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Increasing Domestic Procurement by the Mining Sector in Central Asia

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Increasing Domestic Procurement by the Mining Industry in Central Asia



May 2014

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1. Introduction

The governments of Kazakhstan, Kyrgyzstan and Tajikistan share a common goal of using the mining sector as an economic catalyst for their respective industrialisation processes. They also share the same determining factors in capturing benefits of the mining sector and translating them into a broader socio-economic development:

- Fiscal linkages, by generating economic development through revenues collected from the mining sector;
- Consumption linkages, by providing a stimulus to economic development as local workers and businesses spent their mining sector incomes in the national economy; and
- Production linkages, by supplying inputs into the mining sector (backward linkages) and by processing commodities (forward linkages).

This study has focused on the third factor, specifically, the creation of local benefits through supplier linkages. The World Bank commissioned a 'pilot' study to inform the nature and scale of potential support to the three Central Asian countries, with the goal of mining-related domestic procurement serving as an instrument to increase employment and industrialisation.

This document presents on the findings of the study, undertaken by Community Insights Group during the period May to July 2013. The report starts with an overview of current global trends with respect to domestic procurement by mining operations. Sections 3-5 describe the situation in Kazakhstan, Kyrgyzstan and Tajikistan with regard to company legal obligations and practices, and government programs and capacities to support domestic SMEs supplying the mining industry. The situation analysis is followed by a summary of case studies (Section 6) undertaken with mining operations to determine their current procurement needs, current local procurement efforts, and barriers to increasing procurement. The case studies also included the perspective of local suppliers and potential local suppliers. The report closes with a set of recommendations for World Bank consideration, to guide future interventions.

2. Approach

The approach to the pilot study involved a mix of desktop review, stakeholder engagement and case study research methods.

Desk Study

An overview of global trends in domestic procurement within the mining sector was developed based on desktop review of recent studies and publications provided, and academic and applied experience of our team members in developing and developed markets. The resultant framework guided data collection and analysis of trends in the contexts of Kazakhstan, Kyrgyzstan and Tajikistan.

The global scan of policy and practice and 'lessons learnt' drew, to a large extent, on a recent publication by members of the project team and commissioned by Revenue Watch Institute (Esteves et al. 2013) and covered topics such as:

- Conceptualising 'domestic procurement': range of definitions and scope
- Domestic procurement in the context of total mining contributions to host nations and communities
- Overview of trends in government policies and legal instruments
- Trends in mining industry initiatives
- Developing multi-stakeholder partnerships
- Aligning timeframes for mine development, domestic procurement development and local economic development
- Partnerships drawing on comparative advantages of different stakeholders
- Mechanisms for monitoring and transparency

The review served to guide the design of an analytical framework for the study. Key trends were evaluated in the context of Kazakhstan, Kyrgyzstan and Tajikistan. The social and economic benefits, either realised or potential, were identified across the three target countries. Specific challenges affecting the success of domestic procurement policies and strategies were also identified, drawing on themes such as the presence of strong national level industry development policy, the ease of doing business, volatility in commodity prices, long term economic booms and busts, and unpredictability and uncertainty of revenues of SME suppliers. These are only a few examples of the wide ranging issues that can impact on successful domestic procurement outcomes.

In examining the current situation in the target countries, we considered what opportunities might exist for regional or cross-border cooperation for increasing domestic procurement. Likewise, we examined if particular emphasis is being placed on supporting gender specific programs, either stemming from mining company activities, or from SMEs working in mining supply chains.

The information collected during this phase helped identify case study data collection tools to ensure they were relevant and appropriate to the interviewees.

Stakeholder Engagement

For each country, a sample of interviewees was selected so as to broadly represent the four sectors: Private Sector, Government, Civil Society Organisations, and Donors. We worked closely with the World Bank in Washington DC and in the countries to identify such stakeholders and initiate contacts. (A list of stakeholders interviewed is provided in *Appendix 2, Stakeholders Consulted*.)

Interviews were conducted using a semi-structured, standardised format to ensure consistency and comparability and to allow for flexibility in the types of questions relevant to different groups of stakeholders. (See Appendices 3-4, Key Informant Interview Questionnaires). We also facilitated small group discussions on (1) barriers and enablers for domestic supplier development, (2) drivers and priorities of stakeholders in participating in domestic procurement initiatives, (3) ideas for practical and innovative interventions, and (4) indicators of success.

Case Studies

The mining company case study research involved representatives of the following functions: Contracts and Procurement, Government Relations and Community Relations, as well as a representative of the Government Shareholder. Semi-structured interviews were conducted using a questionnaire (see Appendix 3) to collect and analyse procurement spend by category of goods and services procured by industry.

The case studies included the following components:

- Demand analysis
- Mapping of company procurement practices for domestic and local suppliers
- Mapping of regulatory and contractual obligations affecting domestic procurement
- Interviews amongst a sample of local businesses in proximity to the mine

Reporting findings and developing recommendations

Findings have been presented by key factors which contribute to increasing domestic procurement, as identified in the review of global trends. Recommendations are also proposed for consideration by the World Bank. These recommendations include the type of intervention, e.g. further study, baseline survey, capacity building, new project, new activity within existing World Bank programs, as well as potential partnership models.

3. Global Trend Review

This section provides an overview of various policies and practices currently adopted by governments and industry to realise the benefits of domestic procurement in mining sectors. It should be noted that there appears to be a marked absence of analysis of the effectiveness of domestic procurement policies applied to date, and which type of policy and legal instrument is more effective in what context. The literature that exists on the topic, which is dominated by case studies of 'good' industry practice and discussions of potential pitfalls, is also summarised in this section.

3.1 Framing Domestic Procurement: definitions and scope

Policies designed to promote domestic procurement aim at extending or expanding the benefits of mining activities to the national economy. As such, they attempt to give local stakeholders greater access to economic opportunities related to participation in supply chains and the provision of related support services. This is enabled through mechanisms such as, but not limited to, targets for local suppliers, preference schemes for local businesses, industry or greater access to finance for local businesses.

This section frames the perspective applied in this study, and explains the use of certain terminology and assumptions.

Definitions of domestic procurement

Throughout this document, the term 'domestic' or 'local' refers to 'the national level'. The term 'community' is used to refer to the subnational level, specifically those host communities or regions which are directly impacted by mining activities

The issue of what constitutes 'domestic procurement' is the subject of different interpretations. In different contexts, a company may be deemed domestic if it demonstrates any of the following characteristics (Paul and Pierre, 2010):

- domestic registration legal entity registered under national law
- domestic ownership a certain percentage (for example 50% or more) of the company owned by citizens of the country or by existing domestically owned and registered entities
- domestic value added –a specified percentage of goods/services is produced within the country
- joint venture between a foreign and a domestic company the domestic company owns a specified minimum percentage of a partnership with a foreign company

Contemporary approaches to domestic procurement practice provide examples of where blind adherence to definitions of 'domestic' or 'local' can lead to undesirable consequences. How definitions link back to public policy objectives is important, whether enhanced local industrial capacity, broad-based economic development or increased local employment. A company that maintains a local branch office which is simply a conduit for bringing in goods and services from outside the country may not realise the desired policy objective. On the other hand, a foreign-owned firm entering a joint venture, consortium or taking ownership positions in local firms could make an important contribution to local economic capital particularly if profits are reinvested locally and not repatriated.

Contemporary domestic procurement policies in the mining activities vary widely in scope and level or type of regulation applied. The level of complexity and uncertainty attached to different interventions varies with the number of stakeholders expected to benefit from the intervention; the initial state of the local economy relative to expected outcomes; the alignment of domestic supplier interventions with other industrial and developmental policy interventions; and the expectations gap, being what benefits can be generated from local content strategies versus the desired outcomes by local communities.

Definition of linkages adopted by this study

The relationships connecting a mining industry with the producer firms in its supply chain are often referred to as upstream linkages. These linkages include interactions amongst producer firms, manufacturers, input providers, agents, distributors and providers of services. The extent of local economic diversification also depends on linkage development between the first level of suppliers supporting the mine directly (Tier 1s) and suppliers supporting them. As each of these suppliers grows, its dependence on other supplier firms also grows. The multiplier effect increases with each additional linkage (UNECA 2011).

The diagram below shows how linkages arise at each step of the value chain.

Fig. 1. Opportunities for procurement along the mining value chain (UNECA 2011)

	Upstream inputs				
Consulting services (surveying, drilling, mine design, bulk earthworks, etc.) Specialised equipment Raw materials Utilities Finance	Run-of-mine ore Consulting services Specialised equipment Raw materials Utilities Labour	Concentrate Consulting services Specialised equipment Raw materials Utilities Labour	Refined product Consulting services Specialised equipment Raw materials Utilities Labour	Semi-fabricated product Consulting services Specialised equipment Raw materials Utilities Labour	



Scope of domestic procurement at the national vs local level

One approach to domestic procurement policies is to focus on the national level. Another approach (sometimes referred to as 'local-local', 'localised', or 'community' content) is to focus on the smallest administrative unit, or combination of units, where the natural resource extraction projects take place, be it the village, the town or the municipality. There are two spatial dimensions to consider

The first spatial dimension is one of natural resource extraction activities. Although the actual extraction of resources is fixed in space, being entirely dependent on the actual location of the resource, a large part of the rest of the value chain activities is unattached and flexible. In fact, the actual extraction process, as a highly capital intensive process, may not actually make use of local resources other than land, water, power and public infrastructure such as roads, rail or port facilities. Mining companies operate in highly integrated global value chains (GVCs), in which the local economies do not necessarily participate. This is partly explained by the existence of higher scale economies in the production of inputs in other locations, concentration of ownership along the chain, the level of risk and uncertainty and lack of specialised knowledge and capital in the local economy.

The second spatial dimension to consider is the distribution of economic activity within the country in question. Agglomerative forces at work make population and economic activity concentrated across space. New businesses are drawn to dense places because of the availability of inputs, services, specialised labor and customers. For instance, for the case of Ghana, Bloch and Owusu (2011) report that the large majority of the firms making up the mining inputs cluster are concentrated in the Accra Metropolitan Area and in the adjoining metropolitan area of Tema, where they are in close proximity to the headquarters of the

producing mining companies. This implies that even for activities taking place within the same country, there is a significant effect of distance. A similar phenomenon has been observed in Peru by Nava (2011).

The implication of this is that because of the concentration of economic activity in selected places, the bulk of the creation of new businesses derived from mining linkages may entirely bypass the local-local, or even the regional economy. For suppliers that could benefit from supply chain linkages with mining companies, the only way to operate may be by locating in an already dense location, implying that the suppliers have to incur transportation costs, which are often prohibitive for small producers in a country with poor infrastructure.

Firms can exploit their unique advantage of being at close proximity to the mining project site by being part of larger competitive undertakings happening at the regional and national levels, such as the creation of industrial parks, clusters and growth poles, or building technological capacities and shaping governance for the upgrading of local businesses in global value chains (Fessahaie 2011).

With this perspective, the role of stakeholders at the subnational level is to work actively in the design of such projects to ensure they maximise the benefits of mining activities for the nearby population. Policy makers can attempt to stimulate economic development through domestic procurement at the subnational level by identifying key sectors with higher-than-average backward and forward linkages compared with other sectors in a subnational region, and the highest sectors in terms of mining industry multipliers. Local economies will grow more rapidly if those sectors are encouraged to grow and the mining companies are encouraged to focus their domestic supplier efforts with companies within those sectors (Esteves and Ivanova 2013).

3.2 Domestic procurement in the context of total mining industry contributions to host nations

In broad and simple terms, governments have two sets of (complementary) instruments open to them in ensuring mining industry contributes to the expansion of the national industrial base.

- Royalty and tax revenue maximisation: As mining industry profits become part of the government's tax base tax revenues available to government are maximised. This is expected to provide the government additional revenue to invest in infrastructure and other initiatives that can support the development and expansion of the industrial base. This industrial economic activity adds broader value to the economy through employment, investment and additional tax revenue for the government. The benefits are intended to flow to other sectors of the economy and contribute to greater national prosperity. The benefits from this instrument are realisable in a longer term horizon.
- Local content maximisation: With this strategy, relatively higher priority is given to the employment of locals and sourcing from locally-based firms in the short term. The host government requires the share of national content to be greater than would have resulted from the procurement of goods and services in an open market with no interventions of any sort, such as training programs, increased access to finance, etc. The aim of imposing 'preferential' measures, such as requiring a price premium for domestic suppliers when evaluating tenders (as is the case in Kazakhstan), is to encourage local workforces and businesses to work with leading international mining firms and their large contractors, and benefit from training and transfer of technology.

For governments, a balance between the two strategies requires that industrial development is stimulated through local content requirements, while mining companies are appropriately taxed to provide the financial resources for the government to support industry development initiatives. In seeking the point of balance, trade-offs are sometimes made in confidential agreements with companies regarding royalties, taxes and their commitment to domestic procurement targets. Such trade-offs may include changing the mix and/or timing of royalties

and taxes in exchange for the mining industry's financial support for the development of the local private sector.

A strategic approach to domestic procurement has realistic targets that contribute to lasting benefits. Targets that are beyond the existing capacity of local industry or the absorptive capacity of particular assets may create market inefficiencies.

There are further unintended consequences. Unethical behaviours can lead to community discontent. Some examples include domestic procurement interventions being closely aligned with public officials' or investors' other local businesses; targets resulting in selection of contractors unable to meet prequalification without falsifying capabilities; extortion of fees to be part of a tender list; authorisation of single/sole sourcing without appropriate governance arrangements; bid rigging between contractors to increase prices; or bribery of officials to provide certification.

Setting inappropriate targets for domestic procurement can encourage perverse behaviour, presenting governance risks. One example of this is 'fronting' where companies are established with the prescribed local ownership or address, but the decision-making and benefits are held by individuals other than those who are not targeted beneficiaries of the local procurement policy (Esteves and Barclay, 2011). Nepotism and corruption can be associated issues, as observed in Angola and Nigeria (Mwakali and Byaruhanga, 2011).

3.3 Trends in domestic procurement policies adopted by governments

The mechanisms available to ensure that domestic procurement provisions are implemented are usually specified in national local content legislation and regulations outlining domestic procurement requirements. Mining companies can also commit to certain domestic procurement requirements under the terms of individual concessions, supplier agreements, production sharing or framework agreements with governments. The consequences for mining companies, in the event of non-compliance, will vary depending on the relevant national legislation and regulations. A broader challenge is that many governments lack the institutional capacity to monitor or accurately assess or measure local content outcomes. This also presents an issue for companies being held to account for their local content commitments.

Definitions of domestic procurement and the scope and regulatory mechanisms available vary across countries. Members of the World Trade Organisation (WTO) are bound under the National Treatment Obligation (NTO) clause under which foreign companies cannot be forced to buy from local suppliers or hire local service suppliers if a better alternative in terms of price or quality exists abroad. In line with this obligation, some country level laws do not specify any type of sanction for non-compliance, but instead, suggest to mining companies that preferential treatment should be given to local suppliers and workers. WTO rules also limit member countries' policy discretion to impose performance requirements. The WTO Agreement on Trade-Related Investment Measures (TRIMS) specifically prohibits the application of trade restrictions that are incompatible with the obligation to provide national treatment or that constitute quantitative restrictions (such as the imposition of local content requirements).

The following types of government policies, legal instruments and practices are discussed below:

- Requirements for minimum domestic procurement targets
- Requirements for companies to produce domestic procurement plans
- Requirements to give preference to locals without specifying targets
- Requirements to build local enterprise
- Government-led initiatives with voluntary mining industry involvement

3.3.1 Requirements for minimum domestic procurement targets

Table 1 contains a description of existing local content legislations in different countries. Currently, the 31 countries that are WTO members and are also considered Least Developed Countries (LDCs), can introduce measures that deviate from the NTO clause for a defined period of time on the grounds of their "individual development, financial or trade needs, or their administrative and institutional capabilities". Out of this group of 31 countries, only Angola has introduced explicit local content requirements.

In countries with a small or weak industrial base and a limited skilled workforce, it is difficult to achieve short term local content objectives, whether legislated for or not. In a LDC context, there are at least two main reasons why most LDCs countries have not enacted local content regulations: the very prominent mismatch between international companies' requirements and local supplier's capabilities on the one hand, and the limited capacity that LDCs have in introducing, implementing and regulating legislation on the other.

As can be seen in Table 1, existing local content legislations vary greatly in their scope and targets. For instance, while Angola's legislation is limited to establishing a 10% preferencing margin for local suppliers and does not establish overall targets for Angolan content, Kazakhstan's Subsoil Law establishes a target of 50% local procurement from Kazakh suppliers by 2012. While some legislation is specific for certain sectors (e.g., Russia), or for a specific component of the mining value chain (e.g., Indonesia), others are meant to benefit specific population groups (e.g. South Africa and Zimbabwe).

Table 1. Local content legal instruments in different countries

Country	Legislation	Description of relevant articles
Indonesia	Previous 1967 Mining Law (Law No. 11) concerned basic principles of mining where mining concessions were provided through a Contract of Work. New mining law on Mineral and Coal Mining came into effect on 12 January 2009 (4/2009), created a new licensing regime. Law n. 4/2009. Source: Original Legislation, Chirstian Teo & Associates (2009)	Under the new Mining Laws and implementing regulations, priorities exist for the employment of local personnel, procurement of domestic goods and services and partnerships with local community and businesses. There is also the requirement to use local/national mining services companies. If the local/national companies do not exist, the license holder may use other mining company services established under Indonesian law which include foreign investment companies. The new law specifically bans a mining company to use an affiliated mining services contractor, unless is obtains minister approval (Asia Law 2009). Regarding Ownership, the Law establishes that after 5 years of production, "companies must divest part of its foreign shareholding (if any) to the Government, Regional Government, State Owned Business Entity (Badan Usaha Milik Negara or "BUMN"), Regional Owned Business Entity (Badan Usaha Milik Daerah or "BUMD") or (iii) Private Owned Business Entity (Badan Usaha Milik Swasta or "BUMS"). It is not clear, however, what amount of foreign shareholding must be divested. Rather, the New Mining Law simply provides that this issue will be dealt with in a subsequent Government Regulation (Peraturan Pemerintah) (Widyawan & Partners 2008). The local content requirement policy in the mining industry still eaves the
		Indonesia government faced to potential challenges based in commitments under international and national law; including under relevant World Trade Organisation (WTO) and/or Bilateral Investment

¹ Under the modification of the agreement of TRIMs by Annexure F on Special and Differential treatment of the Doha Work Programme Ministerial Document (2005).

Country	Legislation	Description of relevant articles
		Treaties (Panjaitan 2013).
Russia	2011 Amendments to the Strategic Investments Law of 2008 and Production Sharing Agreements (PSAs). Source: US Trade Representative/Menas Local Content Online	The Federal Law "On the Procedure for Making Foreign Investments in Business Entities of Strategic Importance for the National Defense and Security of the Russian Federation" (the "Strategic Investments Law" 07 May 2008) regulates the access of foreign investors into certain sectors of the Russian economy which fall under the category of "strategic reserves" (King and Spalding 2012) such as copper and gold. Article 6 of the Strategic Investments Law lists type of 42 activities deemed to be of strategic importance, in which purchases of controlling interests by foreign investors must be preapproved by the Russian government (Clifford Chance 2012). Local content provisions do exist in the Russian Federal law "On Subsoil" (21 February 1992), but the terminology is so vague that actual local content clauses are negotiated in each contract. Existing PSAs, local content requirements are, if anything, becoming more stringent. International operators are expected to employ a diverse range of strategies to ensure their projects bring stable and sustainable growth to Russian communities. This includes "unbundling" of contracts and price preferencing for local contractors but focuses most strongly on microchanges to procurement policy — ensuring indigenous firms are as informed and capable of bidding and competing for contracts as the
		international suppliers.
6		
South Africa	Mineral and Petroleum Resources Development Act No28 2002 (MPRDA) and subsequent Regulations; the Broad- Based Socio-Economic Empowerment Charter (BBSEE) for South Africa is the best evidence of	Amendments to the MPRDA Section 23 as of 2013, is now amended to provide that "[if] the [mining] application relates to the land occupied by a community, the Minister may impose such conditions as are necessary to promote the rights and interests of the community, including conditions requiring the participation of the community". The effect of this amendment is that the Minister can impose, by edict, further "conditions" on an applicant that is mining on land occupied (not necessarily owned) by a community to "promote [their] rights and interests including conditions that require the participation of the community".
	local procurement targets. Competitive Supplier Development Programme (CSDP). In February 2007, the Department of Trade and Industry (DTI) published the Broad- Based Black Economic Empowerment (B-BBEE) Code of Good Practice and the B-BBEE Technical Assistance Guidelines (TAG). Recent	The BBSEE clearly states that multinational who supply capital goods must contribute 0.5% annually of the procurement value to the social fund. Procurement targets spent from Black Economic Empowerment (BEE) entity for 2014 are: capital goods (40%), services (70%) and consumable goods (50%). The policy objective stated in the Mineral and Petroleum Resources development Act seeks to expand opportunities for historically disadvantaged persons to enter into the mining industry or benefit from the exploitation of natural resources. The BBSEE Charter encourages stakeholders to work together in addressing the skills gap through standing consultative arrangements that interface with relevant statutory bodies (Mining Qualification Authority, education authority); develop skills development strategy which includes a skills audit, scholarships and skills training during employment to increase post-mine opportunities.
	amendments occurred in 05 October 2012. Other laws include: the Preferential Procurement Framework Act (No 5 of 2000); the Employment Equity Act (No 55 of 1998); the	The B-BBEE Code of Good Practice permit multinational corporations to earn BEE equity ownership "points" for empowerment actions in non-equity areas provided the DTI approves and provided the multinational has a global corporate policy of owning 100 % of the equity in its subsidiaries. The B-BBEE Code of Good Practice provides a standard framework for the measurement of broad-based BEE across all sectors of the economy, so no industry is disadvantaged over another when presenting their BEE

Country	Legislation	Description of relevant articles		
	Broad-Based BEE Act No 53 of 2003 (BEE Act); the Competition Act (No 89 of 1998) (and Amendment Act No 35 of 1999 and subsequent amendments); the Skills Development Act (No 97 of 1998).	Credentials. Supplier Development Plans are intended to locate opportunities which can improve the capacity of local suppliers. At all stages of the process, consultation with suppliers and the identification of key performance benchmarks is required. Skills development and local procurement are two of the main areas of focus. Some of the plans are relatively modest, reflecting the government's awareness that local companies are not yet capable of ensuring adequate supplies.		
Zimbabwe	Mines and Minerals Act and subsequent amendments Indigenisation and Economic Empowerment Act 2008 and subsequent regulations (2010).	Amendments to the Mines and Minerals Act oblige companies to fund the development of local communities and give traditional chiefs unlimited power to run development programs in mining areas. According to the authorities, under the Indigenisation and Economic Empowerment Act 2008 mining companies are expected to submit indigenisation and empowerment plans to the Ministry of Indigenisation; the plans must spell out how they plan to meet the Act's requirements for 51% shareholding by the indigenous population within five years. The Indigenisation and Economic Empowerment Act 2008 gives Zimbabweans the right to take over and control many foreign-owned companies in Zimbabwe. The bill defines an indigenous Zimbabwean as "any person who before the 18 April 1980 was disadvantaged by unfair discrimination on the grounds of his or her race, and any descendant of such person."		

3.3.2 Requirements for companies to produce domestic procurement plans

There is more ample evidence on the tightening of approval and regulatory processes to require extractive companies to produce domestic procurement plans that include enterprises and workforce participation in resource-producing areas that are aligned with the regional economic development plan. Some examples from South Africa, Indonesia and Philippines are summarised in Table 2. These plans often include a subnational dimension because they require mining companies to specify impacts and benefits for local communities. For instance, in the Philippines, the law requires mining companies to draw a Social Development Management Plan which should describe "the programs, projects and activities that would be undertaken by the mining operator to promote the general welfare of the inhabitants of the barangays where the mining area is located as well as neighboring barangays."

