early 2000s) China was still emerging on the global mineral scene. Thus its level of engagement was very limited. Post 2012, however, China has been more proactive in the global natural resource scene. China's engagement with the OECD on conflict minerals is perhaps the most illustrative of this. The OECD's joint declaration to establish [due diligence for responsible supply chains](#) of minerals from conflict-afflicted and high risk areas, was initiated in 2010, with the current guidelines in their third edition. In corporation with the OECD, and through an extensive process of consultation with Chinese companies, the [Chinese Due Diligence Guidelines](#) were published in 2015. These guidelines are considerably more stringent

Figure 13 Five principles of Belt & Road Initiative



²¹ This is a result of the perception of many 'bad' assets being purchased by Chinese investors during the commodity boom. This issue is addressed in more detail in a later report.

²² <https://www.forbes.com/sites/wadeshepard/2017/12/20/what-happened-on-chinas-new-silk-road-in-2017/#643286ac72e9>

than the OECD guidelines. The guidelines prioritise gold, tin, tungsten and tantalum and provide a 5-step model for carrying out risk-based supply chain due diligence. The China Chamber of Commerce of Metals, Minerals and Chemical Importers and Exporters (CCCMC) is also expected to compile resource-specific audit protocols to support the guidelines.

China is not a contributor to most international codes of conduct, such as the NRG, IFC, EITI, and apart from one Chinese company (MMG), none are (currently) members of the ICMM. In December 2018, the ICMM and the CCCMC entered into a formal agreement to help promote sustainable development in Chinese companies' overseas mining investments²³.

[President Xi Jinping's recent speech](#) at the 19th party congress in Beijing (October 2017) indicates China is now preparing to take a leadership role on the global political, economic, military and environmental stage. The 'Socialism with Chinese Characteristics' idea outlined in the speech would suggest China will be using what it has learnt in the past 10 years, coupled with its own experiences. While it is too early to suggest what these would look like, there is a strong likelihood that China will respect international codes of conduct (particularly on environment) but adapt and enhance these codes to its circumstances and capacities. Therefore, Chinese engagement with resource-rich countries, particularly around international best practices for the mining sector, will reflect Chinese business approaches.

Having documented the approaches by the four industrial countries that were the subject of this report, we now move to drawing out lessons for the EU for shaping its own raw materials engagement with resource-rich countries.

²³ <https://www.icmm.com/en-gb/news/2017/icmm-signs-mou-with-cccmc>

4. EU and Raw Material Engagements

It is important for the EU to understand the drivers for raw materials engagement over the past two decades and the overarching objectives of such commitments. The relationship between mineral resources and their contribution to development has been and continues to be a complicated one. The 'Resource Curse' literature of the 1990s documented a number of factors that can lead to a negative impact on growth and development for countries that rely heavily on their mineral sectors. While there have been a number of success stories, such as Botswana and Chile, there have also been a number of countries where resources have not only failed to deliver on development, but have also contributed to violent conflict.

At the start of the 2003 commodity price boom, there was a renewed commitment by both the industrial countries as well as the emerging and developing countries to make the most of commodities. The World Bank attempted to define the link between minerals and sustainable development (Figure 2). Funding and projects from a host of international development actors were directed to support resource-rich countries to enhance the contribution of minerals to their development. From improved regulations and legislation, revenue transparency and contract negotiations, improved capacity and skill building and economic linkages to the economy were targeted. Multilateral institutions, such as the World Bank, EITI and the African Development Bank were involved, as were individual country government agencies such as JICA, AusAid, GIZ and UKAID.

By 2017, when the resource boom has retreated to more stable price levels, more than a decade of engagements have been completed between the industrial and resource-rich countries. The achievements of these engagements differ by issue and by country. For example, progress has been achieved in preparing regulations for minerals that fuel conflict; the importance of human rights, particularly of indigenous communities, have been recognized through the Free, Prior and Informed Consent requirements for mineral investments. STRADE's Policy Brief ([01/2017](#)) speaks to the role and responsibilities of industrial countries for positively influencing the environmental and social conditions of raw materials production in resource-rich countries. Suffice to say, the issues facing mineral consumers and producers are now clearly articulated and efforts are underway to not only mitigate the negative aspects of the sector but also work towards net positive results.

In the background to government and civil society's efforts are the exploration and mining company operations. These companies have increasingly accepted the importance of their impact on local communities and national economies. However, all issues are not yet addressed and consensus still needs to be achieved on a number of matters. New issues also arise on the global agenda as the global mineral community (governments, companies and civil society) continues to evolve.