Table 2. Examples of requirements for domestic procurement plans as part of permitting

Country	Policy/regulation	Specific requirement
South Africa	Mineral and Petroleum Resources Development Act no 28 2002 (MPRDA) and subsequent Regulations; Industrial Policy Action Plan (IPAP2) 2010	Under the 2010 reforms, published in the Industrial Policy Action Plan (IPAP2), public bodies will be designated large, strategic or repeat procurement projects. These organisations will be expected to work with South Africa's Department for Trade and Industry to ensure tenders support increased local purchasing and supplier development. The IPAP2 also includes a boost to Broad Based Black Economic Empowerment and building domestic production and vendor development requirements into tenders with more than US\$ 10 million (£6.49 million) of imported content. Section 104(2)(b) of the MPRDA makes provision for on-going benefit sharing made possible by royalties being directly paid to communities in order to fund development plans. Under Chapter 2, Part 2 of the MPRDA, a social and labour plan is

Country	Policy/regulation	Specific requirement
		compulsory for the granting of development rights to the applicant. The plans must demonstrate the holders are contributing to and are willing to contribute to local development plans which include improvement to housing and living. Recent 2013, amendments to the MPRDA, creates conditions that will go beyond the requirements of the prescribed social and labour plan, as well as the equity divestiture requirements contained in the Mining Charter.
		Section 46 of the MPRDA includes a local economic development program which must include, among others, the procurement progression plan s46(c)(vii) and its implementation for HDSA companies in terms of capital goods, services and consumables and the breakdown of the procurement.
Indonesia	Article 74 of the Law on Limited Liability Companies No 40 2007	Pursuant to Article 74 of the Law on Liability Companies, companies doing business in the field of and/or in relation to natural resources must put into practice Corporate Environmental and Social Responsibility (C)ESR, and that (C)ESR "constitutes an obligation of the Company which shall be budgeted for and calculated as a cost of the Company performance of which shall be with due attention to decency and fairness."
		"Environmental and Social Responsibility" pursuant to Article 1 of the Law on Liability Companies Act is defined as 'a Company's commitment to taking part in sustainable economic development in order to improve the quality of life and environment, which will be beneficial for Company itself, the local community and society in general.
		Furthermore, Article 66, stipulates that annual reports must contain at least: a report on the implementation of Environmental and Social Responsibility (C) ESR.
Philippines	Amendments to Sections 134-136 of DENR Administrative Order No. 96-40, the Revised Implementing Rules and Regulations of Republic Act No. 7942, otherwise known as the "Philipping Mining Act	A Social Development and Management Programs or (SDMP) refers to a yearly community development programs/projects/activities based on the approved five-year Social Development and Management Program to be prepared by all mining operators in the Philippines under the national law. The SDMP describes the programs, projects and activities that would be undertaken by the mining operator to promote the general welfare of the inhabitants of the barangays where the mining area is located as well as neighboring barangays. Activities recognised under Philippine law, and which form part of an SDMP, include, among others:
	"Philippine Mining Act of 1995."	 Human resource development (with preferences being provided to Filipino citizens) and institutional building programs in the form of skills reformation and entrepreneurship development for the local community and as part of the decommissioning process Enterprise development activities which support income generation Assistance for infrastructure development and support services in the community

3.3.3 Requirements that give preference to locals without specifying targets

Some countries bound by the NTO clause have adopted a number of domestic procurement policies within the parameters established by international trade and investment agreements. These policies aim at directly increasing the participation of local workers and suppliers without establishing legally binding national local content legislation and regulation. Enforcement in these cases rely on mechanisms with different degrees of power, that range from specific commitments in Production Sharing Agreements to general agreements on the need to support domestic procurement that do not impose any sort of restrictions on mining companies, a best endeavors approach.

Examples of these types of policies include: ensuring 'full, fair and reasonable' access to opportunities for local suppliers initiated by national or subnational governments (such as The Australian Industry Participation National Framework); compiling a list of 'capable' local suppliers by local government agencies (see for instance the supplier registry system developed by the Industrial Association of Antofagasta and mining companies in Chile); and harmonising supplier requirements and encouraging the implementation of certification systems for local suppliers by local government agencies or mining companies (such as in Atacama mining cluster, Chile). A particularly relevant policy for local Small and Medium Enterprises (SMEs) is the requirement for 'unbundling' contracts (Canada, for example, established this under Participation Agreements between locally affected Aboriginal communities and mining companies). Unbundling contracts involves breaking packages of work or supply agreements into smaller parcels that are within the capabilities of targeted businesses to fulfill.

The advantages of these types of initiatives are that they can be readily implemented because they do not depend on enacting regulatory tools, and that they can be flexible to the needs of the local economy and the mining companies. Their main disadvantages are that their effectiveness depends on the existence of a pool of competitive potential local suppliers, and that compliance cannot be legally enforced.

3.3.4 Requirements to build local enterprise

Given that policies aimed at increasing access to opportunities have only limited impact on the size of the local supply of goods, services and labor; some countries have adopted complementary policies aiming at increasing the size of the local supply and workforce availability. Examples of this type of policy include increasing local participation via specific requirements to transfer know-how and skills related to mining operations to benefit local enterprises and workers; and requirements to train the local labor force.

A related strategy is the requirement to form joint ventures with local public or private companies, in order to ensure, in a more direct way, the transfer of knowledge and technology from foreign mining companies to local companies.

At the subnational level, countries such as Philippines, India, Papua New Guinea, Peru, Kazakhstan and South Africa have mandated spending on enterprise and skills development as part of social funds that companies are required to set up. In the Philippines, for instance, the law mandates companies to not only produce development plans for the host and neighbouring communities, but also to contribute to "self-sustaining income generating activities, such as but not limited to, reforestation and production of goods and services needed by the mine and the community" (Act No. 7942, Philippines, Section 136).

3.3.5 Government-led initiatives with voluntary industry participation

There are also examples of non-mandated, voluntary approaches to subnational government and company collaborations to increase visibility and access to opportunities. One of them is C-Res, in Queensland, Australia, a subsidiary of the Mackay Whitsunday Regional Economic Development Corporation (REDC). This entity was specifically established to deliver a mining company's (BHP Billiton Mitsubishi Alliance's (BMA)) Local Buying Program. The program aims to provide opportunities for small businesses with less than 25 full-time employees to competitively supply goods and services to BMA in townships throughout the Bowen Basin region. In addition to providing supply opportunities, the Local Buying Program, through the establishment of a Community Foundation, aims to deliver community and economic development programs to enhance and build local business and community capability. The Foundation aims to enhance the economic viability of the wider community and region through programs targeting new business, existing business growth, employment programs and benchmarking of economic performance with other regions.

Another example is ePilbara. ePilbara is an online Business Capability Register for the Pilbara region in the state of Western Australia managed by the Pilbara Development Commission, and supported by a number of mining companies and Chamber of Commerce and Industry. To be listed in ePilbara, companies must meet the following criteria: a Pilbara postal address,

employees permanently based in the Pilbara and the ability to provide products or services from the Pilbara location. The website also provides access to ProjectConnect- a service provided by the Chamber of Commerce and Industry of Western Australia which links project developers and their major contractors with their own categorised electronic library of suppliers. Mining companies use ePilbara to publish information on upcoming tenders and recipients of recent tender awards.

3.3.6 Concessions on import tariffs and duties

Legislation on investment in many countries provides for customs duty exemptions for imported goods of mining companies e.g. equipment and spare parts. Whereas such provisions are designated for priority investment projects, they often create discourage mining companies from buying locally. There are several measures that can promote mining investment and promote domestic procurement with regard to concessions on import tariffs and duties:

- Regulations to extend customs exemptions, based on a regional mining list, to domestic
 suppliers that predominantly supply the mining sector, so that suppliers do not have to rely
 on mining contracts to apply exemptions, and are not at a cost disadvantage when supplying
 services to mining companies where these may be supplied internally by the mine (e.g.
 drilling and mining);
- Regulations that provide for customs exemptions to be applied based on a central product list. This is applicable to countries which currently extend exemptions on the basis of lists agreed with each mine;
- Regulations that provide for development of a tiered mining list and application of the list to
 the phasing out of exemptions (e.g. in the case where a product is available, but may not yet
 be produced at the required scale or quality); and
- A process for updating the mining list and providing a reliable channel for mining suppliers to
 make applications for removal of products from the mining list, and communicating the
 process to regional organisations. This could include developing a process for querying and
 applying for products to be removed from the various tiers of the mining list (including
 investigation into local production/ service delivery, timings for investigation and removal).

3.4 Trends in industry 'good practices'

Within industry, there are evolving attitudes towards local content, as evidenced in the shift in the way the business case is communicated. In many instances, the initial motivation for investing in local content was a need to comply with formalised commitments, either to a host government, an investment partner such as the International Finance Corporation (IFC), or an Indigenous community, or in pursuit of a social license to operate. Compliance was deemed necessary in order to secure access to resources. Case study research on local procurement amongst 23 companies by Esteves et al. (2011) found that these companies had become increasingly motivated by the desire to establish and maintain enduring partnerships with local suppliers for mutual benefit. Table 4 provides examples from this case study research of extractive companies engaging in a range of local procurement interventions that are designed to increase local business access to contract opportunities. Strategies include: assigning higher preference weightings to local businesses in competitive bidding processes; sole sourcing arrangements with local suppliers; price matching, that is allowing local suppliers to match the price of other suppliers; breaking large contracts into smaller ones (unbundling) to create opportunities for smaller local suppliers; requiring non-local suppliers to sub-contract locally or to enter joint ventures with local suppliers; providing technical and management training and mentoring; and linking local businesses to other service providers and agencies that promote technological innovation and provide access to finance.

Table 3. Examples of mining local content activities

Company	Strategies
Increasing the access o	f local businesses to opportunities
Cameco, Saskatchewan, Canada	 Targeted for 35% of all goods and services to be sourced from northern-based Aboriginal-owned businesses. Conducted workshops to communicate upcoming contract opportunities within the business, and to provide guidance as to how to go about becoming a Cameco supplier.
Newmont Boddington Gold, Western Australia	 Applied price preferences to local businesses during the final analysis of bids. A regional content preference is available to businesses located outside the prescribed areas that use goods, materials or services in contracts that are purchased from businesses located within the prescribed areas. All tenderers are required to show the actual cost of their local or regional content.
OZ Minerals, South Australia	 Established a website on The Industry Capability Network (ICN) site, through which suppliers were invited to lodge an expression of interest for packages of work. The ICN undertook a first round of screening and the Engineering, Procurement, Construction and Management (EPCM) contractor followed with a short listing process.
Developing strategic po	artnerships and agreements
Century Mine, MMG, Gulf region of northern Queensland	 Signed the Gulf Communities Agreement (GCA), an agreement between Century, the Queensland Government and the four Native Title Groups of Waanyi, Mingginda, Gkuthaarn and Kukatj. Tenderers are first evaluated for their eligibility as a Native Title GCA party, prior to the technical assessment. The GCA Department facilitates support to provide tenderers with information regarding business set up requirements and ongoing business management, e.g. preparation of BAS statements, payroll, training, health, safety and environment procedures and human resources policy.
Rio Tinto Argyle Diamond Mine, Kimberley, Western Australia	 Argyle's policy for local Aboriginal contracting is driven by its Mine Participation Agreement with Traditional Owners, and is supported by a Management Plan specifically dealing with Business Development and Contracting. Under the agreement and all else being equal, Argyle commits to giving preference to tenderers who bring the greatest opportunities to Traditional Owners. The company is obliged under the Agreement to notify the Business Development taskforce (comprising Traditional Owners and company representatives) of company intent to let any contract over AUD\$ 250,000 in a year, relating to the provision of goods or services to Argyle at the mine site. Any request for tender over this value requires the tenderer to demonstrate how they will involve Traditional Owner businesses in the contract, how they will employ and/or train Traditional Owners, and how they will provide benefits to Traditional Owners.
Rio Tinto	 Encouraged the establishment of a joint venture (ESS Gumala) between Compass Group's remote services division, ESS Support Services Worldwide, and the business arm of the local traditional owner group, Gumala Enterprises Pty Ltd, as a means of providing contracting opportunities to Traditional Owners. Compass Group is a hospitality and support services company operating across 55 countries.
Ahafo Mine, Newmont Ghana Gold Ltd (NGGL)	 NGGL entered into a partnership with the International Finance Corporation (IFC) to establish the Ahafo Linkages Program. The objectives of the program are to increase income and employment opportunities in local communities by building the capacity of local enterprises that are directly or indirectly related to NGGL activities, and to improve the environment for business development. The IFC Linkages Program includes Technical Assistance Programs which range between two and four years to optimise local procurement by strengthening local

Company	Strategies					
	SMEs and entrepreneurs linked to IFC's investment clients or large multinational companies.					
Actively engaging and	Actively engaging and supporting communities					
Cameco, Saskatchewan, Canada	 Employed a business specialist to assist communities in establishing businesses and to access financial resources or a business partner. 					
BHP Billiton Iron Ore, Pilbara, Western Australia	 The company is made aware of potential opportunities during engagement processes with Traditional Owners. This enables intervention at an earlier phase to assist people with establishing business structures and administration, rather than waiting for vendor pre-qualification processes to identify capacity needs. 					
Rio Tinto Iron Ore, Pilbara, Western Australia	 In planning for a new project, the projects team works with the community team to identify opportunities for Aboriginal businesses, and ensure Aboriginal businesses are invited to tender. 					
Identifying and classify	ing local productive capacity					
Anglo Ferrous, Minas Gerais, Brazil	 Profiled businesses located in affected communities and assessed their capability by drawing a random sample of 365 companies from the industrial, commercial and services sectors. The data collected was used to develop a Business Action Plan in collaboration with local community leaders. 					
Rio Tinto Iron Ore, Pilbara, Western Australia	 Commissioned an independent inquiry to identify systemic blockages to Aboriginal business procurement and make recommendation to increase Aboriginal involvement in the supply chain. Implemented a system to track progress through joint reporting by the procurement and community relations divisions on Aboriginal business spend, using the 'Lean' monthly reporting system. The metrics for this system are built into management incentive and reward programs. 					
Directly supporting loca	al business development					
BHP Billiton Iron Ore, Pilbara, Western Australia	 Provided assistance via an accountancy firm that assists with governance, periodic audits and risk management, and provided access to a range of other consultants assisting with items such as preparation of prospectuses. 					
Anglo Zimele, South Africa	 Anglo Zimele Development and Empowerment was established in 1989 to empower BEE entrepreneurs in South Africa. It is made of three funds: Anglo Khula Mining Fund, providing financing for local junior mining companies in the exploration and pre-feasibility phases until they are able to demonstrate a commercial return; Small Business Start-Up Fund, which provides loan finance in the communities residing around the mining operation. Small business hubs provide training and mentoring in business skills; Supply Chain Development Fund, which works with Anglo American's procurement departments to incorporate local SMEs into the supply chain. The fund provides loan and equity financing and technical assistance. Capacity is built in four ways: training programs and/or on-the-job training; a technical mentor; assistance from business development officers in management, marketing, operational, and financial aspects; and personal guidance and mentoring from Anglo Zimele staff. 					
Anglo American Chile	 The Emerge program has two streams. The first assists medium sized entrepreneurs grow their business, through business development training; commercial assistance to draw up and implement a business plan; financial support; and follow-up. Small businesses are supported in a partnership with Fondo Esperanza and provision 					

Company	Strategies
	of individuals micro-credit and business education to entrepreneurs who have formed community banks
Rio Tinto Coal & Allied, Hunter Valley, New South Wales	 Provided funding support to the Hunter Region Business Enterprise Centre, which enabled the Centre to employ two full-time business facilitators who provide free advice to small and medium businesses looking to start up or grow. The Centre also provides support to local Aboriginal communities.
Anglo Ferrous Brazil's Supplier Development Program	 Management training: entrepreneurial awareness; initiatives to improve education levels of managers; joint development (owner/family/employees) of a strategic company vision; business management courses; technical training courses in specific areas of work; financial management courses; Business development and growth: programs to support higher education for employees, courses focusing on sales, production and administration, market research of local demand, financial disclosure, participation in trade fairs and events, and bulk purchasing incentives; Improvements to unprofitable businesses: diagnostics of individual companies experiencing financial difficulties in order to evaluate profitability and potential market repositioning and awareness of the potential to move into other market segments; Creation of new enterprises: entrepreneurial awareness, promoting the establishment of new suppliers of raw materials, machines and equipment, campaigning to repatriate local residents who have been trained and are living or working elsewhere, attraction of young people to the region through study grants; attraction of company
	subsidiaries and suppliers, promotion among investors interested in expanding into, or creating new businesses in affected municipalities.
Rio Tinto Simandou, Guinea	 Infrastructure investments (electricity, telecommunications, multi-user port, freight and passenger rail, housing, health, education and local services) to underpin growth and development along corridor in southern Guinea
Vale, Brazil	 INOVE is a supplier support program available in Brazil. Apart from training, two financial assistance packages are offered: the Finance Fund with low-interest loans, and @NF, which enables payments to be brought forward. Vale has also negotiated with large companies to provide favourable conditions to Vale suppliers when purchase items such as IT, warranty insurance, safety equipment, industrial tools

Oil & Gas Case Study: BP Azerbaijan Regional Development Initiative

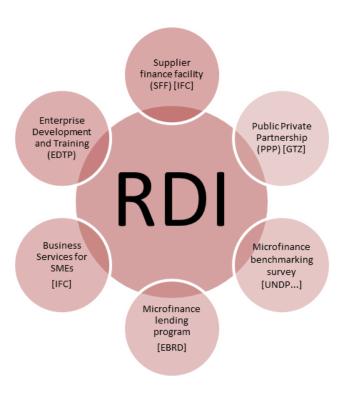
BP and its co-venturers in a large oil & gas project implemented a multi-stakeholder, long-term, large-scale, Regional Development Initiative(RDI) in Azerbaijan, Turkey, and Georgia. The goal of the RDI was to enhance local enterprise development, access to energy and good governance.

The 2006-2010 iinitiative was based on principals of multi-stakeholder dialogue. Its key features included:

- A multi-sectoral forum
- Provision of coordination and coherence (government, multilaterals, private companies, international NGOs, donors, IFIs)
- Identification of gaps/obstacles and strategies to overcome those
- Implementation activities drawn on core competencies (complementarity)
- Comprehensive information resource on investment opportunities

The key components of the RDI are depicted in Figure 2 and outlined below.

Fig 2. Elements of BP Azerbaijan Regional Development initiative



Supplier Financing Facility: Risk sharing investment facility, with investment of USD\$ 15 million shared by IFC, BP and Micro-Finance Bank of Azerbaijan (MFBA).

Education, Development & Training Programme: complementary programme designed and financed through RDI. Managed by the Enterprise Centre and implemented by ACDI/VOCA (international NGO). The goals included identification of potential local suppliers; workshops; design and implementation of a development plan for enterprises.

Micro-finance Programme: A three year programme that commenced in 2006. EBRD on-lended to local banks, and BP and co-venturers contributed USD\$6 million to loans. Funding was also provided to open MFBA branches in western regions (USD\$1 million BP and USD\$2.3 million matching grants from IFC & MFBA).

Business Services: During 2004-2007, the Azerbaijan Bank Training Centre (ABTC) developed 42 courses and 1,178 representatives of SMEs were trained.

Public Private Partnership: This GTZ programme, with BP co-funding, provided technical assistance to 17 local companies to meet BP pre-qualification tender requirements.

3.5 Domestic Procurement Initiatives: Best Practice

The previous section demonstrates the existence of a wide range of policies and industry practices at different stages of implementation. In the absence of empirical data on the outcomes, conclusions cannot be drawn as to their application to all settings seeking to boost local content. There are, however, some common themes that emerge through case study research, pointing to certain elements of success albeit difficult to quantify.

- Build partnerships and develop linkage programs
- Ensure systematic identification of opportunities
- Adopt a common, integrated approach across stakeholders
- Establish strong mandated implementation body

3.5.1 Linkage programs and the role of partnerships

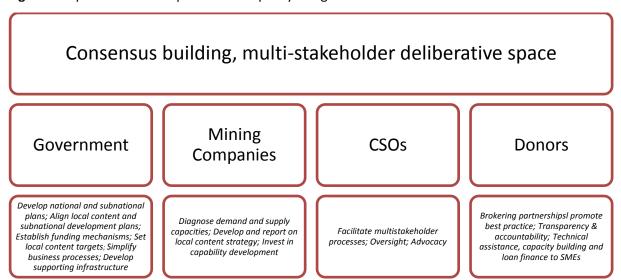
Partnerships between industry, governments and development agencies are particularly evident in local supplier development programs, with a view, for example, to enabling SMEs to access financing and skills development programs, technical mentoring and support for the development of business management skills (Deloitte 2004, Jenkins et al. 2007, Nelson 2007, Rufffing 2006, UNCTAD 2001). Some linkage programs focus heavily on institutional strengthening activities to encourage an enabling environment for SME development. Other programs have given particular focus in assisting women to establish their own small businesses by providing them with access to legal, business and financial systems, thereby reducing the gender gap that prevents many women from participating in economic life (ODI 2005, Wyse and Shtylla 2007). Generally speaking, civil society organisations have not paid a dominant role in linkage programs.

- Company role: It is important to consider the drivers and obligations of each sector in considering their potential contribution to policy design. Beyond the explicit licencing agreement associated with a given mining concession, the company needs to establish and maintain a social licence to operate within the communities around the project site and beyond. Optimising domestic procurement opportunities within its supply chain is practical and can potentially be commercially attractive for the company. Practical challenges however exist in achieving this goal. In a developing country context, the most common challenge is the lack of underlying industrial capacity in the given geography. Building local supply capacity is in the interest of all but needs to be a medium to long-term objective. A skills development and supplier development program should be designed with a longer time horizon in mind. In the short term, the company has other important obligations in the operation of its mine that include meeting set standards in health, safety, social and environmental management. They must meet regulatory obligations to the government and contractual obligations in off-take agreements, and maximise financial returns for shareholders. Obligations for strict short term targets for domestic procurement threaten the foundations that make a mine or oil and gas project commercially viable.
- Government: The role of central government versus subnational government varies greatly in terms of domestic procurement policy development and practice. In most cases, central governments have far more discretion and capacity to make and implement laws compared to subnational governments. Their respective authority and capacity to pass laws, and establish and monitor agreements with resource companies can determine their contribution to local economic development outcomes. One role that is frequently held in common, however, is creating a business-enabling environment through positive policy frameworks; creating side-stream linkages, through infrastructure (power, logistics, communications, water), human resources development and R&D); strengthening institutions and investing in industry development, as well as constructive oversight of companies' local content plans.

- Civil Society: CSOs are defined in this context as organised, independent (preferably
 politically non-aligned) groups who have an externally focused role in communicating with
 business including domestic suppliers, the community and public or private sector. This
 includes industry bodies (business associations) NGOs (international or national), and the
 media. Many of the roles played by CSOs require supplementary funding support, as
 typically their own operational budgets are meagre.
- International Donors can play an important role in brokering partnership, promoting best practice in domestic procurement and ensuring transparency and accountability. International donors often provide technical assistance, capacity building and loan finance to local suppliers.

Some examples of domestic procurement policy design elements that should be informed by a consensus-building, multi-stakeholder deliberative space, to be led by different stakeholders (government, companies, CSOs and international donors), are provided in Figure 3 below):

Fig 3. Examples of domestic procurement policy design elements



3.6 Clusters and Cluster Initiatives

Mining sector linkages and industrial policies have been successfully implemented through cluster initiatives in many developed and developing economies. Cluster initiatives are organised efforts to increase growth and competitiveness of clusters within a region, involving cluster firms, government and the research community. They include the creation of industrial parks, clusters and growth poles. Cluster initiatives present a model to organise economic policy as a collaborative effort of different branches of the government, the private sector, trade associations, civil society, etc.

Stimulating economic development through domestic procurement requires governments and companies to work together to identify key sectors with higher-than-average backward and forward linkages compared with other sectors in a subnational region, and the highest sectors in terms of mining industry multipliers. Local economies will grow more rapidly if those sectors are encouraged to grow and the mining companies are encouraged to focus their domestic procurement efforts with companies within those sectors, and if cluster initiatives are targeted towards those sectors. Some key elements of cluster initiatives are as follows:

- An increased focus on the microeconomic business environment as opposed to a traditional macro focus
- A long-term agenda to improve competitiveness of clusters rather than individual firms or

broad sectors

- An emphasis on regional and local areas
- Improved networking among cluster firms, trust-building and enhanced dialogue to create spill-overs
- The provision of seed money rather than large subsidies
- A balanced input of resources from government and industry
- A selection of dusters through a process of competition
- A mix of competition and cooperation as underlying drivers of learning and innovation
- A mix of SMEs and large firms participating
- Partnerships involving not only cluster firms and government, but also the academic community
- Learning and innovation based on a systems-view rather than on isolated firms

Some prominent examples of mining linkages and cluster initiatives are provided below – from Chile, Australia, Brazil, Mozambique and South Africa. The common thread across all cases is that the government's role has been crucial for success, by providing logistics and infrastructure; providing a stable legal and regulatory framework; and attractive fiscal packages. The examples from southern Africa demonstrate spatial development initiatives, in using a resource or development corridor approach to optimise spatial linkages provided by the anchor project infrastructure. Such initiatives require a solid institutional space for implementation.

Chile

Chile's mining has strong links with a large number of companies that provide inputs, from equipment and engineering consulting, to power, logistics, communications and financial services. According to a study by the Technical University Federico Santa Maria (2009), 84% of mining suppliers are Chilean. While there are no formal commitments in Chilean law, Chile's government institutions have worked together with the private sector in supporting domestic procurement and supplier development.

Region II in Chile is one of the most successful examples of an industrial cluster built around the mining industry². In the development of this cluster, centered on Antofogasta, mining companies and governments have worked together to maximise the positive linkages from mining for local development. In 2002 Antofagasta established an executive committee to encourage the development of a mining cluster in the region. This public-private partnership deliberately targets and fosters local suppliers, helping them adjust their practices in accordance to the needs of mining companies operating in Chile and overseas. Ongoing initiatives in the cluster aim to transform 250 Chilean-based firms into world-class suppliers by 2014, training 28,000 people and developing Chile's capacity to expand its human capital by December 2015. Earlier initiatives in the cluster included:

- A program to develop suppliers for the industrial growth of Region II, which provided a subsidy to large companies in Region II who participated in supplier development, requiring the companies themselves to take responsibility for the training and integration of local suppliers.
- A program designed to address the qualification needs of SMEs supplying the mining industry, through credit programs, capacity building technical consultancy, subcontracting exchange, management training, and marketing and export assistance.
- Various government measures to support mining suppliers' expansion, including an R&D centre focusing on mining at the University of Chile and a scientific park in Antofagasta city.

² Case study included in World Bank's Terms of Reference for this study (2013)

Brazil

An example of collaborative attempts to greater economic integration of mining with other sectors is found in within Pará State, Brazil. A supplier development program REDES is managed by the Pará State business association FIEPA. As FIEPA/REDES wish to be seen as a non-partisan technical initiative, it does not obtain funds directly from the state government. REDES receives funding support from 15 large companies, operating in various sectors (such as mining, energy, food). The industry partners also participate by setting targets for local purchases and monitoring. REDES also reports on expected future demand, provides information to would-be suppliers of how to access large buyers, and offers training through service providers.

Membership of REDES grew from 216 in 2004 to 1,640 in 2010. The absolute amounts of procurement from within Pará also increased (from R\$ 379 million in 2001 to R \$4.161 million in 2010). The proportion of total procurement from firms with their principal business operations in Pará increased from 41% in 2001 to 49% in 2010 (ICMM 2013).

Mozambique

Supported by the World Bank, the Government of Mozambique is implementing the Integrated Growth Poles Project (Project), as part of its strategy for inclusive and broad-based growth. One of the two project areas is Nacala Corridor, which is experiencing rapid growth fuelled largely by mining (mainly coal) operations in Tete province. Initial focus on the Nacala growth pole will involve support for the Nacala Special Economic Zone (SEZ) (US\$ 43 million). Activities are focused on upgrading infrastructure (water supply system and an access road); and supporting privately-executed public investments to increase smallholder production, link smallholder farms to emerging supply chains, and increase agro-processing activities. The latter will draw on an Innovation and Demonstration Catalytic Fund (IDCF) (Government of Mozambique 2013).

South Africa

The Richards Bay industrial cluster is a further example. The industrial hub started with the development of the Richards Bay Harbour and Coal Rail Line in the 1960s. South African government policies and incentives were designed to establish industrial development nodes outside the Johannesburg area. This led to the Industrial Development Corporation and Rio Tinto establishing Richards Bay Minerals to exploit and process the nearby heavy mineral deposits, which in turn triggered the development of Richards Bay into a heavy industrial cluster. A suitable base in terms of infrastructure, logistics, power supply and skills was available to support the development of other large-scale, capital intensive and resource-based industries such as Billiton Hillside Aluminium, Indian Ocean Fertilisers, Mondi Kraft, Bell Equipment. Due to the outsourcing of non-core activities and the impact of the government's Black-Economic Empowerment policies, a cluster of specialised SMEs is emerging in the greater Richard's Bay area.

Western Australian mining cluster

The mining industry is the backbone of Western Australia's economy. According to analysis of the largest mining companies in Western Australia, every job created in the mining and petroleum industry creates three more in other sectors throughout Western Australia (van Eenennaam 2011).

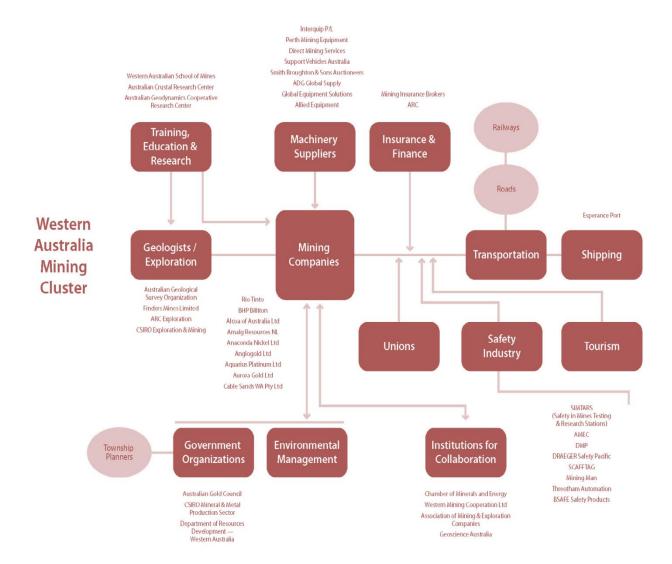


Fig 4. Diagram of components of the mining cluster in Western Australia (van Eenennaam 2011)

3.7 Timing of Domestic & Local Procurement Initiatives

A key policy question is how best to implement domestic procurement policies, taking into consideration the timing of opportunities available in the extractive life cycle. Governments need to make sure there is alignment of the mining project development timelines, timelines set by local content regulations, and timelines required to build local capability.

Typically, for local businesses to be able to participate in the Construction phase, supplier capability interventions need to start approximately three years before construction starts. Companies can take roughly one year to identify local businesses, undertake supplier capability gap assessments, and integrate domestic procurement commitments into tenders of larger contractors. They can spend two years undertaking training and seeking other improvements to meet project requirements. Therefore, the dominant practice of waiting for the Feasibility and Planning Phase to develop strategies for supplier and workforce development does not allow for sufficient preparatory time. However, it is often at this stage that companies require the large EPC/M (Engineering, Procurement, Construction/Management) contractor to consider local content. EPC/M contractors tend to operate in a highly competitive market and unless specifically incentivised to develop local capability, will make procurement and employment decisions based on cost, quality and timing considerations.

For the above reasons, domestic procurement opportunities should be identified and local community capability assessments should be conducted at Exploration, Conceptual and Prefeasibility phases. At each of these phases, the requirement of companies should be to engage communities, manage expectations, and to identify which skills and businesses should be developed that can be applied to other sectors in the local economy if the project is not approved.

From a government perspective, a point of leverage in influencing domestic procurement commitments lies in the regulatory processes of providing exploration concessions (prior to the Exploration/Identification Phase) and permitting approvals for mining projects (during the Feasibility and Planning Phase). Through these approvals processes, governments can incentivise mining companies to start early, involve other parties and thus contribute more effectively to subnational development. In developing guidelines for the development of Local Content Management Plans, governments could articulate their expectations on the level of analysis and stakeholder dialogue.

3.8 Monitoring of domestic procurement initiatives

Monitoring is a component of domestic procurement practice currently being examined by the World Bank, EITI and international NGOs such as Revenue Watch Institute. While there is evidence of dialogue, this has not yet converted to implementation. There are calls for clear targets on the basis of which mining companies make commitments, and transparent reports on results on the basis of which interested parties could evaluate and report on the progress of domestic procurement policies.

In reality, the goal of monitoring domestic procurement practices is plagued with obstacles, including vagueness and lack of uniformity in definitions and targets, lack of transparency in reporting results, lack of indicators on the true extent of local value addition, and confidentiality issues. Much of the data on price of goods and services paid refers to a commercial transaction and is not disclosed by firms as it affects competitiveness. Communicating price levels encourage others to accept the market price as what is communicated, rather than basing their prices on cost structures unique to different business models. Local SMEs are drawn into pricing wars which they are unable to sustain. Communicating the price can also encourage some businesses to collude to set higher market prices, creating inflationary pressures. On the other hand, disclosure of process, by communicating who tenders are awarded to and the criteria for selection, provides a level of oversight without adding to the risk of market distortion.

The NGO Revenue Watch Institute has offered guidance for effective monitoring of the mining industry, which can inform the design of monitoring frameworks for a mining company's domestic procurement performance. Monitoring is referred to as encompassing four broad activities undertaken in collaboration with a range of stakeholders (Smith and Rosenblum, 2011):

- Reviewing laws and contracts to understand a mining company's obligations.
- Monitoring companies' activities to determine compliance with those obligations.
- Communicating information to address any areas of non-compliance.
- Enforcing laws and contracts when companies fail to comply.

A range of mechanisms is available to enable monitoring of domestic procurement (Smith and Rosenblum, 2011):

- Government accountability for monitoring company obligations in legal frameworks.
 Wherever a company's obligations are defined, whether in legislation, regulations or company-specific contracts, it can be specified which government ministries will be responsible for ensuring compliance with specific obligations.
- Clearly defined legal obligations of companies. Objective local requirements are easier for

- government and civil society to monitor and enforce. This involves clear and unambiguous definitions for domestic procurement and performance measures.
- Uniform frameworks for all mining projects. Monitoring efforts are simplified by establishing a company's obligations in law, rather than in individually negotiated contracts. Where this is not possible, model contracts with a set of common requirements for domestic procurement development present another option for uniformity.
- Requirements for companies to self-report. KPIs can be updated with the life of the domestic procurement development strategy, i.e. on average every three years. This is to reflect the changing business drivers over the life of the mining project, and the changing community context. Reports can be transparent and auditable by independent third parties prior to submission to government and open to requests for additional detail. Reports can also be regular and timely and based on internationally accepted reporting standards. For example, initiatives such as the EITI require public disclosure of revenue information and flows from mining to governments. EITI is currently considering including domestic procurement as part of a voluntary agenda.
- Government oversight institutions. Parliaments and the judiciary can assist in enforcing domestic procurement obligations in situations of noncompliance. For these mechanisms to be effective, adequate training of government personnel is required.
- Community monitoring. This can take the form of corporate –community partnerships that
 identify areas of concern to the community related to domestic procurement and jointly
 monitor the company's efforts to address those concerns; government-trained community
 monitors; and independent monitoring by communities who report their findings to the
 company or government to address instances of non-compliance.
- Civil society monitoring and advocacy. CSOs play a role in monitoring government and company strategies and plans related to local content. In instances of non-compliance with legislated local content commitments, anti-corruption laws or human rights violations, CSOs can use the media to leverage public opinion and company concerns with reputation; raise concerns directly with the mining company through company grievance mechanisms; influence government agencies and mining home countries responsible for enforcing the companies' obligations to conduct independent investigations and sanction as appropriate.

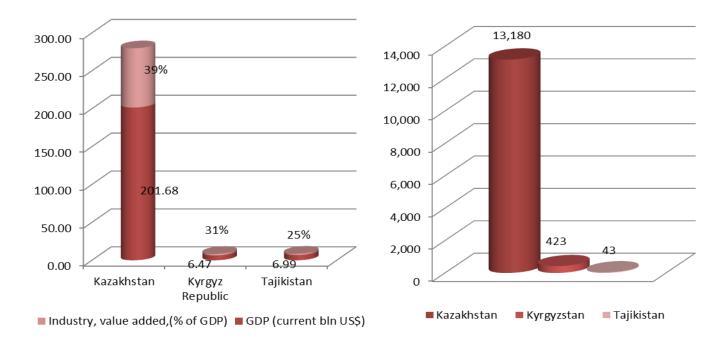
4. Kazakhstan, Kyrgyzstan and Tajikistan: National development priorities and mining

4.1 Overview of the mining sector and its contribution to national economies

The economies of Kazakhstan, Kyrgyzstan and Tajikistan differ widely in size, structure and level of development. Kazakhstan is a dominant economic player in the region, with market size of almost 30 times the markets of Kyrgyzstan or Tajikistan³. A large producer of oil and gas, Kazakhstan has been successful in attracting foreign direct investment and stimulating manufacturing.

Fig 5. GDP and Industry Value Added as percentage of GDP, 2012

Fig 6. FDI inflows, average for 2009-2012 (US\$ million)



The development of minerals extraction and processing in all three countries originated during the Soviet era. Many patterns of mining, processing, shipping, and trade that were in effect during that period continue and influence current conditions. All three countries are highly depended on the production and export of commodities.

The mining sector is larger and more developed in Kazakhstan as the country is a one of the world's leading producers of several mineral commodities. The linkages of Kazakh mining sector and the rest of the economy are better developed then in Kyrgyzstan and Tajikistan. Government policy has a strong focus on the development of industrial linkages through promotion of local content and supplier development.

In Kyrgyzstan, there is only one large mining enterprise, Canadian operated Kumtor gold mine. However, due to its prominent role in the economy of Kyrgyzstan there is a growing appreciation of the benefits that mining production linkages might create for the economy. There is also an understanding of technological complexity of modern mining operations and the related issues of supplies and domestic procurement development. However, this

³ http://data.worldbank.org/indicator

understanding is yet to be translated into policy in the context of building an industrial base that can service the demand of the mining sector.

The mining industry in Tajikistan is nascent, with only a few small-scale and artisanal mining projects which maintain a low profile due to overly complex regulations and public concern about corruption. Recently, the government has placed effort into attracting investment in the development of large-scale mining projects, such as the Konimansur silver deposit. At present, there appears to be little focus on production linkages and local content in mining projects. Moreover, due to the absence of large modern mining operations in the country there is little understanding of the complexity and quality of supplies that are required by such operations. A vision for mining sector linkages is yet to develop both within government and the private sector.

The mining of mineral commodities is important and makes significant contributions to GDP and export revenues of Kazakhstan, Kyrgyzstan and Tajikistan as well as in other countries of the Former Soviet Union (FSU). The FSU countries led by Russia and Kazakhstan are major international suppliers of raw and processed minerals. The region produces mineral commodities mainly for export, and the output of mineral commodities is significantly influenced by economic conditions in the rest of the world. China and the European Union (EU) are particularly significant target markets (United States Geological Survey (USGS) 2012).

Kazakhstan is a leading supplier to Europe and Central Eurasia of uranium (36% of the world production); the third ranked producer of chromium (13%); and the fourth ranked producer of titanium sponge (17%), rhenium (6%), and magnesium metal (3%). It is also a significant producer of other mineral products including barite, cadmium, copper, ferroalloys, lead, petroleum, and zinc (USGS 2011). Kyrgyzstan is a significant producer of gold, antimony metal, mercury ore and metal and uranium amongst countries in the region (USGS 2011). Tajikistan is a significant producer of antimony ore (USGS 2011). Both countries produce a range of other mineral commodities as details below in Table 4.

There is a counter-intuitive trend occurring in coal production in the region. While all countries in the EU have reduced their combined coal production, the Commonwealth of Independent States (CIS) countries increased their coal production by 14.7% (USGS 2011). Moreover, Kyrgyzstan and Tajikistan made concerted efforts to switch their energy-intensive enterprises to coal from natural gas, in part because natural gas is more costly and entails regular conflicts with gas producer Kazakhstan, Uzbekistan, and Russia.

Table 4. Production of selected mineral communities, 2011 (thousand metric tons unless otherwise specified) (USGS 2011)

	Kazakhstan	Kyrgyzstan	Tajikistan	Europe & Central Eurasia total	World total
Aluminum, Alumina	1670	0	0	12800	91800
Aluminum, Bauxite	5495	0	0	13000	252000
Aluminum, Primary3	249	0	278	9110	44300
Antimony, metal content, (metric tons)	800	1500	2000	10600	185000
Chromite, mine output, gross weight	3800	0	0	4490	29900
Copper, Mine output, metal content	417	0	0	2050	15900
Copper, Metal, refined Primary3	338346	0	0	3300	16600
Gold, mine output (kilograms)	36670	21000	2240	379000	2670000
Iron ore, mine output, metal content	14100	0	0	140000	1420000
Pig iron and direct-reduced iron	3141.2	0	0	179000	1180000
Steel, crude	3699	0	0	293000	1520000
Lead, Mine output, metal content	346	0	0.8	376799	4730
Lead, Metal, refined Primary3	111249	0	0	725119	5090
Manganese ore, mine output, metal content	390	0	0	9231	15800
Mercury, metal content(metric tons)	0	250	4	305	1850
Nickel, Mine output, metal content	0.5	0	0	31084	2910
Silver, metal content, (metric tons)	644676	0	2652	4760	82800
Titanium (mtr tons), Ilmenite, TiO2 content	15000	0	0	310000	4510000
Titanium (mtr tons), Metal sponge, metal content	20700	0	0	54700	123000
Zinc, (metric tons), metal content	420000	0	0	1440000	12300000
Uranium, U3O8 content, (metric tons)	22939	2385	0	33200	63000

4.1.1 Kazakhstan

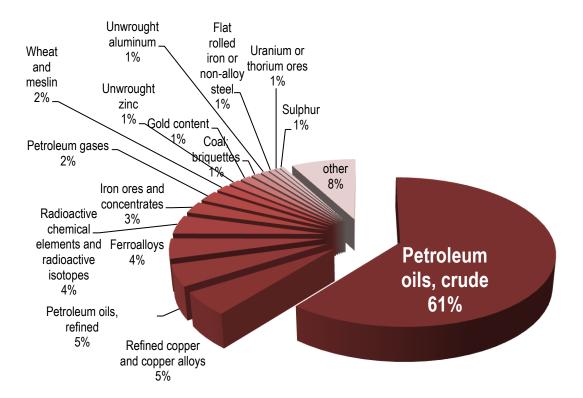
Kazakhstan's mining industry accounts for approximately 27% of the Kazakhstan's GDP. Kazakhstan ranked second only to Russia among the countries of the FSU in the quantity of its mineral production. The country is the leading uranium producer in the world (36% of world output), and its production volume amounted to 22,939 t (U_3O_8 content). As of 2011, Kazakhstan had 629,000 t of known recoverable resources of uranium, or 12% of the world resources and the second largest supply of uranium resources after Australia. The reserves of the country are rated fourth in the world in copper, sixth in zinc, seventh in cobalt and cadmium, eighth in gold and manganese ore in gross weight (USGS 2011).

In 2012, subsoil users comprised 215 mining enterprises (Ministry of Industry and New Technologies (MINT) 2012).

Mining Sector Contribution in the National Economy

The mining sector of Kazakhstan is oriented towards exports of raw materials and primary metals. The value added by mining and quarrying made up 18.2% of the GDP. Total industrial production was valued at USD\$109 billion, of which USD\$ 68.8 billion (63%) was from mining and USD\$ 13.2 billion (12%) was from metallurgy (including USD\$ 5.4 billion from ferrous metallurgy). Mineral commodity (including hydrocarbons) exports made up 91% of the value of Kazakhstan's total exports. Mineral products accounted for USD\$ 68.3 billion (78%) of total exports, to which metals and metal products contributed USD\$ 11.6 billion (13%) (Kazakhstan Agency of Statistics 2012).

Fig 7. Structure of Kazakhstan Exports in 2010, HS4 Product Classification (Simoes and Hidalgo 2011)



Local Content contribution

The total value of the procurement of all goods, works and services by mining companies (215 companies) was 766.2 billion tenge (US\$ 5 billion) (MINT 2012). The local content or local purchasing component of this expenditure for goods was 57.6 billion tenge (US\$ 376 million) being nearly 14% of the total spend on goods (416 billion tenge, US\$ 2.7 billion). On works and services the local content component was 303 billion tenge (USD\$ 1.98 billion) being 86.6% of the total expenditure of 350 billion tenge (US\$ 2.29 billion).

Sector Development Challenges

One of the key problems in the sector is a low reserve replacement rate compared with the mineral reserves depletion rate (Government of Kazakhstan 2010). The reserve replacement rates are a particular concern for priority metals such as gold, copper, lead and zinc.

Kazakhstan ores are generally of a lower quality than that of the other major producers. As a result of these low quality reserves only 35% of the explored reserves are being exploited. To address this, the government has set as priorities for the sector to develop or acquire technologies for the reprocessing of mineral resources and anthropogenic mineral formations.

Other issues facing the development of the sector, as identified by the government, include:

- Lack of geological infrastructure, including specialised service organisations in research, design, engineering, airborne geophysical, geochemical, core storage and other;
- Lack of quality analytical geological information. A large amount of geological reports remain classified and are closed to public access;
- Shortage of qualified mining sector professionals; and
- Lack of technical standards for exploration, and scientific and applied research.

Major players

The Government holds a stake in all significant and strategic mining projects. Its shareholding in particular enterprises is usually held by the Sovereign Wealth Fund Samruk Kazyna and its mining subsidiary Tau Ken Samruk. Some of these investments are included below together with other major companies operating in the sector.

Kazakhmys is a UK-registered copper mining company whose main assets are located in Kazakhstan. It's headquartered in London, United Kingdom but its main subsidiary, Kazakhmys Corporation, is located in the city of Karaganda, Kazakhstan. Kazakhmys is the largest copper producer in Kazakhstan and one of the world's largest. It had a market capitalisation of US\$ 6.6 billion as at 31 December 2012. Kazakhmys listed in London in October 2005 and their shares can be traded in London, Hong Kong and Almaty. The holding company has a market value of US\$ 1,546 million as at 31 December 2012 and contributed US\$ 548 million to the Group's EBITDA. Kazakhmys has two significant shareholders, Mr Vladimir Kim, the Chairman, holds 28%, and the Government of Kazakhstan holds 26%.

Kazakhmys is the dominant producer of copper ore and metals in Kazakhstan. The company operates 17 mines, 10 concentrating plants, and two smelting and refinery plants. In 2011, 303,000 t of copper contained in concentrate and 301,000 t of refined copper cathodes were produced, which respectively accounted for about 73% of the copper in concentrate and 89% of the refined copper produced in Kazakhstan. The average copper grade of crude ore produced by Kazakhmys decreased to 1.01% from 1.09% in 2010, resulting in a 6% decrease in the copper content of ore production, despite a 1.5% increase in crude ore production. One of the new projects under development is Bozshakol Mine. Production at Bozshakol is planned for 2015, and the project is expected to produce 100,000 t/yr of copper in concentrate through 2030.

ENRC, a UK-listed Kazakhstan focused integrated mining group with interests and operations in China, Russia, Brazil and Africa. The company has over 70,000 employees, of which 65,000 are located in Kazakhstan, and annual revenue of US\$ 7.7 billion in 2011. The company is the

world's largest producer of ferrochrome on a chrome content basis, the largest iron ore mining and processing enterprise in Kazakhstan and one of the world's significant iron ore exporters by volume. It has sizeable proven reserves of chromium, manganese, iron ore, bauxite and coal. Among its key shareholders are Kazakhmys (26%) and the government of Kazakhstan (11%).

Kazzinc Ltd is the largest producer of zinc in Kazakhstan. In 2011, the company produced 300,800 t of zinc metal, of which 246,000 t was produced from Kazzinc's own mine output. Its other products include copper, lead, gold, silver, cadmium, indium, thallium, tellurium, selenium, sulphuric acid, aluminum, sodium antimonate, mercury, zinc sulphate, and zinc oxide. The company was founded in 1997 and is based in Ust-Kamenogorsk, Kazakhstan. Kazzinc Ltd operates as a subsidiary of Glencore International plc. Glencore owns 69.6% and the Government of Kazakhstan holds a 29% stake.

JSC ArcelorMittal Temirtau is the largest enterprise in the mining and metallurgical sector of Kazakhstan that is an integrated mining and metallurgical complex with its own coal, iron ore and source of power supply. JSC ArcelorMittal Temirtau produces and sells longitudinal welded tubes and pipes for the mechanical industry, and water and gas distribution applications primarily for in Kazakhstan. It also exports its pipes and tubes to the member countries of the CIS. The company was founded in 1960 and is based in Temirtau, Kazakhstan. JSC ArcelorMittal Temirtau operates as a subsidiary of Luxembourg based Arcelor Mittal.