It should be remembered that, at the end of the day, exploration and mining companies are business operators. Therefore their business interests require their governments to assist them in capitalizing opportunities abroad, in a manner that allows them to meet host and home country regulations. The majority of exploration and mining companies are listed on stock exchanges in Australia, Canada and the UK and USA as well as having their headquarters in these countries.

4.1. Summary of country approaches

In Chapter 1, the report documented the underlying assumption for transforming minerals into development. Regional priorities for resource-rich countries may differ, but the aim remains the same. Chapter 2 documented the engagements undertaken by the three of the four countries under review in relation to supporting governance. The resource exporting countries (Australia and Canada) were more active in this sphere than the resource dependent countries (China and Japan). Australia was further distinguished from Canada, where the former has increasingly moved to funding of other international initiatives (EITI and NRGi for example) to assist resource-rich countries. Canada, while maintaining a strong portfolio of direct project assistance for mineral projects, also provides funding for the wider development agenda. Japan's presence in this area has been fairly limited, and China is noticeable by its absence.

In Chapter 3, the report started with the documentation of the nature of exploration and mining companies (headquartered in the four countries) operations in resource-rich regions. The profile of the mining company (Major or Junior) allows us to understand the nature of engagement, from the home country's perspective. A government will seek to support its companies operating abroad. Depending on the nature of the company, this support will vary. For example, Majors have strong internal capacities and do not require much

assistance in engaging with host governments. Intermediates and Juniors, with more limited resources and capacity, require such assistance. All three will benefit from better-governed and regulated business environments in host countries, but this will be more beneficial for the latter two. Better regulated environments reduce business costs and increase the ability of smaller firms to meet international best practice standards, as these costs are not internalized to the business.

Documenting the engagements between non-EU and resource-rich countries indicated, again, the diverse approaches from the resource exporting and resource dependent countries. Australia, to a large extent, has outsourced such engagements to representatives of the Australian exploration and mining companies. These associations prioritise their efforts to meet the needs of their members. Canada, has focused on the reputational risk of its mining companies abroad and has a strong focus on CSR based policies.

The resource dependent countries tend to focus on the business and technical aspects. Japan's approach is heavily focused on financial and technical support that can directly aid its companies in accessing assets abroad. Such assistance to developing countries is often accompanied by a caveat; Japanese companies will be first to have access to any data generated as well as the first right of refusal on projects that may result from Japanese programs.

China, under its Belt and Road Initiative, is also using key investments in infrastructure and energy projects to open up regions for mineral investments. In the case of China, 'prudent' investment is an important consideration. The National Development and Reform Commission of China has been tasked to provide [guidance to its companies investing overseas](#) to prevent 'vicious' competition and corruption. Advice is also being provided on security risks for operations abroad. The Chinese Cabinet, in 2017, also issued guidelines for foreign investment, with the aim of supporting 'capable firms' and retaining the right to restrict or ban deals in certain sectors. These measures can be linked to a general increase in controlling outbound capital in China, as well as seeking to decrease more risky deals overseas, which can collapse and be damaging for China's image abroad.

For both Japan and China, the link between acquiring assets that feed their smelter/refineries is an important consideration. This is also shown in Table 4, where China and Japan are more likely to have Major/Intermediate companies or State Owned/Other companies. Neither country plays host to a significant number of Juniors.

One issue that was not addressed in this report was the link between secondary industrialisation and raw materials. Often discussed under forward or backward linkages, the premise that mining operations can give rise to other industry and services sectors germinating in local economies is an important link in the raw materials and development chain. While Japan has taken note of this link, The Nairobi Declaration makes a specific mention; Australia and Canada have not specified linkages as a priority. It can be implicitly inferred in China's Belt and Road Initiative. With its plans for infrastructure and energy projects, there can be elements of industrial linkages under this strategy. However, as the Resources for Infrastructure model experience has indicated, Chinese firms execute Chinese funded projects. These firms utilise Chinese finance, out-sourcing inputs to other Chinese companies and employ Chinese labour. Linkages did not emerge through the RFI model, and it remains unlikely that they will emerge through the BRI.