Kazatomprom. Within the past 8 years, Kazakhstan rapidly increased investment in its uranium industry, and the country's production of uranium oxide increased from 3,300 t in 2003 to 22,939 t in 2011. Foreign direct investment made up about 66% of uranium mining investment in 2011 and was accomplished mainly through establishment of joint ventures with the state-owned company Kazatomprom JSC. Kazatomprom is a state-owned company in Kazakhstan, which operates in the field of uranium and nuclear fuel cycle services, production of beryllium, tantalum and niobium, and power production. Kazatomprom was founded in 1997 and is headquartered in Almaty. 100% of the company's stock is held by the Government under the National Welfare Fund Samruk-Kazyna.

Bogatyr Komir operates in Kazakhstan in open coal production. The company is responsible for 70% of the total coal produced in Ekibastuz coal basin. The shareholders of the company are Russian RUSAL and the Government of Kazakhstan.

Other large metallurgical enterprises in Kazakhstan include:

- Ust-Kamenogorsk Titanium-Magnum Integrated Plant;
- Temirtau Electrometallurgical Integrated Plant;
- Taraz Metallurgical Integrated Plant; and
- KSPSteel.

4.1.2 Kyrgyzstan

During the Soviet period, Kyrgyzstan's mining industry was based on mining of antimony, mercury, rare-earth elements and uranium. The country was a main producer of mined mercury and of mercury and antimony metal in the Soviet Union. During 20 years of the country's independence, Kumtor mine was the only successful mining project developed. Several gold/copper deposits are in an advanced stage of pre-development: Andahs, Bozymchak, Ishtamberdy, Kumbel, Karakazyk and Jamgyr. Little exploration work has been carried out and there have not been any new significant discoveries (Sariev 2012).

Gold mining industry. Registered gold reserves as of November 1, 2012 included 60 gold deposits amounting to 448 tons, including 443 tons for 36 primary deposits, and 5 tons for 24 alluvial gold deposits. Despite the vast amount of proven and confirmed reserves of precious metals and minerals, the country currently only has two gold mining companies operating in the country, Kumtor and Makmal (respectively, 15-18 tons per year and 0.2-0.5 tons per year).

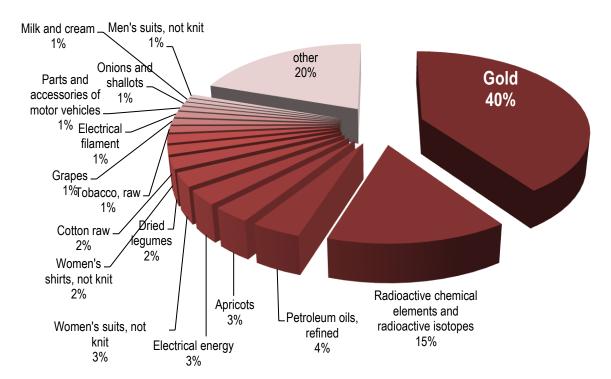
There are also small gold mines that are operational: Jamgyr, Tereksai, Solton-Sary and Ishtamberdy (Agency for Geology and Mineral Resources 2013).

Non-ferrous metals. The raw materials base of the industry includes mercury and comprehensive mercury-antimony-fluorite ore deposits of Khaidarkan and Novoye, which are developed by the Khaidarkan Mercury Plant. Explored reserves of antimony, in antimony and complex ores of the Kadamjai, Terek, Khaidarkan, Novoye, Kassan, Severnyi Aktash, and Abshir deposits, collectively total 265 thousand tons. Explored reserves of uranium have been exhausted and in the past 30 years, the Kara Balta Mining Plant has been processing raw materials imported from Kazakhstan. The plant does not have its own raw materials base and its future depends on the ability to secure imports of uranium. Large reserves of tin and tungsten are concentrated in the Trudovoye, Uchkoshkon and Kensu deposits and collectively amount to 208 thousand tons of tin and 125 thousand tons of tungsten. A development plan is under preparations for the Trudovoye deposit, with possible production to start no earlier than 2013 (Agency for Geology and Mineral Resources 2013).

Mining Sector Contribution in the National Economy

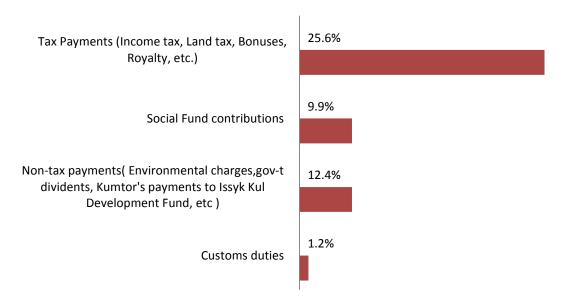
Mineral commodities are the backbone of the industrial production of the country, accounting for 58% of industrial production in 2011. The mining industry contributed 14 % of GDP and 15 % of tax and customs revenues in 2011. Production of mining and metallurgical industries comprised more than 50 % of export revenues. The mining industry employs more than 15,000 people, with average monthly wage about four times higher than the average wage in the country.

Fig 8. Structure of Kyrgyzstan Export in 2010, HS4 Product classification (Simoes and Hidalgo, 2011)



Kumtor alone accounted for more than 20% of all tax receipts (State Tax Inspection 2012) and 11.7% of the country's GDP (EITI Kyrgyzstan 2012) in 2011.

Fig 9. Percentage of EITI Kyrgyzstan companies'⁴ contribution to the countries revenue by type of payment in 2011



Source: EITI Kyrgyzstan 2012

Social contributions

In addition to taxes and payments under the tax legislation, the subsoil legislation includes a 'social package' requirement. The social package is a set of measures implemented by the subsoil user's investment aimed at developing the local community, and addressing the most pressing issues of local importance. Criteria for investment include (Sariev, 2012):

- Education of the local population in various technical specialties;
- Employment of local population; and
- Development of rural infrastructure.

Mining sector challenges and priorities

The Government's priority, as evident in the National Development strategy 2013-2017, is to increase revenue and economic benefits from mining through:

- Production diversification and integration into the world economy;
- An improved investment climate;
- Introduction of new and green technologies; and
- Better balance of interests of mining companies, the government and communities.

One of the policy measures is the development of a medium-term strategy for development of the mining industry for 2013-2015. The Ministry of Economy is responsible for the strategy, and is supported by the USAID project REFORMA, Deloitte consultants and the Kyrgyz Mining Association.

⁴ 56 companies were involved in the EITI in 2011; their industrial output accounted for 96.5 % of all the country's mining sector output.

The government has also included a number of mining projects as priority investments in the National Development Strategy 2013-17. The sources of funding of such investments and the mechanisms for their implementation are unclear. The government holds a stake in a number of the projects listed below through the state—owned enterprise KyrgyzAltyn. Private companies hold licenses for the majority of these deposits.

Table 5. Priority Investment Projects in the Mining Sector

Project name	Total estimated cost (US\$ million)	Implemen- tation time frames
Kumtor (gold 302 tons, 18-20 tons annually), 81% extracted, 245 tons	350	2013-2026
Jerooy (gold 80-100 tons, 15-18 years), gold production in 2016 70-85 tons	450	2013-2028
Taldy Bulak Levoberezhniy (gold 80 tons)	300	2014-2028
Taldy Bulak (gold, 100 tons, copper, 400 thousand tons)	500	2013-2033
Bozybmchak (gold, 30 tons, copper – 203 thousand tons), production of gold and copper in 2014 26 tons	280	2014-2027
Ishtamberdy (gold – 30 tons), production of gold 26 tons	100	2013-2025
Kuru Tegerek (gold, 10 tons) production of gold and copper in 2015 8.4 tons	200	2015-2018
Terekkan + Terek + Perevalnoye (80 tons). Production of gold in 2016- 2017 70 tons	200	2016-2018
Togolok + Jangart (gold 30 tons). Production of gold in 2016 25 tons	200	2016-2018
Charaat Group of deposits (gold, 100 tons). Production of gold in 2016 83 tons	300	2016-2018
Shiraljin (gold, 22 tons). Production of gold in 2016 19 tons	150	2016-2018
Trudovoye, Kensuu (tin 148 thousand tons + 29 thousand tons, tungsten 95 thousand tons)	150	2013-2020
Zardalek (aluminum, 150 million tons)	50	2016-2017
Tuyuk – Kargasha (hard coal, 100 million tons)	100	2016-2017
Kara Keche (brown coal, 188 million tons)	100	2016 -2020
Sulukta, field 11 (brown coal, 105 million tons)	50	2014-2017
Total	3130	

Major Players

Some large companies are partially owned by the state represented by a state owned enterprise Kyrgyzaltyn (for example 33% in Centerra Gold - Kumtor; 40% in Altynken; and 40% in Jerooialtyn). Kyrgyzaltyn operates another mining operator in Kyrgyzstan, the Makmal Mine.

The largest of the operating mines is the Kumtor gold mine, which is located about 350 kilometres southeast of Bishkek. The Kumtor Mine is operated by Centerra Gold Inc. of Canada. In 2011, Centerra produced 6.02 Mt of gold ore and extracted 18.1 t of gold content. Kumtor contributed 11.7% to the GDP of Kyrgyzstan and 26.1% to the total industrial production of the country (Kumtor, 2012).

The companies that are conducting pre-development works include Kazakhmys (Bozymchak deposit), Full Gold Mining (Ishtamberdy deposit), Robust Resources ⁵(Andash deposit), and Zi Jin (Taldy-Bulak Levoberezhnyi deposit). Moreover, there are many Chinese companies working at small gold deposits.

The largest companies involved in exploration are Manas Resources (Shambesai deposit), Kentor Gold (Bashkol deposit), Highland Exploration (Kyzyl-Unkur deposit), Gold Fields (Taldy-Bulak deposit), Stans Energy (Kutesai deposit), and Chaarat Gold.

In processing and refining, only the Kara-Balta mining plant is currently operating. It is owned by Kyrgyzaltyn and refines Kumtor gold.

4.1.3 Tajikistan

Established during the Soviet era, the mining industry of Tajikistan served as a source of raw materials for the processing industry in other regions of the Soviet Union. Tajikistan's mineral industry had been mining mineral ores and producing mineral products, which included aluminium, antimony, arsenic, boron, celestite, cement, coal, construction materials, fluorspar, gold, lead and zinc, mercury, molybdenum, natural gas, petroleum, salt, semiprecious and decorative stones, silver, strontium, tin, tungsten, and uranium (USGS 2011). In many cases, Tajik mining companies produced ore concentrates, which were sent for further processing to other parts of the Soviet Union. After the collapse of the Soviet Union, the producing Tajik mining industry lost their market. Some mines have ceased to exist and others considerably reduced their production or shifted to other production.

The Tajikistan Aluminium Co. (TALCO) smelter (formerly the Tajikistan Aluminium Smelter (TadAZ)) is the country's only large-scale production enterprise in the mineral sector. Tajikistan relies heavily on the smelter's earnings. The aluminium plant was launched in 1975. It is one of the ten largest aluminium smelters in the world and provides up to 70% of the country's foreign currency earnings, consuming 40% of the country's electrical power. Tajikistan does not mine alumina but imports the raw material through tolling arrangements.⁶

Tajikistan has significant mineral resources, which include a large number of rare metals, rare-earth elements and uranium, which have potential for future development. Currently, there are more than 600 explored deposits and over 800 occurrences with demonstrated potential for further development. The country has not engaged in the development of these resources as it lacks access to international capital markets and relies almost exclusively on concessional financial assistance from international financial institutions and bilateral donors.

Recently, the Government of Tajikistan has been actively seeking to reform its mining sector. The most crucial step was undertaken when the Government decided to put the Konimansur silver deposit out for tender with the IFC as its transaction advisor. Located in the north of Tajikistan close to the border with Uzbekistan, the deposit is one of the largest in the world. Various estimates put the size of the deposits at around 50,000 tons, and the total investment required to develop them will likely be more than US \$2 billion (World Bank 2012). The Konimansur silver deposits are of high grade and include significant quantities of zinc and lead ores.

Mining Sector Contribution in the National Economy

The country's economy depends heavily on the production of aluminium and cotton, and exports of these commodities. Exports of aluminium provide over 50% of the country's export revenue.

⁵ Australian Kentor Gold sold Andash mining to Robust Resources in May 2013 as the company was unable to start the development of the deposit due to a local community conflict.

⁶ Tajik aluminum exports fall to 221,500 tons in Jan-Oct 2012, Asia Plus, http://news.tj/en/news/tajik-aluminum-exports-fall-221500-tons-jan-oct-2012

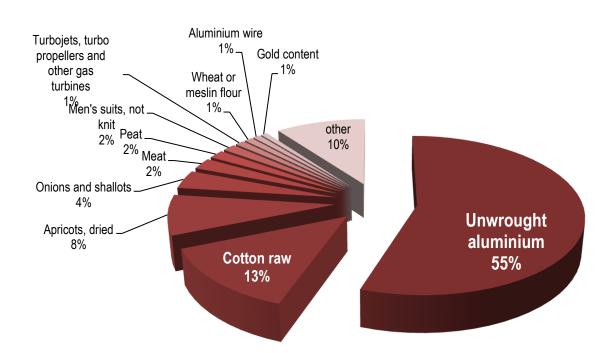


Fig 10. Structure of Tajikistan exports in 2010, HS4 Product Classification (Simoes & Hidalgo 2007)

Potential sector revenues remain lost to the central government, as they lack capacity to collect taxes and enforce mining sector legislation that is currently in place. Tajikistan is not well poised to take advantage of the global mining investment boom without a significant transformation of the operation of its mining sector (World Bank 2012).

Sector Development Challenges

According to the State Committee for Investment and State Property Management, GosKomInvest (Saidov 2011), the mining sector faces the following key challenges:

- Complex structure of sector administration, poor allocation of power among government bodies;
- Imperfect laws and lack of clear and transparent procedures for the acquisition of mineral resource rights;
- Ineffective laws associated with investment protection and volatility of mining legislation;
- Lack of a well-defined concept and comprehensive program for the industry's development;
- Lack of qualified mining specialists and managers; and
- Inadequate infrastructure and power supply.

Major Players⁷

Tajik-Chinese Joint- venture Zerafshan, one of the largest companies in the industry, has an almost complete production cycle: mining, processing and metallurgy. The main mineral base of this enterprise is the Jilau and Taror primary gold ore deposits in Sughd region. The gold production in 2012 was 1510 kg. Since 2007, the Chinese ZiJin Mining Group Co. Ltd, which has a 75% stake in the joint venture, has invested US\$ 144 million in the modernisation of the mine, thus increasing the output capacity of this gold mining company. Part of these investments was used to build a refinery, with first production in 2013. The design annual capacity of the refinery is 5000 kg of gold 9.

JV Aprelevka is a Tajik-British mining company, located in the north of the country, in the village of Kansai, in the Sughd region. Until 1985, the mine produced lead and zinc ores and in 1985, Kairakkum gold mine was constructed on the basis of gold deposits, which served as the base for creation of Aprelevka JV in 1996. Reconstruction of the gold processing plant started in 2001 and the first gold bar was produced in September 2002. The ore is mined by the open pit method. To date, the company has obtained more licenses for exploration in several prospective areas. Currently, it plans to carry out additional exploration work to increase the gold reserves at existing Aprelevka deposit.

Pakrut LLC, a mine 100% held by the British company Kryso Resources Ltd, was established in 2003 and operates the Pakrut deposit located on the southern slope of the Gissar range, 107 km from the city of Dushanbe. The geological exploration at Pakrut deposit started in 2004. The pre-gold reserves at the deposit, approved by the State Reserves Committee (CRC) of the Republic of Tajikistan, were 28.1 tons. Currently, the reserves of Pakrut gold mine are estimated to be 100 tons.

The gold mining company Tilloi Tojik (Tajik Gold), located in the Khatlon region, is a state-owned gold company. The company is located in a mountainous area of Southern Tajikistan. The gold extracted by Tilloi Tojik is mainly used to replenish country's gold reserves.

Adrasman lead-zinc mining plant, 100% owned by Kazakh company KazInvestMineral, specialises in the production and processing of silver-containing lead ores to produce a lead concentrate, which is sent for processing to Shymkent Metallurgical Plant in Kazakhstan. The plant is located in the village of Adrasman in Sughd region, 70 km away from the city of Khujand. The resource base of the plant is the East Konimansur deposit. The facilities constructed at the deposit are an underground mine, a concentrator plant, motorised transport shop, electrical shop, etc.

Anzob Mine (now the Tajik-American Limited Liability Company) is located in Sughd province on the northern slope of Gissar range in Central Tajikistan. The company specialises in underground mining and milling producing a mercury-antimony concentrate. The antimony grade in the concentrate is 40% to 60% and the mercury grade is up to 1%. The design throughput capacity of the mine is 700 thousand tons of ore and more than 30 thousand tons of mercury-antimony concentrate per year. The average actual volume of ore mining and processing is 350 thousand tons per year. The main processor of the produced concentrate was Kadamjai Antimony Plant located on the territory of Kyrgyzstan, but in recent years, the products are being exported to China.

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⁷ Information drawn from Tajik Development Gateway, http://www.tajik-gateway.org/wp/

⁸ http://news.tj/ru/news/sp-zarafshon-uvelichivaet-dobychu-zolota-i-sokrashchaet-proizvodstvo-serebra

⁹ http://news.tj/ru/news/affinazhnyi-zavod-sp-zarafshon-zarabotal

4.2 Mining Sector Investment Climate, Regulation and Institutions

This section describes the investment climate in each country with emphasis on the mining sector. It also provides a brief analysis of laws and regulations that regulate mining investment, such as subsoil law, concessions law, production-sharing contracts law, as well as key government bodies and civil society organisations involved in the mining sector.

The level of foreign direct investment (FDI) in Central Asia has grown rapidly in recent years. FDI has been focused on relatively few sectors and countries due to the availability of natural resources. Kazakhstan holds the largest stock of FDI in the Central Asian Region (including Mongolia); in 2011, 56% of FDI inflows went into Kazakhstan, 3% to Kyrgyzstan and less than 1% into Tajikistan (UNCTAD 2013).

Even though investment policy frameworks have partially improved, Kazakhstan, Tajikistan and Kyrgyzstan need to attract more and better FDI (OECD 2013). One of the key policy tools that governments can use to increase the benefits of mineral commodity FDIs is to forge linkages between foreign businesses and local companies, to maximise spill-over effects supporting economic development. According to an OECD assessment (2013), investment promotion agencies in Central Asia do not yet use such linkage programmes to actively attract foreign investors while also supporting the development of small and medium-sized enterprises.

Table 6. Summary of tax and non-tax payments of mining companies in Kazakhstan, Kyrgyzstan and Tajikistan (Baker Tilly 2013)

	Kazakhstan	Kyrgyzstan	Tajikistan				
Corporate taxa	Corporate taxation						
Profit tax	20%	10% - standard rate; 0% - for gold mining companies	For manufacturing companies 15% for 2013- 2014; 14% for 2015-2016; 13% from 2017. For other entities 25% for 2013-2014; 24% for 2015-2016; 23% from 2017. The amount of profit tax cannot be less than 1% of gross revenue.				
VAT	12% standard rate 0% export of goods; International transportation.	12% standard rate; 0% - export of goods, except gold; international transportation	18% - standard rate; 0% - export of goods except row cotton and fibre; precious stones and Aluminium, Ferrous and other metals. Reduced 5% can be applied by public catering, trade and procurement, and construction companies.				
Social Tax, Pension and Social Security Contributions	11% tax, 5% contribution to Social Security Fund	17.25% for national personnel 3% for expatriate personnel	25%				
Subsoil legislati	ion						
Bonus	Subscription bonus – onetime payment for the right to use the subsurface. Rates are established by the Government. Commercial discovery bonus is fixed payment when commercial	Bonus is one-time payment for the right to use the subsurface. Rates are established by the Government.	Subscription bonus – onetime payment for the right to use the subsurface. Commercial discovery bonus is paid when commercial discovery is announced. Rates are determined by the Government.				

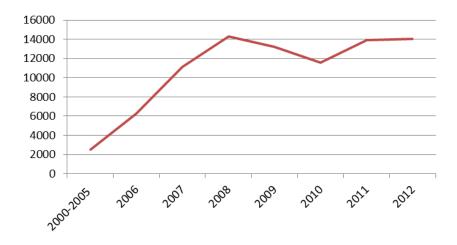
	Kazakhstan	Kyrgyzstan	Tajikistan
	discovery is announced. Rate is 0,1% of the value of proven reserves.		
Royalty	N/A	Monthly fixed payment at percentage on gross proceed	Monthly fixed payment at percentage on gross proceeds
Revenue tax for gold mining companies	N/A	1 to 20% of gross proceeds of gold ore, concentrate or alloy, depending on the price of gold ¹⁰ .	N/A
Payment for compensation of historical costs	Fixed payment for compensation of exploration and development costs.	N/A	N/A
Subsoil Use Tax/ Mineral Extraction Tax	Subsoil Use Tax is levied on extraction of minerals (production or extraction volume). Rate is differentiated depending on the type of minerals.	Non-tax payment for holding license is levied at he rates depending on the type of minerals and the period of use for the right of use the subsurface.	N/A
Subsoil User' Excess Profit Tax	Subsoil users should pay additional surtax. Rates are differentiated depending on net profit level.	N/A	N/A

4.2.1 Kazakhstan

Investment Climate

The global economic and financial crisis highlighted Kazakhstan's dependence on primary industries and commodity exports, and the need to diversify the economy towards value-added industries. This is demonstrated by declining trends in FDI during 2008-2010, shown in Figure 11.

Fig 11. Kazakhstan's FDI inflows, 2000-2012 (US\$ million) (UNCTAD 2013)



 $^{^{\}rm 10}$ At current prices, the tax rate would be 3%

Regional economic integration has been enabled by the establishment of a customs union between Kazakhstan, Russia and Belarus in 2010. The next stage of economic integration was initiated in 2012, to create a common economic space within the Eurasian Economic Community. The Eurasian Economic Commission, the supranational body of the community, is expected to gradually take over a number of responsibilities from the national authorities in areas such as competition policy, technical regulations and environmental standards.

Bilateral World Trade Organization (WTO) accession talks are still continuing and expected to be finalised by the end of 2013. One of the remaining discussions focuses on local content requirements in the mining and hydrocarbon industry. WTO rules limit member countries' policy discretion to impose performance requirements. The WTO Agreement on Trade-Related Investment Measures (TRIMS) specifically prohibits the application the imposition of quantitative local content restrictions.

Kazakhstan's legal environment with respect to investments continues to remain complex and challenging despite reforms to its legal system. Over the last few years there have been significant improvements in crucial areas such as securities legislation, concessions, derivative transactions, competition, insolvency and anti-money laundering legislation. Notwithstanding such improvements, Kazakh commercial laws still fall short in certain respects of standards that are generally acceptable internationally. In company law, the major shortcomings are found in the legislation on 'disclosure and transparency' and on 'ensuring the basis for an effective corporate governance framework.

In terms of access to finance, 31% of firms identified this issue as a major constraint to growth (Business Environment and Enterprise Performance Survey (BEEPS) 2009). Nonperforming loans (NPLs) remain high, at 37% of total loans as of the end of 2012 compared to 35% at the end of 2011 (EBRD 2010).

Subsoil Legislation

The main piece of legislation governing the mining sector is the 2010 law On Subsoil Assets and Their Use. This law, which replaced a 1995 version, brought major changes to the legislative environment for the mining sector, and increased the government's control over the sector. Notable changes compared with the previous legislation included the abolition of single contracts for exploration and development of a mineral resource. The subsoil law also grants the government the right to unilaterally abrogate contracts if it deems it to be in the national interest, and gives local authorities powers to terminate contracts if a company is found to be violating contractual provisions.

One of the most important aspects of the legislation governing subsoil use is that all companies in the natural resource sector are being required to meet stringent conditions relating to their use of local (Kazakh) content – goods, services and labour. These requirements were set out in a 2009 document (Concept Paper on Further Development of Local Content) and were further enhanced in the 2010 subsoil law. The latter grants the government greater powers to decide how local content requirements for each contract be calculated, as part of efforts to promote the use of Kazakhstani goods and services and help to diversify the economy. In addition, companies are now required to follow strict procurement rules when purchasing goods, services and labour.