4.2. Shaping EU raw materials strategy in the future

Overall, two strands of engagement appear from the analysis in this report. The first focuses on the wider governance support agenda, to support resource-rich countries better manage their natural resources. Increasingly, supporting international initiatives are being funded as opposed to bilateral projects. The second strand provides direct support from home country governments to their companies operating abroad. A previous STRADE report ([02/2017](#)) on the EU's approach to engagements with resource-rich countries noted that the EU lags behind other industrialised countries in terms of spend and number of engagements undertaken with resource-rich countries. The analysis in this report shows that there are a number of avenues for the EU to 'catch-up' with other industrial countries. Note these recommendations are aimed at the EU level and not at the member state level. A number of the member states (particularly Germany, France, Sweden and the UK) are active members of the international community assisting resource-rich countries in galvanising their mineral sectors for development.

Moving from bilateral to multilateral initiatives. As noted in the case of Australia, the government has moved from funding bilateral projects to multilateral initiatives managed by international financial institutions. These include funds managed by the World Bank (Extractives Global Programmatic Support Multi-donor

Trust Fund) and the IMF (Topical Trust Fund on Managing Natural Resource Wealth). The advantage of financing such funds is that it allows a coherent assistance strategy to be operated by one institution and guards against projects that replicate the same efforts from other donors. It also carries the added advantage of being managed by experienced professionals in the mineral and development sector, without requiring the EU to develop a full cadre of such professionals in-house. Such funds have a mix of short and long-term assistance programs that can address the immediate and continuing needs of resource-rich countries.

Support international institutions. As noted in the country case studies, Australia and Canada both provide funding for global initiatives such as the EITI, NRGI and the IGF. Again, while individual member states may provide funding, none was documented for the EU. These institutions serve an important purpose – building on a partnership approach through discussion, they increase the uptake of and the monitoring of international best practices in the mining sector. While the focus of these institutions is mainly on revenue and finances, they are increasingly expanding their scope to include other socio-environmental challenges in the resource sector.

These conduits can support governance and regulatory reform to allow resource-rich country governments to effectively monitor and check compliance of companies working under their jurisdiction. This can also aid EU member states to monitor the activities of their companies abroad. Through international development assistance, the improvement of host country business environments will be of benefit to all. Such assistance would include technical support in drafting regulations as well as providing training and capacity building within host government institutions.

Supporting overseas company operations. The Australian and Japanese overseas support for company operations provides two distinct approaches. The Australian approach is more passive, with support provided by funding mining associations and through diplomatic engagement. The Japanese approach is much more active, with direct funding and joint venture opportunities created through JOGMEC.

EU assistance can provide support for its own companies operating abroad for incorporating sustainable mining practices, particularly funding programs that support companies in working in jurisdictions with lax and un-clear regulations. The basic premise would be to a) provide support and training on responsible mining practices while operating abroad (both for companies as well as diplomatic staff and b) to provide mechanisms and processes to address local grievances and dispute mediation, where their company operations lead to possible conflict. This is an area where the EU can take the initiative of providing training for its firms that are likely to operate in the mining sector abroad. Such activities can also be planned in conjunction with Australian, Canadian and other interested governments, to provide a common knowledge base and best practice guidelines for companies. Efforts such as the Australian support for the [Australian Africa Minerals and Energy Group](#) (AAMEG) could be replicated at the EU level.

Monitoring overseas company operations. Canada has taken a lead in establishing protocols for monitoring their company behaviour abroad. While the implementation of this approach is not without its flaws, it addresses an important area of contention between resource-rich developing countries and industrial countries. The STRADE [Policy Brief 06/2017](#) outlined some areas of consideration for the EU. These included:

International human rights treaties: Implement measures to ensure that company operations abroad are in accordance with international human rights treaties to which they are subject, in both the host and home countries.

Access to justice and complaint mechanisms: Create an effective mechanism where both European companies and local communities have access to EU diplomatic staff to report and register possible conflicts rising from mining operations. This should also include training for diplomatic staff to recognise and mediate on such conflicts. These two issues are discussed in more detail in STRADE's policy brief on Holding international businesses responsible (forthcoming).

Data and evidence-based strategy: Before embarking on devising a promotional strategy, develop a comprehensive data set on the nature and level of company operations abroad. This would include documenting exports and investments, the regional focus and the profile of the European companies that operate abroad.

Supplement economic diplomacy with cultural diplomacy: While trade and investment agreements become the main conduit of promoting business abroad, emphasis should also be laid on promoting cultural diplomacy. This would focus on gaining greater insight on how developing a cultural knowledge base that includes languages, history and national philosophies, that all inform the business environment of host countries.