Even though most extractives companies have clauses in their agreements specifying that their contracts are protected in the event of legislative changes, the subsoil law contains an article that requires all companies – including those with such stability clauses - to adhere by the local content regulations. This has meant that most companies have had to incorporate new local content requirements into their contracts.

The government has set ambitious targets for the next few years relating to use of local content. In the Local Content Program for 2010-2014 (Government of Kazakhstan 2010), the 2014 subsoils (oil and gas and mining) target is to achieve 16% local content in goods and 85% in works and services. According to the Ministry for Innovation and Trade's (MINT) Local

Content 2012 report, the actual total procurement of goods, works and services by subsoil mining companies (215 companies) amounted to 766.2 billion tenge (US\$ 5 billion). Of this, purchasers from domestic producers amounted to 360.7 billion tenge (US\$ 2.35 billion) (47.1%). In particular, the purchase of goods amounted to 416.3 billion tenge (US\$ 2.7 billion)(proportion of local content was 13.8%, or 57.6 billion tenge); and of works and services amounted to 350 billion tenge (US\$ 2.28 billion)(share of local content was 86.6%, or 303 billion tenge (US\$ 1.98 billion)).

The Kazakh authorities regularly warn that extractives companies are falling short of their obligations in this respect, and impose penalties ranging from fines to removal of licences. Companies face a number of difficulties in ensuring that they meet their local content requirements. These include the substandard quality – or, simply, lack of availability – of Kazakh goods, owing to the underdeveloped manufacturing base, and the absence of the necessary technical and managerial skills in the local workforce.

Regulations are also being tightened in the environmental sphere, amid growing concern over the mining sector's environmental record. The most recent legislation was approved in October 2011, and provides for mining companies to be fined if they fail to implement a waste-use programme (which must itself be approved by the government) and, in the event of a second violation, to have their facilities closed. Mining companies engaged in extraction work that involves tailings are particularly affected. The government also has the right to revoke a company's permit for waste emissions, in effect preventing them from operating.

Concessions. Kazakhstan has adopted a policy of promoting public-private partnerships (PPP), and as a result it has undertaken efforts to reform concession enabling legislation, in particular, the amendments in 2008 to the 2006 Concessions Law No. 167-III. In addition, a National PPP Unit was set up in 2008 under the Ministry of Economy to improve the PPP institutional framework. The current Kazakhstan Concession Law enables the implementation of concessions in infrastructure including those based on open tendering. The July 2008 amendments to the Concession Law addressed a number of major flaws, relating to definitions, model contract provisions, register of concessions, deadline period to conclude concession contract, and limits to state guarantees. Overall, the amended Concession Law is now seen as adequate; however, the law still falls short in certain aspects of internationally acceptable standards (EBRD 2010).

Corporate governance. The principal legislation governing corporate governance in Kazakhstan is the Law on Joint Stock Companies (JSC Law), dated 13 May 2003 as amended. The EBRD's 2007 Corporate Governance Sector Assessment assessed the quality of corporate governance legislation in force in November 2007, and Kazakhstan was found to be in "medium compliance" with the relevant international standards (OECD Principles of Corporate Governance) (EBRD 2010).

Public Procurement. Public procurement law in Kazakhstan is regulated by the Law on Public Procurement enacted on 29 December 2009. In the EBRD 2010 assessment, the law scored "low to medium compliance". However, Kazakhstan, based on the 1994 UNCITRAL Model Law, scored very high in the competition indicators (90% compliance rate), with "average medium" compliance with international public procurement standards (69% compliance rate). Local public procurement policy focused on adopting transparency safeguards and providing enforcement, although it is less comprehensive when it comes to accountability, efficiency, and economy instruments (EBRD 2010).

Institutions

Kazakh government regulates the mining sector at three levels: by central government bodies, at the local level (within a centrally established regulatory framework), and through ownership of government stakes in mining projects (Kazakhstan Association of Mining and Metallurgical Enterprises 2012). These are listed in Tables 7-9 below.

 Table 7. Level 1 - Central government bodies (ministries and agencies)

Area of regulation	Government Body	Key Legislation
SUBSURFACE USE	Ministry of Industry and New Technologies (MINT), and MINT's Geology Committee and Subsoil Use department	Law "On mineral resources and subsurface use" and over 70 regulatory legislation acts
ENVIRONMENT AND INDUSTRIAL SAFETY	Ministry of Environmental Protection, Ministry of Agriculture, Ministry of Emergencies	Ecological Code, Land Code, Water Code, Forestry Code, Law "On industrial safety"
INVESTMENT ACTIVITY	MINT and Ministry of Economic Development and Trade	State Program FIID, Industrial Program, Law on Investment, Law on Free Economic Zones
LOCAL CONTENT	NADLoC (National Agency for the Development of Local Content) MINT, Local Content Department	Law "On mineral resources and subsurface use" and over 70 regulatory legislation acts
LABOUR RELATIONS	Ministry of Labor and Social Protection	Labour Code, General and Industrial Agreement on social partnership
INNOVATION ACTIVITIES	MINT and MINT's Development Institutes and Industrial Department	SP FIID, Industrial Program, Law "On State support of industrial and innovation activity"
TAXES AND PAYMENTS	Ministry of Finance, Ministry of Economic Development and Trade, Ministry of Environmental Protection	Tax Code, Law "On transfer price formation", Ecological Code
TRANSPORT AND LOGISTICS	Ministry of Transport, Agency for Regulation of Natural Monopolies, Kazakhstan Railway	Law "On transport, Law "On natural monopolies and controlled markets

Table 8. Level 2 - Local level, within a centrally established regulatory framework

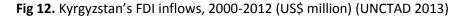
Organization	Responsibility
Production and Entrepreneurship Departments	Implement government regulation in direct contact with mining
of Regional/Local Akimats (Local Government)	and other mining infrastructure organisations
Regional Socio-Entrepreneurial Corporations –	Subsidiaries of JSC Tau-Ken Samruk with status of national
Local Representations of Tau Ken Samruk	companies implementing at regional level, SEC and Tau-Ken
	Samruk have some overlapping functions

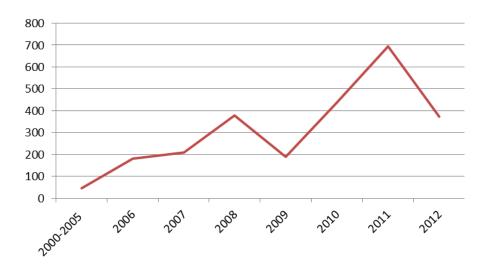
Table 9. Level 3 – Ownership of government stakes in mining projects

Organization	Responsibility
Sovereign Wealth Fund Samruk-Kazyna	Through Samruk-Kazyna, the Government implements its priority
	right to gain rights for subsurface use
National Mining Company Tau-Ken Samruk	Samruk-Kazyna delegates the management of government stakes in
(100% subsidiary of Samruk-Kazyna)	the mining sector to Tau-Ken Samruk, in particular for new
	investment projects, with a goal of promoting economic and
	strategic interests of the state; and increasing the potential of the
	mining industry of Kazakhstan by introducing new technologies, and
	increasing effectiveness of the state participation in
	implementation of subsoil use projects
National Exploration Company Kazgeology,	Provides exploration services to replenish stocks of minerals in
100% equity, owned by Samruk-Kazyna,	Kazakhstan in the framework of government policy, under Public-
reports to MINT	Private Partnership arrangements with national companies of
	Samruk-Kazyna JSC and private mining companies

4.2.2 Kyrgyzstan

During the last few years, the government has made a number of efforts to improve Kyrgyzstan's investment climate. The Investment Council was established in early 2007 and has been providing local and international business representatives (representing the mining, industry, agro-processing and tourism sectors) with a forum to discuss the main barriers to doing business with top officials in the government.





According to the National Development Strategy (NDS) 2013-17, the major focus of public authorities will be to create in Kyrgyzstan an environment that is attractive for domestic and foreign investors. Special attention will be paid to development of mining, energy, tourism, agriculture, transport, financial sector, as well as to ventures that are based on new and environmentally-friendly technologies.

In many legal areas, written laws have reached medium compliance with international standards of best practice (EBRD 2011). However, implementation of laws remains highly problematic and investor confidence in the judiciary to enforce laws remains weak.

Under the umbrella of its extensive reform program to streamline the investment climate and promote entrepreneurship in the country, several laws were either adopted or amended in recent years. Some of the most relevant legislation includes the Law on Investments (2003) and the Law on Foreign Investments (1997). The Law on Investments applies equally to both domestic and foreign investors and provides for guarantees against undue government interference in investor affairs, sets out detailed anti-discrimination measures, clarifies the guarantees against unwarranted expropriation and naturalisation, and introduces explicit measures on the right to repatriate funds. Despite the advances, one of the biggest drawbacks of the system is poor implementation capacity (EBRD 2011).

The 2013-17 NDS recognises the mining industry as a strategic sector of the economy and that the government should create a favourable environment for investments into the development of natural resources of Kyrgyzstan. In recent years, community conflicts became a prominent issue in the country's relations with mining investors. The government strategy to address these conflicts amounts to awareness building: "We must ensure that the population is aware that investors bring in significant funds and create new jobs, contribute to regional development and higher standards of living and therefore, the attitude towards investors has to be positive and constructive". No other formal mechanisms to address the issue have been developed by the government.

Subsoil Legislation

The main laws governing the use of mineral resources are the Laws 'On Subsoil' as of 2012; 'On Concessions and Concession Enterprises' as of 1992; and 'On Production Sharing Agreements in Subsoil Use' as of 2002. Additionally, the use of coal and oil and gas resources is regulated by the Law on Coal as of 1998 and the Law on Oil and Gas as of 1999.

The legislation provides the following means of acquiring mineral rights from the state: license, state registration, concession contract, and production sharing agreement. Licenses are the most common instruments issued by the State Geology Agency. The legislation provides for the three types of licenses depending on the type of work: geological exploration work; exploration; and development. Licenses can be obtained on the basis of competitive bidding, auction or direct negotiations. The licensee has an exclusive right to transform the license for geological exploration in the license for exploration work, and then for the development of the deposit (International Business Council 2012).

Legislation provides for a wide range of rights and guarantees to foreign investors, including guarantees of export repatriation outside the Kyrgyzstan, protection from expropriation and compensation of losses to investors, the use of income guarantees, freedom of monetary transactions, etc.

There are no local content provisions in the Subsoil Legislation. Local content requirements may be included in the investment, concession agreements and production sharing agreements with operators. There are no local content provisions in existing investment or concessions agreements. The government can also include local content clauses in competitive tenders for large mining projects. In the case of a tender for the Jerooy gold project (the tender failed in April 2013, the second tender is planned for later this year), requirements for local workforce as well as investment in local social infrastructure – the 'social package' - were included.

Concessions law. The 1992 Law on Concessions and Foreign Concessionaire Entities in the Kyrgyz Republic, as amended, is the main act regulating the legal framework for concessions. The Concessions Law is, however, vague as far as the majority of the concession regime's core areas are concerned. Its scope of application requires significant improvement in some fundamental areas, e.g. the definition of a concession. Moreover, the selection procedure is not detailed. The Concessions Law states that such a procedure, as well as the list of necessary documents to be attached to a bid, is to be defined by the Government. No such document has been identified, nor is it clear whether such documents have general application or are particular to each concession (International Business Council 2012).

Public procurement law. The PPL is based on the 1994 UNCITRAL model law, hence the PPL's basic features are sound but the regulation is only medium compliant with modern international (EBRD 2011). Procurement procedures include open tender, restricted tender, two-stage tender, request for quotation and direct contracting. Open tender is the default procedure. The PPL regulates eligibility and qualification criteria for public procurement procedures. The law determines specific deadlines for some stages in the PP procedure. Domestic preferences may be applied to any kind of procurement contract. The contracting entity is entitled to apply a 20% discount to the offer of any tenderer offering products of domestic origin, or 10% for local tenderers in the procurement of works.¹¹

 $^{^{11}}$ The Law of Kyrgyzstan on Government Procurement, 2004 with 2008 and 2011 amendments

Institutions

The development and implementation of the mining policy in Kyrgyzstan is divided between the Ministry of Economy and the State Agency for Geology and Mineral Resources.

Table 10. Institutions responsible for mining policy in Kyrgyzstan

Organisation	Key Responsibilities
THE GOVERNMENT OF THE KYRGYZ REPUBLIC	 Develops a high- level sector strategy and resolves strategic issues. Manages the State Fund of mineral resources of the Kyrgyz Republic, approves technical regulation for subsoil use, establishes restrictions and prohibitions on the subsoil use in order to ensure national security, public safety and environmental protection.
MINISTRY OF ECONOMY	 Develops state policy Develops the normative & legal acts Develops proposals to improve the legislation Develops investment policy
STATE AGENCY FOR GEOLOGY AND MINERAL RESOURCES	 Implements the state policy Issues, suspends and annuls the right for subsoil use Conducts expert appraisal of mining and geology projects Attracts investment Regulates geological investigation of subsoil Maintains the state balance of mineral resources Supervises the subsoil protection Represents the government in lawsuits Develops technical regulations and rules
STATE INSPECTORATED FOR ENVIRONMENTAL AND TECHNICAL SAFETY	 Ensures environmental and industrial safety Ensures compliance with the environment protection and industrial safety legislation
STATE AGENCY FOR ENVIRONMENT PROTECTION AND FORESTRY	 Environmental expert appraisal functions Ensures implementation of policy and regulation in environmental protection and use of natural resources, environmental safety and environmental management
LOCAL GOVERNMENT ADMINISTRATIONS AND LOCAL SELF- GOVERNMENT BODIES	 Provide land allotment and a right for temporary use of land allotments within the terms defined by a license Ensure free access of licensees to the licensed area Stop unauthorized extraction of mineral resources Control liquidation and conservation of mining and other property Work with local population to stop unlawful interference in subsoil users' operations Organize public environmental expert appraisal of subsoil use sites Register and regulate activities of individual miners

4.2.3 Tajikistan

The government of Tajikistan is generally favourable to foreign investment. Nevertheless, despite some progress in various areas of economic reform the overall business environment is underdeveloped (UNDP 2012). Two of the biggest impediments for investors are a weak judiciary and widespread corruption (EBRD 2012). Mining investment procedures are cumbersome and complicated, and in need of streamlining according to international best practice.

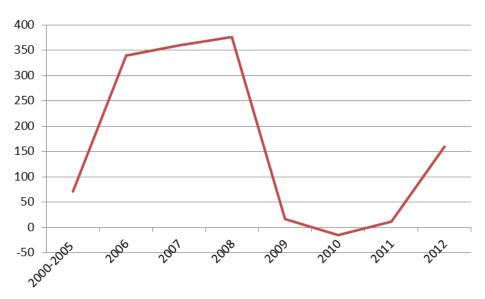


Fig 13. Tajikistan's FDI inflows, 2000-2012 (US\$ million) (UNCTAD 2013)

In the World Bank Doing Business (2011) Report, Tajikistan gained 10 places from 149th in 2010 to 139th in 2011, placing it among the top 10 most improved countries. This improved score was mainly due to changes in legislation, simplified procedures to start up a business, simplified operation requirements and greater investor protection. Implementation remains weak. Areas where Tajikistan continues to score poorly include paying taxes (reflecting overly complex tax laws and a weak tax administration), trading across borders, construction permits and access to finance. Overall, the business environment remains difficult with excessive state intervention in the corporate and banking sectors, lack of competition and many formal and informal administrative barriers.

The implementation of commercial laws by the courts in Tajikistan remains fraught with uncertainties and inefficiencies. This reality deters investors from participating in this kind of market. The EBRD Judicial Decisions Assessment (2012) found the quality and predictability of commercial law decisions in Tajikistan to be well below the regional average, substantially behind Kyrgyzstan and Kazakhstan.

Subsoil Legislation

The principal pieces of legislation governing subsoil use relations in Tajikistan are the Law 'On Subsoil' dated 20 July 1994 (the Subsoil Law) and the Law 'On Production Sharing Agreements' dated 5 March 2007 (the PSA Law). The Subsoil Law establishes a general legal framework for the use of subsoil resources in Tajikistan, while the PSA Law provides the legal framework for entering into a subsoil use contract with the state (UNDP 2012).

Under the Subsoil Law, the exercise of the right to use subsoil is governed by licensing agencies. Subsoil use licenses are issued on behalf of the Government of Tajikistan by the Ministry of Energy and Industry or the Main Geology Administration under the government. Subsoil use licenses, amongst others, include geologic survey and exploration licenses and production/mining licenses.

The PSA Law provides an alternative way of structuring mining (including oil and gas) activities in Tajikistan on the basis of agreed contractual terms. Subsoil users operating under PSAs are taxed based on preferential tax regimes of Chapter 48 of Tax Code effective from January 1 2013. Two types of preferential tax regimes are applicable to investors depending on the production sharing terms of PSA, but under both regimes investors are exempt from profit tax (UNDP 2012).

The government also plans to adopt the law of Tajikistan 'On Investment Agreements' to allow the investors the choice of the scheme of subsoil use in Tajikistan. After the adoption of this law, investors will be entitled to choose the most appropriate form of cooperation with the state, namely, on the basis of a license or a production sharing agreement or under a license and investment agreement.

Concessions. On 26 December 2011 the President of Tajikistan signed a new Law on Concessions. The Law provides transfer of state objects into concession without tender in exceptional cases. The Law regulates relations between participants of the concession, defines competence of the authorised state agency, terms and conditions of concession and transfer of objects, rights and obligations of concessionaire and other issues related to transfer of state object to concession. The Tajik concession law is of low compliance with international standards. As the new Law is a relatively new piece of legislation its application in practice is yet to be assessed (EBRD 2012).

Corporate governance. The basic legislation on corporate governance in Tajikistan is contained in the Law on Joint Stock Companies, which entered into force on 5 March 2007. The 2007 EBRD assessment on corporate governance showed Tajikistan being in very low compliance with the OECD Principles of Corporate Governance, with a number of major shortcomings especially with regard to ensuring the basis for an effective corporate governance framework, disclosure and transparency, and the responsibilities of the boards (EBRD 2012).

 $\textbf{Table 11.} \ \textbf{Institutions responsible for mining policy in Tajikistan}$

Organisation	Key Responsibilities
The Government (President)	Makes all strategic decisions
Ministry of Energy and Industry	A central body of the executive branch responsible for carrying out functions related to development of state policy and legal regulation in the field of fuel and energy and natural resources, including renewable energy, industrial, military-industrial, technical and technological regulation, construction industry, food and processing industry.
	Shares responsibility for subsoil regulation with the Geology Department for all mining projects past exploration stage.
	It is also responsible for coal, gold, and precious metals and is involved in joint ventures in all three areas as well as for licensing of activities in these areas, fragmenting cadastre responsibilities between the Ministry and the Geology Agency.
Main Geology Department under the Government of Tajikistan	Implements state policy, manages work in the field of geological study, rational use and reproduction of mineral resources, and maintains the State geological information register.
	All the exploration work falls under the authority of the Head Geology Agency. The Agency decides on prioritisation of the deposits and prepares the tenders for exploration work.
GosKomInvest (State Investment and State Property Management committee)	Key functions of the GosKomInvest include supporting the development of private sector and attracting foreign direct investments. There is a mining technical working group led by GosKomInvest that aims to make the mining sector more attractive and open to investors.
	Participates in development and implementation of investment programs, develops terms of concession agreements and also represents interests of the state as an owner within the frameworks envisaged by corresponding normative and legal acts of the Republic of Tajikistan.
	Promotes investment opportunities for state programs, priority social projects including loans and grants of international economic and financial institutions and donor countries.
Gosnadzor (State Safety and Inspection agency)	Environmental and Industrial Safety Supervision of mining projects.
Ministry of Finance and taxation authorities	Mining sector taxation policy is the responsibility of the Ministry of Finance, and the Tax Committee under the Government of Tajikistan. The Tax Committee works closely with the Geology Agency and the Ministry of Industry on types and administration of taxes in the subsoil sectors.
	Hosts EITI.
Environmental Protection Committee	Environmental impact assessments and environmental inspections.

5. Industrial and SME Development

Industrial competitiveness is the capacity of countries to increase their presence in international and domestic markets whilst developing industrial sectors and activities with higher value added and technology content (UNIDO 2013). As evident from UNIDO's Competitive Industrial Performance (CIP)¹² index ranking (Japan 1st, Iraq 133rd), the industrial performance of the three Central Asia Countries is poor, with Kyrgyzstan and Tajikistan at the bottom of the list. In order to increase their industrial competitiveness, Kazakhstan, Kyrgyzstan and Tajikistan need selective policy interventions through which their comparative advantages in the mineral commodes sector are exploited, while new competitive advantages through industrial linkages are created.

Table 12. Regional industrial competitiveness in South and Central Asia and world ranking comparison (UNIDO 2013)

CIP Regional ranking	World ranking	Country
1	43	India
2	55	Iran (Islamic Republic of)
3	70	Kazakhstan
4	74	Pakistan
5	78	Bangladesh
6	80	Sri Lanka
7	115	Tajikistan
8	117	Kyrgyzstan
9	119	Nepal

With regard to the mining sector and its linkages with the industrial development, three policy levels are relevant: macro level policies for capabilities development, infrastructure and innovation, meso-level policies to promote industrial growth and diversification of key sectors and of particular regions and industrial clusters, and micro-level policies to support enterprise efficiency (Kaplinsky and Farooki, 2012).

Macro-policies support industrial development needed to address the prevalence of market failure with regard to skills and capability building and the development of infrastructure required by all industries. Together with the promotion of industrial growth and structural change, this may involve direct equity holding by the state, including through joint ventures with the private sector. Beyond direct equity holdings, the state may direct resource rents to the industrial sector through loans, including micro-enterprise loans to SMEs which may be viable third- and fourth-tier suppliers in commodity value chains. Mining sector rents may also be utilized to develop state capacities to upgrade suppliers and processors of commodities, or to provide support to linkage firms by the business services sector. Related to this is the investment of mining rents in institutions that deal with innovation and technology, as well as in training and education (Kaplinsky and Farooki, 2012).

¹² The CIP index now consists of eight sub-indicators grouped along three dimensions of industrial competitiveness. The first dimension relates to countries' capacity to produce and export manufactures and is captured by their Manufacturing Value Added per capita (MVApc) and their Manufactured Exports per capita (MXpc). The second dimension covers countries' level of technological deepening and upgrading. To proxy for this complex dimension, two composite sub-indicators – industrialisation intensity and export quality – have been constructed. The degree of industrialisation intensity is computed as a linear aggregation of the Medium- and High-tech manufacturing Value Added share in total Manufacturing Value Added (MHVAsh) and the Manufacturing Value Added share in total GDP.

Meso-level policies are aimed at structural change through industrial diversification. Of Importance is the government capacity to identify lead sectors and to effectively direct resource rents to promote these lead sectors.

Micro (firm level) policies target value chain and firm level efficiency and upgrading aimed at the efficiency of all firms and value chains in the economy.

As per the World Bank study 'Trade Expansion through Market Connection: The Central Asian Markets of Kazakhstan, Kyrgyz Republic, and Tajikistan' (2011), there are two types of manufacturing capacity constraints in the three countries: backbone services and infrastructure i.e. expensive financial services, unreliable power supply, and limited and expensive telecommunications services; and business environments i.e. excessive red tape, poor public services, and excessive involvement by political elites in business thus biasing competition.

As evident from the table below, Kazakhstan, thanks to the large size of the market, FDI and the revenue from the oils and gas sector, has been more successful in developing its industrial capacity through macro- , meso- and micro-level policies. Kazakhstan's Manufacturing Value Added ¹³ per capita is five times higher than Tajikistan's and nine times higher than Kyrgyzstan's.

Table 13. Manufacturing Value Added (MVA)¹⁴

Indicator	Year/Period	Kazakhstan	Kyrgyzstan	Tajikistan	Central Asia	World
MVA per capita at constant 2005 prices in US\$	2005	533.73	65.51	96.19	191.17	1,240.35
	2012	586.17	65.32	104.14	208.25	1,277.10
MVA average annual real	2005-2010	5.99	5.18	10.08	6.65	1.96
growth rate (in %)	2010-2012	6.54	3.63	7.50	7.12	2.26
MVA as percentage of GDP	2005	11.07	11.54	20.78	10.31	16.62
at constant 2005 prices in US\$	2012	10.96	11.01	20.18	10.05	16.71

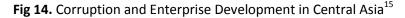
SME Development

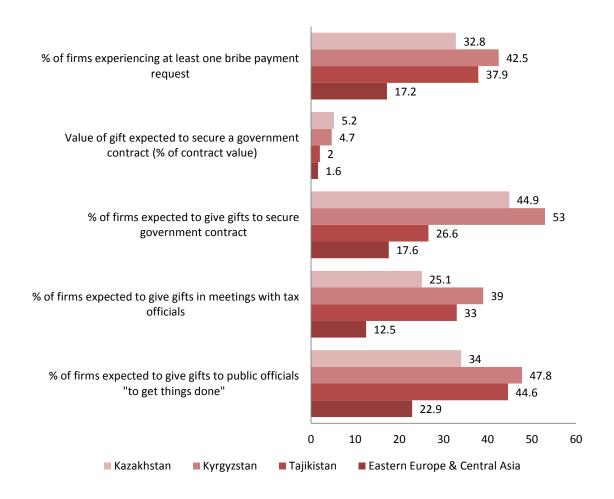
Central Asian governments recognise the importance of SME development in their countries' growth. However they have been constrained, as large enterprises have historically dominated major industries like metal, oil, and gas, and SME linkages to these industries are not developed. To assist SME growth, the countries have special programs funded by the government or foreign donor institutions. Kazakhstan and Kyrgyzstan, for example, support infrastructures (business incubators, techno-parks), consulting and training centres, special tax regimes, outright financial support through loans and grants. Tajikistan is streamlining SME policies to eliminate program duplication, and developing state policy and strategies to attract FDI to SMEs.

¹³ Manufacturing refers to industries belonging to ISIC divisions – all manufacturing, processing, repairs and machinery installation activities. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources.

¹⁴ UNIDO Industrial statistics, http://www.unido.org/resources/statistics/statistical-country-briefs.html

Among key constraints to the growth of the SME sector are weak property rights, corruption and weak judiciary.





Business regulations - registration, permits and licenses - also remain overly complex and time consuming despite recent reforms to improve in all three countries. Access to infrastructure, especially reliable electricity supply, is a major problem in Tajikistan and Kyrgyzstan.

Access to finance for SMEs in Central Asia is limited, with commercial banks and other lenders generally viewing SMEs as high-risk borrowers. Consequently, small companies from the region often face high interest rates and collateral requirements that they are unable to meet. Banks, the traditional source of funding in Central Asia, are reluctant to provide loans to SMEs due to the high perceived risk associated with SME lending. Only 20% of small firms and 27% of medium firms in Central Asia use bank loans as a source of business financing. This reluctance stems from the asymmetry of information, i.e. lack of relevant credit and financial information on SMEs, and limited or lack of adequate collateral. At the same time, few financing tools exist outside the banking sector to support SME financing (OECD 2013).

Regional integration and trade

Regional economic integration and trade can potentially play a significant role in the development of the industrial and SME sector in the region. Regional trade might help Kazakhstan, Tajikistan and Kyrgyzstan overcome such competitive disadvantages as small domestic markets, landlocked location, low domestic economic density, and long distances to

¹⁵ www.enterprisesurvey.org

international markets. Regional trade might also contribute to production diversification by exposing suppliers to larger regional markets and regional competition thereby increasing productivity. Further, the Eurasian Economic Community (Kazakhstan, Kyrgyzstan and Tajikistan are members) may present an important avenue for the three countries to diversify their economies.

Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan established the Eurasian Economic Community in 2000 with the goal of creating a common market. Within the Eurasian Economic Community, a Customs Union agreement between Belarus, Kazakhstan, and Russia went into effect on January 1, 2010. According to the agreement, the countries form a joint customs territory where no customs duties or other economic restrictions on the movement of goods apply. Each of the members of the Customs Union applies the same customs rates and trade regulations for goods traded with countries outside of the Customs Union. The members of the Customs Union were projected to save more than US\$ 400 billion by 2015 owing to reduced shipping time and costs. Kyrgyzstan and Tajikistan expressed their interest in joining the Customs Union in the future. Kyrgyzstan is on the way to join the Customs Union within a year. Starting on January 1, 2012, the Customs Union among the three countries became a Common Economic Space (CES), which was the next step in the Eurasian integration process. The CES agreement removed barriers to the movement of goods, capital, and labour between the three countries. It also included coordinated principles of business regulation and coordination of macroeconomic and monetary policies. ¹⁶

Skills and education

There is a shortage of professionals in the industrial sectors at all levels – managers, engineers, technical specialists and skilled workers. Industrial professions have been in decline since the collapse of the Soviet Union, due to the shrinkage of the industrial sector, underfinancing of education, and broken relationships between educational institutions and employers. The skilled workforce shortage is particularly acute in the Kyrgyz and Tajik industrial sector as these two countries are major sources of labour migrants – both skilled and unskilled – for Russia and Kazakhstan. For example, the share of Tajik labour migrant remittances is estimated at between 30 and 50% of the Tajik GDP. Skilled industrial professionals from Tajikistan and Kyrgyzstan are attracted by the visa free regime, better paying industrial job opportunities, as well as prospects of career development. An older generation of highly skilled technical professional with higher education and Soviet industrial experience is also attracted by the prospects of retiring in Kazakhstan and Russia and receiving better retirement benefits.

Industrial and technical education is in need of reform at all levels - vocational, technical training and higher education. The TVET system in all three countries is in particular contrast to the rising demand for TVET services from industrial sectors, including mining. This stems from a number of factors: excessive central control over educational curricula, low public spending per student, and low completion rates of advanced study (OECD 2013). All these factors lead to a misalignment between worker skills and job market requirements.

¹⁶ http://www.evrazes.com/

5.1 Kazakhstan

5.1.1 Industrial Development

Diversification

Oil and mining industries are the engine of Kazakhstan's growth, although the country is actively pursuing diversification. The dependence on these extractive sectors meat that the global financial crisis and subsequent fall of oil and commodity prices in 2008 led to a recession. A recent recovery, with GDP increasing 7.5% year-on-year in 2011, and 5.0% in 2012 has been assisted by rising commodity prices.

The government's diversification program is aimed at developing targeted sectors such as transport, pharmaceuticals, telecommunications, petrochemicals and food processing.

Local content regulations are aimed in large part at supporting diversification of the economy and thereby reducing dependence on the extractives sector. This is being currently implemented through the 2010-14 National Programme of Accelerated Industrial and Innovative Development, and the 2013-2020 Kazakhstan Innovative Development Concept.

Mining companies are encouraged to support the diversification drive through downstream activities, specifically by building processing plants so as to increase the export value of minerals and develop the country's metallurgy sector.

Special Economic Zones

Kazakhstan has set up a number of special economic zones (SEZs) offering a range of incentives to attract investment, encourage export-oriented manufacturing, implement new technologies, and enhance management approaches. The SEZs are focused on sectors: Astana-New City (construction); Sea Port Aktau (logistics and transport); Innovation Technology Park (IT industry); Ontustik (textiles); National Industrial Petrochemical Technopark (oil and gas engineering, petrochemicals); Burabay (tourism); Khorgos – Eastern Gates (trade and logistics).

One interviewee in this study from the mining industry expressed the view that the expectations of the SEZs have not been met, partly due to the limitations on their activities and the weakness of management models. The opinion was that rather than being focused on singular sectors, the aim should be to develop the region in which the SEZ is located.

Innovation

Fostering innovation was at the centre of a speech by President Nursultan Nazarbayev at the 26th Plenary Session of the Foreign Investors' Council, 22 May 2013. The following priorities were stated:

- Integrating 'green economy' concepts to industrial development, using EXPO 2017 in Astana as a key catalyst for technology transfer to the rest of Kazakhstan.
- Improving the education system to produce more engineering and technical specialists that
 meet the needs of business, by creating applied research divisions in the universities and at
 the same time encouraging development of non-applied sciences.
- Encouraging foreign investors to create corporate scientific centres in Kazakhstan, and developing innovation clusters in the areas of geology, medicine, 3D printing, metallurgy, energy saving and construction technologies, and composite materials.
- Expanding the triple helix model of Business, Science and the State being applied at the Nazarbayev University, which includes funding collaborative research, and establishing business incubators, commercialisation offices and experimental workshops.
- Establishment of an award for break-through scientific research and innovations that are commercialised by foreign investors and local companies within Kazakhstan.
- Calls to foreign investors to follow the example of oil company Shell, specifically their coordination of the Oil and Gas Industry R&D Roadmap to 2025. Responsibility for implementing the roadmap lies with the Government, Samruk-Kazyna Fund and KazEnergy

Association.

- Simplification of regulations related to innovative activities, including strengthening the regulatory basis for an efficient system of intellectual property protection.
- Addressing non-compliance of Kazakh technical and construction standards against international standards, by preparing an inventory of all local standards and 2013-1015 plan for their alignment with international best practice.
- Establishment of financial instruments for risk financing.
- Establishment of a new institution called the Innovations Venture Fund, funded by subsoil
 users as part of the mandated 1% of profits for research and R&D, and encouragement of
 active participation of foreign partners in the Board of Trustees

WTO and Customs Union

In 2010 Kazakhstan joined the Belarus-Kazakhstan-Russia Customs Union in an effort to boost foreign investment and improve trade relationships and is planning to accede to the World Trade Organization in towards the end of 2013.

Kazakhstan's accession into the World Trade Organization (WTO) will require a decrease of the Common Customs Duty of the Customs Union. In line with Kazakhstan's zero customs duty obligations under WTO, the adjustment will be proportional to the position of Kazakhstan's economy in the overall economy of the Customs Union.

Technical and Vocational Education

While the economy has been growing, the country's TVET system has not been sufficiently flexible to adapt to the growing demand for qualified expert staff. The obstacles that Kazakhstan faces in establishing a well-functioning TVET system are similar to those of other former Soviet countries. Many years of under-investment have resulted in outdated curricula, materials and infrastructure. Centralised state control and weak links between general and vocational education have exacerbated these problems. The core problem within TVET is that most of the qualifications being offered are not relevant to the job market.

Recently, however, the government has made the modernisation of its educational system a national priority. In 2010, it launched two programmes to promote education and economic development: the State Program of Education Development in Kazakhstan for 2011 – 2020, and the 2010-2014 State Program of Accelerated and Innovative Development of the Republic of Kazakhstan.

5.1.2 SME Development

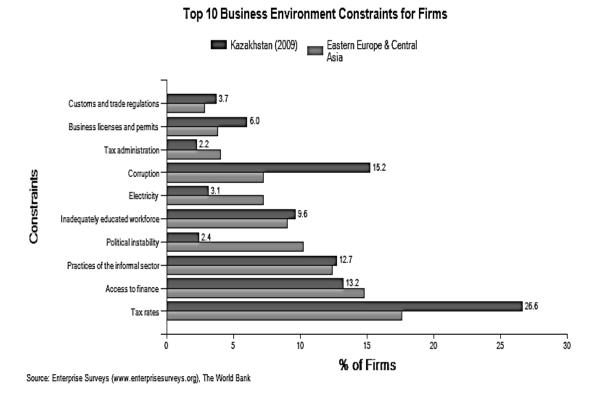
In 2010, SMEs contribute 93% of all enterprises; 26% of the workforce and 29% of GDP (DAMU 2013). More than 80% of SMEs operate in Retail & Wholesale, Services and Agriculture, demonstrating the limited diversification. Mining and Fuels, which are usually produced by large companies, make up more than 80% of Kazakh merchandise exports, and their share has been growing in the recent years. For comparison, in other transition countries Mining and Fuels make up around 20% of exports (EBRD 2009).

According the World Bank/IFC's most recent Enterprise Survey, business practices of SMEs in Kazakhstan follow the characteristics identified in Table 14.

Table 14. Kazakhstan, Typical Firm Characteristics and Business Practices (World Bank 2009)

Indicator	Kazakhstan	Eastern Europe & Central Asia	All Countries
Capacity utilization, manufacturing firms (%)	80.5	73.4	72.6
% of firms with female participation in ownership	34.4	36	37.1
Proportion of permanent full-time workers that are female (%)	41.4	38.2	31.8
% of firms competing against unregistered or informal firms	36.9	44.6	56.4
% of firms with a checking or savings account	92.1	88.8	87.8
% of firms with a bank loan/line of credit	33.2	43.4	35.4
Value of collateral needed for a loan (% of the loan amount)	91.2	134.3	168.8
% of firms using banks to finance investments	31	36.5	26.2
% of firms with an internationally-recognized quality certification	10.8	19.9	16.4
% of firms using technology licensed from foreign companies*	14.5	20.7	15.1
Proportion of total sales that are domestic sales (%)	97.9	90.8	93.4
Proportion of total inputs that are of domestic origin (%)*	73.9	62.1	61.4
Proportion of total inputs that are of foreign origin (%)*	26.1	37.9	38.6

Fig 15. Top 10 Business Environment Constraints for Firms (World Bank 2009)



The four main obstacles to business cited by entrepreneurs in the latest Business Environment and Enterprise Performance Survey (BEEPS) (joint initiative of the European Bank for Reconstruction and Development (EBRD) and the World Bank) (2009) were: high taxes, access to finance, an inadequately educated work force, and corruption. The sources of finance are concentrated in Almaty and Astana, and most banks and their branch networks remain focused on catering to SMEs in the two main cities.

In Transparency International's Corruption Perception Index (2012), Kazakhstan ranks 133 out of 176 countries. Notwithstanding the low performance, the ranking has improved over time and Kazakhstan became an Extractive Industries Transparency Initiative (EITI) candidate country in 2010.

The World Economic Forum's 2012-2013 Global Competitiveness Index indicates that Kazakhstan's position has improved remarkably, to a ranking of 51 out of 144 countries, from 72 out of 138 countries in the previous year. However, it ranked only 104th for indicators based on innovation and sophistication factors and 115th for financial market development as an efficiency enhancer. The improvements are largely attributed to progress in macroeconomic stability (16th) and technological readiness (55th).

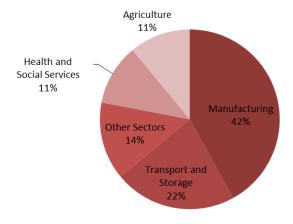
The main impediments faced by Kazakhstan MSMEs relate to (EBRD 2009):

- Low quality of products and manufacturing;
- Lack of transfer of technologies to reach international standards;
- Poor management skills (operational, marketing, export, mergers and acquisitions); and
- Deficiencies in long term business planning, and restructuring.

The DAMU¹⁷ Entrepreneurship Development Fund is a government initiative to boost the development of small business. Its mission is to facilitate the development of Kazakh SMEs and microfinance institutions, by integrating and providing financial and consulting services. DAMU is a national development institute and a wholly-owned subsidiary of Samruk-Kazyna National Welfare Fund. Most major banks in Kazakhstan have credit lines with DAMU, and 12.5% is the maximum banks can charge SMEs when they on-lend DAMU money.

DAMU also operates a Credit Guarantee Scheme that was established in 2010. The scheme targets SMEs, including start-ups and established firms, operating in economic sectors defined as a priority within the framework of the Business Roadmap 2020 programme, such as manufacturing. The scheme also prioritises projects related to modernisation and expansion of production, as well as purchase and modernisation of equipment.

Fig 16. Credit Guarantees provided by DAMU by sector in 2010-2012



¹⁷ http://www.damu.kz/239

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The Government's assistance has focused mainly on MSME financing rather than advisory services and the local consultancy market is weakly developed (EBRD 2009). Several international donors are providing assistance to MSME development, although this is reducing. Besides the USAID Kazakhstan Small Business Development Programme, the World Bank and the Ministry of Agriculture help improve access to finance by providing micro-credit programmes.

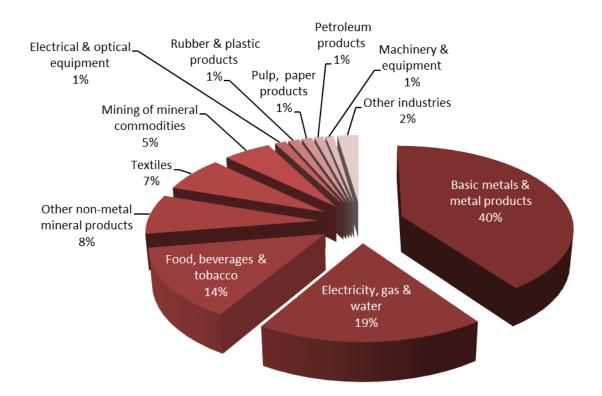
5.2 Kyrgyzstan

5.2.1 Industrial development

The most important industrial sectors in Kyrgyzstan are metallurgy, food processing, textile and garment manufacturing, and production of non-metallic mineral products and energy. Together, these industries produce over 90 % of industrial output. According to the State Statistics Committee there are over 2090 enterprises in the industrial sector employing more than 200 thousand people. Despite the small proportion of GDP - 16.8% in 2012, industry remains the most important sector of the economy in terms of contribution to the budget and exports (Government of Kyrgyzstan 2012).

According to the Ministry of Economy, in recent years, the government has been working on diversification, with a focus on industries with higher added value. These include the textile and garment industry, agribusiness, energy, mining and construction industries. These industries are increasingly using local resources, but not always focused on their downstream processing.

Fig 17. Composition of Industrial Production in Kyrgyzstan in 2012 (National Statistics Committee of Kyrgyzstan)



The Government of Kyrgyzstan's National Development Strategy for 2013-17 recognises that the extremely low competitiveness of the nation's industrial sector is one of the main reasons for a low volume of FDI and the underdeveloped SME sector. In addition to infrastructure and business environment issues described in the previous section, instability of property rights in the recent years has been one most important factors hampering industrial development. For example, after a violent change of government in 2010 more than 40 companies were nationalised, including industrial facilities, energy and mobile communication businesses, hotels, etc. (Kalikova & Associates 2011)

A key policy document for the development of the industrial sector is 'The Program of the Development of Manufacturing sector in Kyrgyzstan for 2013-2015'. A number of activities listed under this program represent opportunities for the government to develop production linkages with the mining sector:

- Identification of priority sectors of the manufacturing industry,
- Development and implementation of programs in priority sectors of the manufacturing industry,
- Development of proposals for establishment of industrial zones,
- Identification of competitive advantages of regions and development of regional industrial development plans according to identified competitive advantage,
- Development of a draft program for a vocational and technical education system to meet the needs of industry,
- Introduction of product quality and safety assurance systems to meet international standards, and
- Creation of international accredited testing laboratories for export-oriented production.

Although these activities seem to target primarily export oriented manufacturing, they could be extended to cover domestic suppliers of the mining sector.

The NDS 2013-17 also includes a number of National Industrial Investment Projects. These are presented as high return and high value added investments that will increase national product, tax revenue and create new jobs. However, it is unclear whether these projects strategically contribute to industrial development.

Free Economic Zones

The taxation of foreign investors and entities is governed by the law on free economic zones (FEZ) of 15 March 1996. Customs fees, duties and payments, which apply to entities operating in the zones, are also governed by this law. FEZs function as autonomous entities not subject to customs laws and regulations of customs requirements. They are considered foreign territories with total freedom from customs control. Customs involvement is limited to customs officials escorting consignments destined to and from them. All goods except petroleum, alcohol and tobacco and tobacco products can be brought into the zones.

The companies in FEZs are active in trade, food processing, light industry, the production of construction materials and furniture and tourism. There are four FEZs in Kyrgyzstan:

- Bishkek FEZ is located in the capital, with part located at Manas international airport;
- Karakol is on the shores of Lake Issyk-Kul, the world's second largest alpine lake and in the vicinity of the Kumtor gold mine, providing opportunities for tourism development;
- Maimak is situated near the Kyrgyz-Kazakh border; and
- Naryn, located on the Chinese border, offers potential for the development of tourism and the mining sector. This free economic zone covers 47,000 square km, equivalent to one quarter of the territory of Kyrgyzstan.

The performance of the FEZs has been mixed. Recently, there have been reports about corruption and power abuse, especially in the Bishkek FEZ. President Atamabaev has recently requested Parliament to revisit the FEZ law amid corruption reports.

WTO and Customs Union

Kyrgyzstan is a WTO member since 1998 and is progressing to joining the Customs Union (CU) in 2013. To become a full member of the CU, the Kyrgyz parliament must ratify the 70 international agreements in the framework of the Eurasian Economic Community, of which about 40 are directly related to the CU.

There is an on-going debate about the costs and benefits of the CU. On one hand Russian and Kazakh markets will be closed for re-export of Chinese goods from Kyrgyzstan – a major part of the Kyrgyz informal economy. On the other hand, some argue that productive resources will switch from the informal re-export sector to manufacturing. Kyrgyzstan's cheap labour force, high hydroelectricity potential and abundant natural resources, complemented by access to a large combined market of CU members, may attract industrial investments to the country. There appears to be a consensus that Kyrgyzstan has to put in place and implement a comprehensive industrial development strategy in order to benefit from the CU accession.

Russia's WTO accession in 2012 may have positive impact on the terms of accession of Kyrgyzstan in the CU. The most acute issue of the CU is import tariffs. The current average rate of customs duties in Kyrgyzstan is 5.1%, the average rate for the obligations of the WTO is 7.5%, and the average rate of the Common Customs Tariff (CCT) of the Customs Union is 10.6%. The government is in negotiations with the CU to keep low tariffs for import of Kyrgyz manufacturing inputs (Vecherni Bishkek 2012).

Technical and Vocational Education and Training (TVET)

According to the OECD's TVET review of 2012 (OECD 2013), the TVET system in Kyrgyzstan is weak and growing weaker, in contrast to the rising demand for TVET services and the acute need for population to obtain marketable qualifications. The overall Kyrgyz education system is still in transition after the dissolution of the Soviet Union, two decades ago. The current vocational education system is not sufficiently responsive to labour markets. Employers in industrial sectors who purchase new technology and equipment face the difficulty of finding workers who know how to operate this equipment.

5.2.2 SME Development

The contribution of SMEs is slightly more than 40% of the GDP. In the last three years, FDI in SME development has been decreasing. In 2011, FDI fell by 15%. Kyrgyzstan's SMEs mainly operate in retail trade, services and agriculture and, to a much lesser extent, are engaged in manufacturing. The Government NDS (2012) views trends in SME development "not as a driving force of economic recovery, but rather a process which leads to inefficient use of natural, labour, intellectual and other resources". According to the NDS, the most challenging issue in SME development is the sector's competitiveness.

A distinctive feature of the Kyrgyz SME sector is that Kyrgyz firms are more likely to have full-time female workers and to have female participation in firm ownership compared with the ECA region. About 70% of manufacturing firms have female participation in ownership. Kyrgyzstan stands out for the lowest level of capacity utilization (58%) in the region after Georgia. Compared with the rest of the region, firms in Kyrgyzstan rely less on bank financing for investments and more on equities and sales of stock. Only 14% of all investments in Kyrgyzstan are financed by bank, compared with 23 % in the region (World Bank 2011).

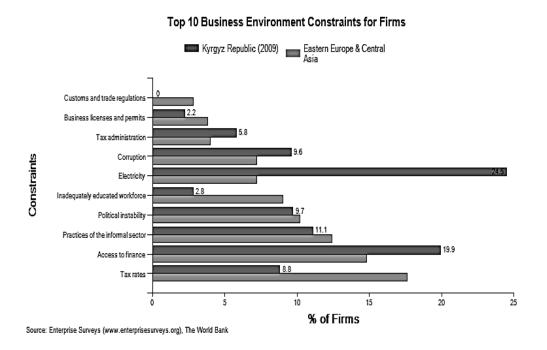
Table 15. Kyrgyzstan Typical Firm Characteristics and Business Practices (World Bank 2009)

	Kyrgyzstan	Eastern Europe & Central Asia	All Countries
Capacity utilization (%)*	57.7	73.4	72.6
Percent of firms with female participation in ownership	60.4	36	37.1
Proportion of permanent full-time workers that are female (%)	42.6	38.2	31.8
Percent of firms competing against unregistered or informal firms	67.5	44.6	56.4
Percent of firms with a checking or savings account	68.9	88.8	87.8
Percent of firms with a bank loan/line of credit	20.4	43.4	35.4
Value of collateral needed for a loan (% of the loan amount)	127.8	134.3	168.8
Percent of firms using banks to finance investments	17.9	36.5	26.2
Percent of firms with an internationally-recognized quality certification	16.2	19.9	16.4
Percent of firms using technology licensed from foreign companies*	19.5	20.7	15.1
Proportion of total sales that are domestic sales (%)	93	90.8	93.4
Proportion of total inputs that are of domestic origin (%)*	67.8	62.1	61.4
Proportion of total inputs that are of foreign origin (%)*	32.2	37.9	38.6

Key Constraints to SME Development

Whereas there have been improvements in the business environment for SMEs, for example, simplified tax payment procedures, Kyrgyz firms continue to face obstacles such as corruption, inadequate provision of electricity, and limited access to finance (World Bank Enterprise Survey 2009). Small firms in particular are more credit-constrained compared to larger firms. Kyrgyzstan lags far behind the region regarding technology innovation measures. 39% of the Kyrgyz firms report having to bribe tax inspectors. In addition to pervasive corruption, less than one-quarter of Kyrgyz firms believe the court system to be fair, impartial, and uncorrupted; only four other ECA countries have lower percentages for this measure. Kyrgyzstan fares poorly in infrastructure, specifically electricity, when compared to the ECA region: the number, duration, and value lost due to power outages are consistently greater than for most ECA countries (World Bank 2011).