Addressing linkages. Poorly addressed by all countries covered in this report is the issue of linkages. While there are individual projects such as BGR's Mining Linkages in [Southern](#) and [West Africa](#), and Canada's funding for the [Engineers without Borders](#), the research did not find any substantial projects that meaningfully addresses the industrialisation and minerals issue. Often linkages are addressed under poverty reduction strategies that focus on subsistence income and small enterprise support. Efforts to generate meaningful, linkages in the medium to high technology equipment and services, or those that consider smelting and refining capacity are not addressed by third countries or the EU. The promotion of such linkages are a core requirement for resource-rich developing countries (see STRADE Policy Brief on Africa and EU Renewing Partnerships). The topic, as an area of collaboration for the EU and industrial countries, will be covered in a separate STRADE report. It is worth mentioning here that linkages have escaped a meaningful, high priority strategy in the engagement between industrial and resource-rich developing countries.

4.3. Conclusion

Meeting the supply needs of the EU (a global sustainable supply of minerals) need to take into account the development needs of supplying countries. Such an approach points to the EU shaping its future policy on engagement with non-EU raw material producers around two major themes. First, maintaining open, undistorted and equitable markets so that the EU's economic efficiency and competitiveness are preserved. Second, engaging with developing country partners in a manner that addresses their natural resource agenda as well. This may well require a rethink of EU support to its basic mineral processing industries originating from their colonial past.

For the EU to play an effective and credible role in the mineral and development agenda, and engage constructively with specialists in member state and in mineral host countries, it would need to develop within it a cadre of expertise on the mineral sector and on associated industries. **Resource diplomacy** as practised by Australia and Canada is commonly conducted by those with close familiarity with the resources sector (for example, those who have worked in mining or trade ministries or in related research organisations) and supported by those actively involved in it. This diplomacy effort can also include monitoring and addressing complaints arising from European operations abroad, similar to the Canadian approach.

The EU can play an **important role in institutional capacity-building** in raw material producing countries. Such capacity-building covers such traditional institutional support as that for ministries of mines, for geological surveys, for the framing and implementation of mining law, and for the administration and trade. But it can also extend to cover a broader range of objectives including support for environmental regulation and schemes for social sustainability. The EU already has programmes which address some aspects of capacity building on a wider country/sectoral level, in particular through the European Development Fund.

One of the matters that dialogue with producing countries would reveal is how successful these efforts are in meeting their objectives and how they might be refined and developed in future. It might, for example, consider the greater use of scholarships to enable young and mid-career government officials to broaden their knowledge and deepen their skill sets. Or it might consider direct support for regional sector development organisations such as the Africa Union's African Minerals Development Centre (AMDC).

Dialogue might also point to other ways in which the EU might deepen its engagement with supplying countries. It might reveal information about the effectiveness and popularity (or otherwise) of China's 'activist' role to promoting resource development through infrastructure-for-resource deals, and whether there are any useful lessons from this policy for the EU. Similarly, it might reveal something of the perceived benefits of Japan's (JOGMEC's) support for geological surveys and R&D, a scheme which, on the face of it, may be closer to what the EU might practically consider undertaking than what China is doing.

The conclusions for the EU from an analysis of its own engagement and that of other industrial countries is clear. The EU needs to take into account the existing instruments available to progress the inclusive growth agenda. It needs to consider efforts already undertaken by others and consider financing such efforts. This would include funds managed by the World Bank, the IMF and the UN. In other areas international leadership is absent, particularly in holding companies to account for their actions in developing countries, assisting home based companies in acquiring the skills for responsible mining practices and in meaningfully addressing the linkages and industrialisation agenda. The EU can provide the much needed consensus and direction here.

List of References

- Auty R.M. (1993). *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. Routledge, London.
- Auty, R.M. (2001). 'The Political Economy of Resource-driven Growth', *European Economic Review*, 45(4), 839-846.
- Gelb, A. (1988). *Oil Windfalls: Blessing or Curse?* New York: Oxford University.
- ICMM (2016). *Role of Mining in National Economies: third edition*. ICMM. London
- Sachs, J.D., Warner, A.M. (1995). Revised 1997, 1999. *Natural resource abundance and economic growth*. National Bureau of Economic Research Working paper No. 5398, Cambridge, MA.
- Sachs, J.D., Warner, A.M. (1999). *The Big Push, Natural Resource Booms and Growth*. *Journal of Development Economics* 59, 43-76.
- Sachs, J.D., Warner, A.M., (2001). *The Curse of Natural Resources* *European Economic Review* 45. 827-83
- Satchwell, I., Redden J.,(2016). *Redefining Australian mining: Understanding the new global footprint*. International Mining for Development Centre. University of Queensland. Brisbane.