Fig 18. Top 10 Business Constraints for Firms



5.3 Tajikistan

5.3.1 Industrial Development

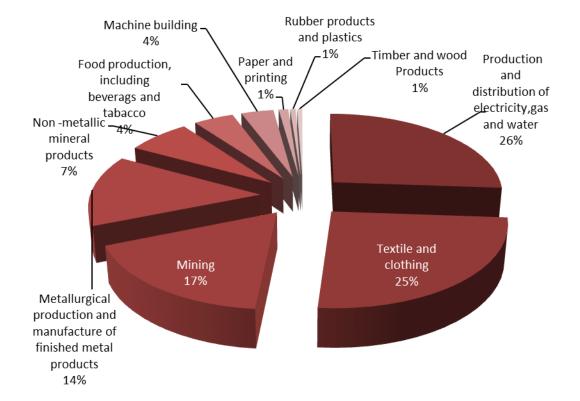
Tajikistan's industrial sector has be in decline since the collapse of the Soviet Union due to the after-effects of the systemic crisis and the civil war, the country's distance from international markets and the limited scope of the domestic market. The Industrial sector is also suffering from a shortage of industrial management skills, a breakdown of former production ties and a shortage of public and private infrastructure services, in particular in power supply. The sector also experiences high energy losses.

There is insufficient development of micro- and small businesses focused on manufacturing. Delays in privatisation or restructuring, the inadequacy of methods being used for the privatisation of large state-owned industrial and agricultural enterprises and the absence of post-privatisation monitoring and support for enterprises have contributed to a decline in the country's production potential (Government of Tajikistan 2006).

The government lists the following measures to diversify the economy and enhance export potential in its National Development Strategy (NDS) 2006 - 2015:

- Raise the profitability of the Tajik Aluminium Plant and the energy sector;
- Implement Infrastructure, export-oriented and tourism investment projects, as well as projects with an emphasis on import substitution;
- Settle debts in the cotton industry and promote sustainable development of this sector;
- Encourage capital investment in the downstream processing of primary aluminium, in the textile industry and in the mining industry.

Fig 19. Share of Sectors in the Tajikistan Industry, 2011 (Statistics Agency of Tajikistan)



The expected outcomes of the NDS to 2015 for industrialisation include:

- Establishment of at least 8–10 private and public-private regional industrial-production and industrial-energy complexes (clusters) based on existing production facilities, and the creation of incentives for growth in the number of micro- and small industrial enterprises to meet the needs of the domestic market and to promote the incorporation of innovations into production; and
- Diversification of industrial production through the development of SMEs, improvement in the investment climate, reduction in the regulatory role of the state and implementation of urgent reforms in certain sectors of the economy, such as the mining industry and the processing of minerals.

The State Committee on Investments and State Property Management is responsible for legislation affecting the foreign investment sector, investment promotion and measures to encourage entrepreneurship. It has established four free economic zones in Pyanj, Soughd, Dangara and Ishkoshim. Companies investing in these zones are given an exemption from profit tax for a period of between two and five years, depending on the size of the investment.

Technical and Vocational Education

The Tajik TVET system has been deteriorating since the end of the Soviet era and is only able to offer outdated skills. Tajikistan is currently modernising its educational system with the assistance of donors. Mechanisms to involve the stakeholders in TVET are in place, but in practice, the participation of stakeholders is limited. The education system in Tajikistan is heavily affected by the difficult economic conditions in the country that lead to few employment opportunities for graduates of TVET institutions. Creating jobs and opportunities for recent graduates poses a challenge. The lack of opportunities demotivates prospective students and affects the reputation of the VET system. Moreover, TVET schools suffer from a lack of funding that inhibits their modernisation (OECD 2013).

5.3.2 SME Development

While the economy of Tajikistan has seen stable growth in the last three years, the SME sector is developing unevenly. Thanks to easier administrative procedures, the number of individual entrepreneurs and dekhan farms are growing rapidly, while SMEs are very few and expanding at a slower pace. There are fewer than 200 businesses in Tajikistan which employ more than 200 workers. Thus, micro and small enterprises are the vast majority of the approximately 155,000 businesses in Tajikistan and their importance to the economy grows every year. The SME sector employed about 1,076,000 people in 2007 or about 50% of total employment in Tajikistan. Another 2% of the labour force is engaged in larger firms in the private sector, and the remaining 48% do not work in the private sector. Individual entrepreneurship is an increasingly popular form for SMEs, and relatively few transition to legal entities. SMEs also face a significantly more difficult regulatory environment (World Bank 2009).

Women run 36% of individual entrepreneurs and 16% of small and medium companies. Women are among the owners of just over half of these firms. Only 9% of dehkan farms are run by women, although half of dehkan farm employees are women (World Bank 2011).

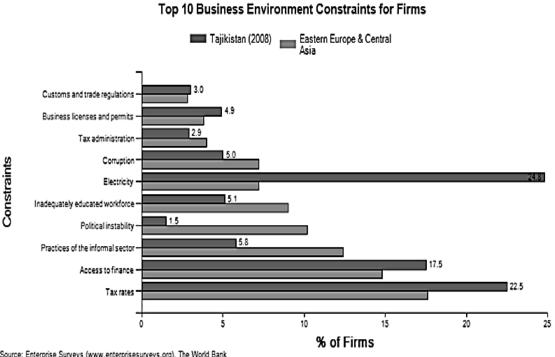
Table 16. Tajikistan Typical Firm Characteristics and Business Practices (World Bank 2008)

	Tajikistan	Eastern Europe & Central Asia	All Countries
Capacity utilization (%)*	66.2	73.4	72.6
Percent of firms with female participation in ownership	34.4	36	37.1
Proportion of permanent full-time workers that are female (%)	31.4	38.2	31.8
Percent of firms competing against unregistered or informal firms	35.3	44.6	56.4
Percent of firms with a checking or savings account	86.9	88.8	87.8
Percent of firms with a bank loan/line of credit	33.6	43.4	35.4
Value of collateral needed for a loan (% of the loan amount)	145.2	134.3	168.8
Percent of firms using banks to finance investments	21.4	36.5	26.2
Percent of firms with an internationally-recognized quality certification	16.7	19.9	16.4
Percent of firms using technology licensed from foreign companies*	25.3	20.7	15.1
Proportion of total sales that are domestic sales (%)	95.1	90.8	93.4
Proportion of total inputs that are of domestic origin (%)*	58.7	62.1	61.4
Proportion of total inputs that are of foreign origin (%)*	41.3	37.9	38.6

SME Development Constraints

The combination of strong regulation and weak enforcement creates significant opportunities for rent-seeking by public officials. Corruption in interactions with public officials comprises one of the main constraints for private businesses in Tajikistan. Tajikistan faces similar problems as other economies from Central Asia in terms of access to finance for SMEs, having a relatively small financial sector in relation to GDP. Microfinance lending has risen rapidly in recent years, funded partly by international donors such as the EBRD, EU and IFC. But lending to small businesses continues to be hampered by the lack of transferable land-use rights, which precludes the use of agricultural land as collateral, despite recent moves to strengthen land ownership rights.

Fig 20. Top 10 Business Environment Constraints for Firms



Source: Enterprise Surveys (www.enterprisesurveys.org), The World Bank

The financial sector continues to be undermined by state-direct lending to priority sectors (e.g. cotton production). Interest rates are high (around 17% on local currency loans), as are collateral requirements, which make access to finance for SMEs difficult. As a result, bank lending accounts for only around 15% of GDP (World Bank 2011). Import and export procedures are too complicated for most SMEs. Only 24% of SMEs import goods, and fewer than 3% export.

Government SME Policy

The government of Tajikistan has taken a number of measures to improve the business environment for SMEs. Implementation of the 2004 Licensing Law has led to some improvements, most notably an increase in the average validity of an issued license. However, licensing is still a lengthy and expensive process for the SMEs who must obtain licenses. The 2006 Inspections Law and its implementation resulted in annual savings to the Tajik SME sector of US\$ 9.3 million, reflecting savings to individual entrepreneurs and dehkan farms offset by an increase in costs to SMEs. Government policies to strengthen access to finance for SMEs have been limited, and have mainly revolved around measures to stimulate business activity generally, rather than focusing on SMEs. Most public investment is directed towards large, state-owned firms and infrastructure projects. The government is currently considering the establishment of a credit guarantee scheme based on the experience of the scheme in Afghanistan (OECD 2013).

The program of state support of entrepreneurship in Tajikistan for 2012-2020, implemented by GosKomInvest, lists the following measures to support the SME sector:

- Establishment of a fund to support the financing of businesses;
- Logistical support entrepreneurship through preferential provision of equipment, production facilities and technologies;
- Creation of a body of state support of entrepreneurship and providing it with greater powers;
- Reduction of administrative barriers to the creation and maintenance of business;
- Government support for the priorities of businesses;
- Encouraging establishment of institutions of self-sustaining business in the form of manufacturing, sales, credit cooperatives;
- Support for innovative businesses;
- Providing information and consulting support entrepreneurship;
- Assistance in the training and upgrading of skills for entrepreneurship; and
- Creation of an enabling environment for businesses that contribute to the creation of additional jobs.

6. Domestic Procurement Policies and Regulation

6.1 Government regulation and government-led initiatives

Due to the shared Soviet past where business and state were a single entity, there is a perception both in public and private sectors that large companies, in particular mining companies, should play a significant role in providing public services and developing public infrastructure in areas where they operate. Many participants in this study across all three countries referred to large mining companies as 'system-forming' or 'town-forming', and expressed expectations that such companies should perform many public sector functions, including building and running schools, hospitals, roads, power, and water infrastructure as well as developing businesses in their supply chain. In Kazakhstan, the term 'system-forming company' is found in legislation, reflecting the expectations of the responsibility of large business in performing public services.

After the collapse of the Soviet Union, the development of domestic procurement and local content policies took different directions within the three countries. In Kazakhstan, local content policies originated in the oil and gas boom as well as the drive to diversify the economy from hydrocarbon exports. A strong focus on industrialisation and related policies — local content, the policy of state equity participation in oil and gas and mining projects, SME finance and innovation, e.g. the DAMU foundation, industrial parks, etc. — has stemmed from the Soviet industrial heritage under the leadership of Nursultan Nazarbaev, president of Kazakhstan since the collapse of the Soviet Union.

Since its independence, Kyrgyzstan's policy focus has been on market liberalisation and the reduction of the state's role in the economy. There was a lack of stability in property rights due to the competition of Kyrgyz elites for power and violent changes of government. As a result of predatory elites trying to capture mining sector rents there has been only one successful mining investment, Kumtor. There has been little attention to developing mining sector linkages as the policy makers have been focused on re-distributing mining rents and on attracting new investments.

A civil war that erupted in Tajikistan after it acquired its independence prevented the companies from developing any major mining projects. However, with the prospective Konimiansur and other mining investments, the government has an opportunity to capture greater benefits from the mining sector by developing appropriate industrial linkage policies and learning lessons from the neighbouring countries and other emerging mining nations.

Public officials and business associations in Kyrgyzstan and Tajikistan have no experience with local content or domestic procurement policies. They are not aware of best practice and refer to Kazakhstan as a model for developing local content. Moreover, the governments in both countries are working on the amending their subsoil legislation to include local content provisions. In the interviews they mentioned that they refer to the Kazakh experience in developing local content provisions. All stakeholders in the both counties have expressed a great interested in the subject and recognised that local procurement should play a greater role in the mining sector.

6.1.1 Kazakhstan

Regulations related to local content in the procurement of goods, works and services in mining activities fall under the 2010 legislation 'On Subsoil and Subsoil Use'. The main institutions involved in supporting local content in Kazakhstan include:

- National Agency for Technological Development (sets local content policy)
- National Agency for Development of Local Content (NADLoC) (implements policy)
- National Welfare Fund (Samruk-Kazyna) (implements industrial policy)
- Parasat (science and development)
- AGMP Association (equivalent to a Chamber of Mines)

Local content performance is monitored by NADLoC through two systems — subsoil reporting and an online registry¹⁸. Data is analysed to understand what is purchased, volumes purchased, and where potential exists for growth or entering other markets. The data informs development of local content action plans. Kazakhstan's 2010 - 2014 local content program has set a target of 16% of goods and 85% of services. As shown in Table 17, actual spend is close to, or exceeds targets, with 14% and 92% respectively in 2012.

Table 17. Mining sector procurement of goods, works and service in 2010, 2011 and 2012 (including Product Sharing Agreements)

Year	Value (US\$ mln)	Local spend (US\$ mln)	LC %	Goods		Works		Services	
				Value (US\$ mln)	LC %	Value (US\$ mln)	LC %	Value (US\$ mln)	LC %
2010	4247.1	1989.5	46,8	2029.4	13,4	696.1	68,5	1521.6	81,5
2011	4703.9	2906.5	61,8	1598.2	13,6%	950.8	85,0	2154.9	87,3
2012	6037.6	3277.8	54,3	2728.2	13,8	874.1	75,4	2435.3	92,1

The online registry is also a vehicle for providing measures of state support, including reimbursement of expenses to domestic producers incurred in implementing quality management systems according to international standards (e.g. ISO). To qualify for support, domestic manufacturers need to past local content tests to determine the percentage of local content in proposed industrial and innovation projects.

The database is also intended to provide mining companies with accurate information about Kazakh producers, their activities and products.

Measurement of local content

The Kazakh Government's Decree No. 367/2010 formalised the measurement of local content in goods, works and services, using the Uniform Method of Kazakh Content Calculation (the 'Uniform Method'). The relevant equations are outlined below. A differentiation is made between 'Kazakh content' and 'Kazakh provider'. The latter comprises citizens of Kazakhstan or Kazakh legal entities where over 95% of staff are citizens of Kazakhstan. Subsoil users are required to provide a 20% discount to Kazakh manufacturers.

The obligations are not only placed on subsoil users, but also state authorities; companies that are majority owned by the National Welfare Fund Samruk-Kazyna JSC; concessionaires; and other companies targeted by the government for local content monitoring.

¹⁸ new.reestr.nadloc.kz

Goods

The percentage of Kazakh Content in goods is stated in the CT-KZ certificate. The certificate is issued by the Ministry of Industry and Trade's Technical Regulation and Metrology Committee to a Kazakh manufacturer. CT-KZ is issued for a period of one year. It is not mandatory for manufacturers to obtain a CT-KZ certificate, however to claim local content, subsoil users need to purchase from CT-KZ holders.

$$KC_T = 100\% imes rac{\displaystyle\sum_{i=1}^n CT_i imes K_i}{S}$$

Where:

- KC_T is the Kazakh content in goods
- n is the total number of goods purchased by a supplier and its subcontractors for the execution of a contract for the provision of goods to a subsoil user
- CT_i is the cost of good i
- K_i is the share of KC in goods indicated in the CT-KZ certificate
- S is the total cost of goods purchased

Works and services

Kazakh content in services is equal to the share of total salary expenses paid to Kazakh employees, including subcontractors. The supplier determines this share, indicated as a percentage on the official letterhead with the certified director's signature and the company's seal.

Kazakh content in works where goods are used is equal to the sum of Kazakh content in goods and Kazakh content in services.

$$KC_{p/y} = 100\% \times \frac{\sum_{i=1}^{n} CT_{i} \times K_{i} + \sum_{j=1}^{m} (CA_{j} - CT_{j} - CCA_{j})R_{j}}{S}$$

Where:

- KC_{p/v} is the Kazakh content in works and services
- n is the total number of goods purchased by the suppliers and subcontractors for the execution of a contract for provision of works/services to a subsoil user
- CT_i and K_i are as per the definitions above
- m is the total number of contracts for provision of works/services signed by a subsoil user and its contractors
- CA_i is the value of the jth contract
- CT_i is the total cost of goods purchased under the jth contract
- CCA_i is the total value of subcontracting agreements signed under the jth contract
- R_i is the share of Kazakh staff payroll in total compensation
- S is the total value of the contract for provision of works (services)

Monitoring

Regulation 1139 requires that subsoil users submit their annual, medium term and long term procurement program, and quarterly reports. Quarterly reporting is carried out using the following formula for Kazakh content.

$$KC = 100\% \times \frac{\sum_{i=1}^{n} CA_{i} \times KC_{i}}{S}$$

Where:

- n is the total number of contracts signed by a subsoil user with suppliers of goods, works and services
- CA_i is the value of each contract for the purchase of goods, works and services
- KC_i is the Kazakh content of a supplier of goods, works and services under each procurement contract
- S is the total cost of goods, works and services purchased by a subsoil user in the three month reporting period

Procurement rules

Since 2010, all subsoil users are obliged to: (1) procure all goods, works and services under the government's Procurement Rules; (2) download all procurement information onto an online registry (i.e. advertisement, tender documentation, results of the tenders, contractor selected); and (3) place advertisements and results in periodicals disseminated three times a week throughout Kazakhstan, in Kazakh and Russian languages.

Kazakhstan's procurement rules for subsoil users allow for the procurement of goods, works and services for mining operations to be carried out by one of the following methods:

- Open competition;
- An e-procurement system;
- Commodity exchanges;
- Request for price quotations (restricted to instances when quality is of little importance and price is the decisive factor; and if the annual volume of purchases does not exceed an equivalent of US\$ 150,000; or
- Sole sourcing (restricted to procurement of employee training; goods and services required for repairs in the event of breakage, failure mechanisms, units in transit, requiring immediate recovery; for containment and emergency response, in the event of emergency shutdown of the main equipment; and instances where there is only one Kazakh supplier of appropriate quality).

In the case of competitive tenders, tender documents prepared by mining companies are obliged to include the following conditions:

- Naming of products using a standard classification
- Details of the procuring organisation
- The list of documents to be submitted by potential suppliers to confirm compliance with the terms of the tender documentation, in the form of certificates
- Payment terms

- Format and method for calculating the price quotation, including cost of transportation, insurance, payment of customs duties, taxes, fees, and other expenses, excluding VAT
- Quantity of purchased goods, the volume of work performed and services rendered for each lot
- Location where the contract will be performed
- Terms of delivery of the goods, works or services to be purchased
- Manner, place and deadline for submission of bids, and bid validity period
- Place, date and time of opening of envelopes with bids
- Draft contract specifying terms of the contract
- Documents proving whether the supplier can be qualified as Kazakh supplier
- Maximum budget allocated
- Functional, technical and operational characteristics, quality characteristics, including, where appropriate, technical specifications, plans, drawings and sketches, as well as a list of documents confirming compliance with these requirements
- Local content requirements of purchased goods or works or services, expressed as a percentage for each lot (from 0 to 100)

The company can include a requirement that only manufacturers or their official representatives can participate in a tender. However, tender documents are not allowed to contain references to trademarks, service marks, trade names, patents, utility models, industrial designs, appellations of origin and the name of the manufacturer, as well as other characteristics that determine the identity of goods, works, services and the individual potential supplier (or) the manufacturer of goods. There are two exceptions:

- Resupply, modernisation, repair and retrofitting main (fixed) equipment used in a single technological cycle; and
- To determine the service provider for leasing and in providing a detailed description of the leased asset.

The tender process involves the following stages:

- Stage 1: Tender applications are submitted and reviewed by the Tender Commission, who makes a decision on admission to participate in open competition within ten calendar days from the date of opening bid envelopes. The Commission considers whether a potential supplier meets criteria described under paragraph 2 of Article 78 'Support local producers' of the Act. The buyer is required to discount the price of competitive bids of local producers by twenty percent. A Kazakh producer of works, services is defined as 'citizens of Kazakhstan and (or) legal entities established under the laws of the Republic of Kazakhstan, located in the territory of the Republic of Kazakhstan, using no less than ninety-five percent of the citizens of Kazakhstan in the total number of employees'.
- Stage 2: Bidders submit their price offers using a prescribed form, detailing: description; manufacturer (this is omitted for goods and services); measuring unit; quantity (volume); and Price, delivery terms specified by bidder; and point of delivery, including transportation, insurance, customs duties, cost of necessary spare parts, cost of maintenance for one unit of good or service.
- Evaluation: The Competition Commission compares the competitive price offers and determining the winner of the open competition on the basis of the lowest bid price quotation and price reduction for Kazakh Producers. If prices are equal, the winner is the one offering the highest percentage of local content.

Issues impeding effectiveness

In March 2012, NADLoC, which is under the Kazakh Ministry of Industry and New Technologies, claimed that most of the 229 companies mining companies do not meet the legal requirements for local content in the Law on Subsoil Use ¹⁹. In 2011 mining companies purchased 568 billion tenge worth of goods and services but only half were made through the register that is required to be used for procurement purposes according to the Law on Subsoil Use. The violations were estimated at 212.2 billion tenge (US\$ 1.38 billion).

Interviews with NADLoC representatives affirmed that local content targets are not being met in the mining sector. The main barriers were stated as a lack of locally produced equipment and machinery and lack of local production facilities. Technology transfer is still at early stages and human resources capability is still weak within certain technical specialities. NADLoC indicated that just under 100 categories of goods that are currently imported by the mining sector have potential to be developed locally (refer to Appendix 1). Some are being produced locally and have potential for growth. Others are not being produced locally but have large demand. NADLoC representatives expressed a desire for international investors to follow a transition strategy with these items, investing firstly in assembly, followed by production of spare parts later on.

NADLoC is currently studying the question of what are the allowable instruments to develop local suppliers which are consistent with a WTO framework.

Industry and Civil Society-led initiatives, including assessment of their effectiveness

The AGMP (association of mining companies) is the representative body for the mining industry. The AGMP has a Memorandum of Understanding with NADLoC and is the first port of call for the government when making new, or amending, legislation affecting the industry.

The services to members are primarily in the form of consultancy advice on legal issues. AGMP also fills an advocacy role when members have issues with local content, for example, in instances when purchases are not counted as domestic purchases.

AGMP representatives interviewed for this study suggested that deeper analysis is required on (1) the competitiveness of goods, and (2) current legal frameworks considering the consequences of Kazakhstan entering the WTO, and what mechanisms will be permissible to support local content. An analysis of the ability of local goods to compete on a global scale has not yet been undertaken, and it was thought that not enough information is available to determine if local producers can compete on price and quality.

Regional associations

To encourage local level initiatives, the Ministry of Regional Development has initiated a partnership program for the development and support of SMEs in regions by bringing together large companies, government and international organisations. The program aims to develop:

- Local supplier networks linked to large companies;
- Alternative business opportunities, unrelated to the core business of companies; and
- Entrepreneurial initiatives to introduce advanced technology and environmental protection.

Memoranda of understanding and cooperation were signed in April 2012 in Temirtau between the Committee of Enterprise Development, Atameken Union, EDF, Damu, the Atyrau, Mangistau, Karaganda and East Kazakhstan regions, KazMunaiGas, OzenMunayGaz, Kazzinc and Kazakhmys. A Central Working Group is responsible for implementation of the Partner Program, which includes representatives of the Committee, local government offices, DAMU Fund, large companies and business associations.

¹⁹http://www.interfax.kz/?lang=eng&int_id=expert_opinions&news_id=880

In the Karaganda region, five meetings of the Working Group were held in 2012, which included identifying priority sectors of SME Development. Kazakhmys shared a list of goods and services planned for procurement in 2013 with potential suppliers, as well as a list of manufacturers and service providers to consider.

Kazakhmys also initiated the Association of Businessmen and Industrialists in Balkhash and Zhezkazgan regions, where Kazakhmys has operations. Currently they are 116 participants, including 38 companies employing more than 4,978 employees.

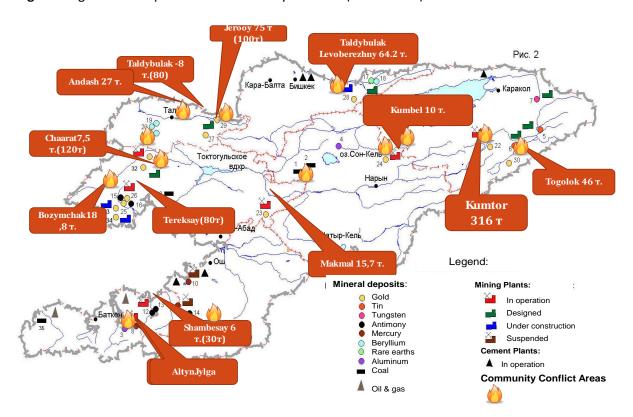
In the East Kazakhstan region, the program is implemented in cooperation with Kazzinc. In 2012, there were four meetings of the Working Group on the implementation of the Partner Program. The forum provided a space for addressing issues relating to the list of long-term supply contracts for SMEs, as well as communicating requirements and criteria for suppliers.

6.1.2 Kyrgyzstan

There is no systematic approach to encouraging greater linkages between mining investment and local suppliers. There have been some recent moves to attract investment to specific sectors. For example, the Ministry of Economy has taken steps to create tourism clusters by identifying locations with tourism potential and measures to simplify investment in the sector and attract public-private partnerships. However, due to lack of resources further development of the tourism cluster is currently on hold. No such programs exist in the mining sector.

The Ministry of Economy, the main government body responsible for the industrial and mining sectors policy, recognises the importance of linkages and value-add that the mining sector creates in the economy. However, there is no government strategy or policy aimed at increasing domestic procurement. Moreover, the Ministry of Economy was not aware of whether any research had been conducted on mining sector forward and backward linkages in Kyrgyzstan. There is also no awareness of best practice in local content in the government bodies responsible for the sector, namely, Ministry of Economy and Agency for Geology. However, the recent community conflicts have put the issues of local content on the government's agenda.

Fig 21. Largest Gold Deposits and Community Conflicts (Sariev 2012)



There are no local content provisions in the Subsoil Legislation. Local content may be included in the investment, concession agreements and PSAs with the operators, however, there are no provisions in existing investment or concessions agreements.

The Subsoil law mentions a 'social package', a set of measures required to be implemented by the subsoil user, aimed at developing the local community and addressing the most pressing issues of local importance. Requirements include:

- Education of the local population in various technical specialties;
- Employment of local population; and
- Development of rural infrastructure.

There is no guidance, however, on calculating the size of the social package, its implementation or monitoring.

The government includes some local content clauses in tenders for large mining projects. For example, the social package for Jeruy gold project tender (the tender failed in April 2013 and the second tender is planned for later in 2013) included requirements for a local workforce and investment in local social infrastructure.

Public Procurement Law applies to companies where the government holds a stake of over 50%. The law applies in the case KyrgyzAltyn, the second largest miner in the country. The Law has the following provisions regarding preferences to domestic suppliers:

- The procuring entity may provide a price discount of up to 20% in the evaluation of bids for goods manufactured in the territory of the Kyrgyz Republic compared with tender applications for foreign-made goods, as well as up to 10% for domestic contractors;
- If procurement is carried out on the territory of the Kyrgyz Republic, the procuring entity provides benefits for domestic contractors subject to the use of local labour resources, as well as at least 30% of local raw materials; and
- In the case of a decision to give preference to domestic suppliers (contractors), all obligations under international treaties are taken into account.

Supplier Databases

There are no comprehensive databases of domestic suppliers in Kyrgyzstan. Both mining companies and suppliers rely mainly on their own networks and databases. There are numerous published sectoral catalogues and online databases of businesses that are used by local procurement staff.²⁰

The Kyrgyz Chamber of Commerce and Trade has a small register of 'Reliable Suppliers'. The Chamber also supported the development of an online database of domestic suppliers²¹. The project is too new to assess its effectiveness. At the time of this report there were only a few suppliers registered in the system, with a few tender opportunities advertised.

One online procurement database that has been fairly successful is the Portal of Kyrgyz Companies²². The project is aimed at assisting in establishing business contacts between companies in Kyrgyzstan and a wide range of customers on behalf of the U.S. Government. It primarily services procurement needs of CENTCOM, the US army's Afghanistan operations. The supplier must self-register with the Joint Contracting and Contingency Services (JCCS). The project is implemented by the American Chamber of Commerce, with the financial support of the USAID Local Development. The portal provides Kyrgyz businessmen with advice on accessing markets on behalf of the U.S. Government.

²¹ http://www.madeinkg.com/index.php/tenders

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²⁰ For example, www.inform.kg

²² http://portal.amcham.kg/tend.html

TenderPro is a Russia-based online supply/demand database and e-procurement platform that is popular in the FSU and is used by Kyrgyz companies, including mining companies (e.g. Kumtor) and their customers²³. Presently, 182 Kyrgyz companies are registered in TenderPro.

Government Capacity

As noted during interviews with the Ministry of Economy, Agency for Geology and others²⁴, capacity in government bodies responsible for the mining sector is low due to the following reasons:

- Lack of continuity and high turnover of staff due to political instability. In addition, the
 Agency for Geology has been a target of mismanagement and corruption accusations by
 some members of the parliament (Jogorku Kenesh) and the media due to the highly
 politicised nature of the agency's work of granting and cancelling subsoil use rights..
- The flight of highly educated and skilled professionals from the government to the private sector due to a rigid public sector salary system. Officials in all ministries, regardless of the sector, receive the same salaries according to their civil servant category. Attracted by higher private sector salaries, mining, geology, economics and finance professionals tend to shift. (In other sectoral ministries, e.g. Education, this issue is not as prominent as there are few better paying opportunities outside of the public sector.)

Capacity of Business Associations

There are numerous NGOs and business associations monitoring activities of the mining sector as well as protecting the interests of entrepreneurs in the country. Currently there are three associations in Kyrgyzstan: Miners Guild, Association of Geologists and Miners; and the Kyrgyz Mining Association. One of most effective business associations is the Committee on Mineral Resources of the International Business Council (IBC). These organisations are operating in an uncoordinated manner, pursuing the interests of a narrow group of stakeholders. Activities are usually limited to discussions of policy, projects, laws, and some advisory services. Most companies do not belong to either association.

6.1.3 Tajikistan

Subsoil legislation and other legislation applicable to private mining investment in Tajikistan do not contain any provisions for local content or preferencing. There does not appear to be a policy targeted at promoting domestic supplies in mining supply chains. In 2009, the government created an Intra-agency Commission to Support Domestic Manufacturers. However, it does not appear to be currently operational.

There are some local supplier referencing provisions in the Public Procurement legislation that is applicable to companies with a government stake of over 50%:

- When foreign suppliers (contractors) participate in public procurement, internal suppliers, all else being equal, may be granted preference in the amount of 20% for goods and 10% for works:
- If the subject of procurement is works to be performed in Tajikistan, preference is granted on condition that the works are performed with the usage of domestic labour resources and not less than 30% of domestic raw and construction materials; and
- The procuring entity may grant 10% of preference to suppliers of consulting services on condition that the internal consulting companies employ not less than 70% of their permanent staff from domestic specialists.

²³ http://www.tender.pro/

²⁴ GIZ Mineral Resources for Development Project, the Mining Association, and mining companies

In addition, local content requirements may be incorporated in investment contracts and PSAs²⁵.

There are no databases of local demand or supply in Tajikistan. However, the Chamber of Commerce and Industry as well as the State Committee on Investments and State Property Management play an important role in organising matchmaking and investment promotion events in the form of business forums, fairs and roadshows. The Chamber of Commerce and Industry organises fairs and roadshows to promote Tajik products and participates in major international exhibitions. It is also charged with the mission of enhancing the quality of products and engaging in the provision of training to Tajik entrepreneurs.

Government and Civil Society Capacity

An assessment of the capacity of public sector and civil society to support domestic procurement was not undertaken as part of this study as none of the stakeholders interviewed were involved in local content development or domestic supplier support.

At the government level, there appears to be some capacity and general interest to promote domestic procurement at GosKomInvest. However, it is unclear which body within the complex mining sector governance structure could potentially be responsible for supporting domestic procurement.

There appear to be no business associations in Tajikistan representing the interests of the mining sector. The Chamber of Commerce and Trade promotes interests of Tajik companies in general and their main focus is promoting Tajik businesses abroad. The Chamber has over 600 members, none of which are mining companies. The Chamber has representations in four regions, including two regions where mining businesses are concentrated – Sughd and Khatlon. The regional Chambers seem to be more involved with mining businesses and, according to suppliers interviewed, are involved in some matchmaking activities between mining companies and local suppliers.

The National Association of Small and Medium Businesses of Tajikistan (NASMB) is involved in promoting an enabling business environment, business support services, basic business skills and private public partnership initiatives. NASMB does not have any linkages with the mining sectors as most of its members are in Dushanbe, the capital. The organisation has capacity to provide business skills training to local SMEs.

²⁵ Iinterview with Deputy Chairman of GosKomInvest Rakhmatboev

7. Domestic Procurement Practice

7.1 Kazakhstan Case Studies

Detailed case study research was conducted on two large mining companies, Kazakhmys and Kazzinc, with a view to identifying opportunities to increase domestic procurement.

Kazakhmys is the largest copper producer in Kazakhstan and ranks 11th largest in the world. The by-products include zinc, silver and gold. The company is an integrated copper producer, encompassing mining and concentrating, smelting and refining, captive power, support services and commercial power. Kazakhmys manages over 20% of the country's domestic supply, making it the largest power provider in Kazakhstan. The company is listed in London, Kazakhstan and Hong Kong. In 2012, group revenues were US\$ 3,353 million. As at 31 December 2012, the market value of Kazakhmys was US\$ 6.6 billion. The Group has two major copper growth projects with planned output from 300 kt to over 500 kt in the next six years.

Kazzinc is a fully integrated zinc producer with considerable copper, precious metals and lead credits. Most of the operations are in East-Kazakhstan Region. The company was established in 1997 through the merger of Eastern Kazakhstan's three main non-ferrous metal companies - Ust-Kamenogorsk Lead and Zinc Combinate, Leninogorsk Polymetallic Combinate and Zyryanovsk Lead Combinate. All three producers were majority-owned by the Government of Kazakhstan. A multinational provate company, Glencore, is the largest shareholder of Kazzinc. In 2011 the company spent approximately 2 billion tenge (US\$ 13 million) on social support in the towns where Kazzinc operates, such as Ust-Kamenogosk, Zyryanovsk, Ridder and other regions. Focus areas include education, healthcare, sports and culture, infrastructure development and providing support for disadvantaged groups.

In order to establish the maturity of both companies in embedding domestic procurement into the strategy, policies and systems of their organisations, company representatives responsible for local content were asked to conduct a self-assessment. The results of the two companies are fairly consistent and presented in Tables 18. An advanced level of self-reported maturity is evident, across all dimensions. This can be attributed to the established regulatory environment for local content and proportionate company response.

Table 18. Organisational Maturity Chart: Average of self-reported levels for Kazakhstan case study companies (Level 1 – Disengaged; Level 2 – Basic; Level 3 – Compliant; Level 4 – Committed; Level 5 - Leading)

Dimension	Level	Description
Business value to	3 - 5	Business drivers agreed, documented and signed off by supply chain, corporate affairs and other key stakeholders.
be gained from domestic procurement	Compliant, Leading	Business case approved by senior management and forms basis of DP Strategy development The investment community recognises Domestic Procurement (DP) performance as
Specific regulatory requirements	3- 4 Compliant, Committed	contributing to business value for the company. DP commitments go beyond meeting legislative requirements, and take into account other standards and good practice for DP DP commitments quantify how value for the company can be created from DP.
Definitions	4 Committed	Definitions of DP consider the value added to the local economy from the proportion of local content within a contract: Raw materials, Manufactured product, Assembly, Salaries of employees of non-local origin.
Demand side analysis		Transactional and non-strategic demand are evaluated against agreed criteria (e.g. including risk, timing, complexity, impact on community) to identify potential opportunities for DP. Demand analysis includes a historical spend analysis and clarity of where currently procured from. Demand analysis shared with government & local agencies and used to develop the local market to be national and/or globally competitive.

Dimension	Level	Description
Supply side analysis	3 - 4 Compliant, Committed	There is a structured local supplier database with supplier details, categories of goods and services is developed that is available to the procurement team. Demand profile is used to assist in identifying suppliers Company has engaged with local businesses to complete a high-level assessment of capacity, needs and barriers, and included in local supplier database that is regularly updated. All supplier information is integrated with overall vendor database and information management systems.
Domestic Procurement Strategy	3- 5 Compliant, Leading	DP strategy has input from Community Relations unit and other relevant stakeholders. KPIs in DP strategy have a clear link to business drivers. DP strategies have all elements including performance targets and KPIs Strategy is clearly connected to overall operational strategy. DP strategy delivers value and reach objectives as per business drivers.
Coordination	4 - Committed	Senior management incentives and performance metrics give a significant weighting to DP. Procurement team see facilitating DP as a core part of their role. Structured approach to share good practices across the company.
Ethics	5 - Leading	Ethical issues managed and identified collaboratively with key stakeholders, particularly suppliers, public officials and business leaders.
Preferencing	3- 5 Committed, Leading	Procedures are in place to implement preferencing mechanisms, such as reserving particular contracts for local suppliers, providing shorter payment terms and simplified tendering and contracts Preferencing within a category is lifted as soon as a competitive local supplier base is developed.
Communicating opportunities	Level 5 - Leading	Localised suppliers are able to understand and participate in any tender processes as effectively as any other medium-large supplier. Other large industry in the area share the mine's communication and tender model due to efficiency in the inclusion of local businesses.
Integrating domestic content into large contracts	4 -5 Committed, Leading	Collaboratively working with major contractors to improve DP performance, including their own DP Plans where necessary. A DP Management Plan is required of all those contracts that contribute to the desired local impact. Localised suppliers are able to understand and participate in any tender processes as effectively as any other medium-large supplier. Other large industry in the area share the mine's communication and tender model
Supplier capability development	5 - Leading	due to efficiency in the inclusion of local businesses. Work with government and other key stakeholders to build thriving local businesses in sectors that align with industrial policy, including building capacity of trade/business associations and training and support organisations. Support high growth suppliers in becoming competitive in local and global markets, and able to meet international standards (e.g. in terms of quality, lead times, safety, working conditions and cost control). Support for SMEs to become independent (identify other markets, innovation, sales)
Community-level enterprise development	5 - Leading	Company integrates a wider range program in partnership with government, civil society and donors (where relevant) to create the local enabling environment required for community entrepreneurs. Clusters are in place to meet regional industry needs, including mining. Nurtured community enterprises survive after contract is over.
Monitoring	3 -5 Compliant, Leading	Collaborative effort to improve indicators of diverse, thriving local economies Framework and proper systems in place for measuring, monitoring and reporting. Baseline of DP performance is established, against which progress is/will be measured. Evaluation and monitoring includes performance of implementation partners and participants in Supplier Development programs.
Reporting	4 - Committed	KPIs are part of the external communication reports and engagement with local community and government.

7.1.1 Demand Analysis

As shown in Tables 19 and 20 below, companies operating in Kazakhstan tend to differentiate between procurement made as subsoil users (and therefore subject to local content regulations) from other procurement. Notable is that the subsoil regulations only influence a minority of the total procurement by both companies - procurement as a subsoil user only accounted for 38,5% of Kazakhmys and 14,8% of Kazzinc total procurement in 2012.

While a fairly high level of local content is achievable for works and services - 99% at Kazakhmys and 96% at Kazzinc, goods are only at 30,5% and 6,4% respectively²⁶.

Table 19. Kazakhmys Domestic Procurement profile in 2012

	Total spend (US\$min)	Total Kazakh spend (US\$ miln)	% Kazakh content	Total number of suppliers	Number of Kazakh suppliers
Total goods, services and works	1646.3	1026.6	62,36	3756	3332
As subsoil user	633.1	378.2	59,74	1439	1330
Total goods	877.4	267.2	30,45	n/a*	n/a
As subsoil user	291.3	53.2	18,27	n/a	n/a
Total services	477.9	469.7	98,28	n/a	n/a
As subsoil user	182.9	182.5	99,77	n/a	n/a
Total works	291.0	289.7	99,55	n/a	n/a
As subsoil user	158.8	158.7	99,96	n/a	n/a

^{*} Data not available

Table 20. Kazzinc Domestic Procurement profile in 2012

	Total spend (US\$ mln)	Total Kazakh spend (US\$ mln)	% Kazakh content	Total number of suppliers	Number of Kazakh suppliers
Total goods, services and works	1479.8	484.6	32.7	1062	898
As subsoil user	219.5	162.7	74.14	138	115
Total goods	1044.4	66.9	6.40	438	290
As subsoil user	73.2	22.8	31.70	83	61
Total services	337.5	323.3	95.80	521	505
As subsoil user	86.0	83.2	96.72	30	29
Total works	97.9	94.3	96.30	103	103
As subsoil user	60.2	56.8	94.26	25	25

²⁶ As mandated by the Kazakh local content regulation, local content numbers include only goods that have CT-KZ certificates. As per case study companies, actual local content numbers are higher as many suppliers whose goods otherwise meet Kazakh content requirement fail to acquire CT-KZ certificates due to a cumbersome bureaucratic process.

7.1.2 Barriers to Increasing Domestic Procurement

Government Perspectives

According to NADLoC (2010), increasing the share of local content in procurement is enabled by factors such as:

- The existence of institutions focused on the development of local content
- A legal framework designed to support the development of local content
- Specialist functions, policies and measures within mining companies for the development of local content
- Factors contributing to the competitiveness of Kazakh suppliers:
 - o A rich mineral resource base
 - Strategic location between Europe and Asia
 - Potential for substantial increases in domestic production of goods, works, services and human resources. (This is supported by the two mining company case studies and the proportion of non-Kazakh content)
 - o Expansion of trade integration, through the EEA and planned accession to the WTO

Barriers to increasing local content in domestic procurement in subsoil include:

- Lack of goods, works and services in the Kazakhstan market with the required quality
- Lack of awareness amongst local entrepreneurs of the goods, works and services demanded by the mining industry
- Lack of awareness amongst companies of potential suppliers of Kazakhstan goods, works and services
- Lack of government support for domestic producers of tools and equipment
- Potential deterioration in the business climate as a result of active intervention in the state in private market processes
- Factors detracting from the competitiveness of Kazakh suppliers, such as:
 - Low diversification of the economy, and low contribution of manufacturing
 - High dependence on imports
 - Low innovation, for example, the volume of innovative products in 2009 amounted to only 2.6% of the total manufacturing output
 - Lack of highly skilled technical professionals
 - o Accelerated industrial production in bordering countries such as Russia and China

Mining Operator Perspectives

Interviews conducted with mining company representatives (Kazakhmys, Kazzinc, Central Asia Resources, and a uranium producer who preferred to remain unidentified), yielded the following common themes:

Procurement system. The regulated e-procurement tendering system, which requires the lowest bid to be accepted, can lead to the selection of suppliers offering lower quality. The procurement system does not allow for evaluation of cost-benefit and a supplier's track record does not count as a criterion. It was expressed that this incentivises companies to work 'around the system'. The strict procurement regulations engender creative practices so as to tightly specify the tender so that only one supplier is able to meet the requirements. This means that the decision is sometimes made by the time the tendering process commences, a practice associated with unethical practices such as kickbacks.

Lack of a local market in certain goods and services. Examples include second tier providers of legal and advisory services (companies are forced to use the pricier large consultancies due to lack of alternatives); leased mining equipment and heavy machinery (companies have to lease

at high rates from individual entrepreneurs); and spare parts inventory in local suppliers (which leads to long lead times for delivery, and companies having to keep safety stock). The idea was put forward for the need for a large storage facility to be built in a centralised location, which would service the needs of a number of mining companies. This would lower transportation costs, and minimise delays in waiting for equipment. It was also expressed that there is little incentive to develop local content in spare parts are these are fairly easy to procure, and the more appropriate model of sourcing these is through joint ventures. Other needs identified include materials for blasting, chemicals, and special steels.

Onerous regulatory reporting. Separate reporting regimes are required for tax, local content, training, and tender reporting. Companies have all had to set up dedicated monitoring and reporting functions. Smaller companies expressed that they are disproportionately burdened as there is no differentiated treatment towards mining firms of different sizes.

Lack of access to affordable finance. Interest rates for borrowing were described as excessive for SMEs. Mining companies in Kazakhstan do not tend to provide direct loans to suppliers, but on occasion make advance payments, or interest-free loans. For example, in order for a marshalling yard to be built to store chemicals, one mining company advanced payment to enable building to commence. This was seen as more efficient as securing a loan from the bank. This presents its risks, however, as companies interviewed described cases where suppliers disappear after receiving advance payments without fulfilling the contract.

Joint ventures. Some companies prefer to work with (and in some cases have actively facilitated) joint ventures between foreign companies and local suppliers. However, mining company efforts to encourage joint ventures are not always welcomed by existing international suppliers, who are not overly keen to develop local competitors.

Lack of information about local suppliers. The lack of a reliable, up to date, database of local suppliers emerged as an issue.

Political risk of regional exports. The belief was that Kazakhstan may not be a large enough market to build competitive local producers, and the politically instability of the remainder of Central Asia does not necessarily lead to surrounding countries being an export market. The Russian market was considered a more realistic trade partner.

Lack of company led supplier development programs. Companies generally saw training and advisory interventions as the task of government rather than industry. Instead, they see the industry role as providing information about items they are currently importing, running supplier forums, and in some special cases, upfront payment, equipment, buildings and longer contract terms.

Not all of the sentiment was pessimistic. Mining companies described Kazakhstan's excellent transport and logistics infrastructure base; and low cost labour, land and energy. Some high quality goods are being provided with Kazakh content, such as drilling materials, pumps and pipes.

One company, Kazakhmys, is pursuing local level initiatives to develop local suppliers by working with SME associations in mining regions (for example, in Balkhash and Zhezkazgan). Members are supported to develop the quality and skills needed to do business with Kazakhmys.

Supplier/SME Perspectives

Interviews with suppliers to the mining industry identified five themes as barriers facing SME suppliers.

Price competition from Russia and China. The local content regulations were introduced just before the recession hit the mining industry. During the recession, a number of international mining companies left Kazakhstan, leaving behind larger national companies to dominate the industry. Lower cost supply was sourced from Russia and China, associated with lower levels of

quality. With the introduction of the Customs Union, even more attention has shifted to supply from Russia.

Regulated procurement system. The perception exists that the overly bureaucratic procurement process is leads to mining companies working around the system and awarding contracts to 'people they know'. Suppliers that do well in the system tend to offer a specialised service or product. Thus, while the government-regulated procurement system is aimed at ensuring equitable participation in the tender process, the reality is often the reverse, and decisions are made by the time the tender is announced. The evidence for this practice is found in instances where the tender is awarded the day after it is announced. The system has potential to be manipulated by 'unofficial' bids and 'official' bids. The unofficial bid is the process of seeking proposals from a number of suppliers, so that they preferred option guides the detailed specifications for the government bidding process. Official bids are tightly specified so that the buyer can get the quality and brand they seek. Not only is the decision made well in advance, the situation presents the potential for decisions to be made on the basis of self-interest. It was thought that free derestricted tendering, consistent with WTO policies, would not create the same incentives for corrupt practices.

High costs of financing. Interest rates for short term business loans were also described as high. The benchmark interest rate in Kazakhstan, as reported by the National Bank of Kazakhstan, was last recorded at 5.5%. The National Bank of Kazakhstan official interest rate is the key refinancing rate. However, short term credits (so called 'fast money') vary between 14% and 18%. Interest on capital investment tends to lean towards 18%.

Inefficient cross-border trading. Another barrier is found in cross-border trading in the CIS area and visa requirements. Having access to the equivalent of an APEC card was thought to increase the efficiency of trading. The Customs Union arrangement would have the potential to address this barrier.

Access to qualified personnel. The education system in Kazakhstan was described as producing too few engineers and scientists. Further, not enough staff have the ability to communicate in the English language, thought to be essential for participation of local firms in global value chains.

7.1.3 Opportunities for Increased Domestic Procurement

Both Kazakhmys and Kazzinc participated in a self-completion survey to identify which goods and services have potential for market development in Kazakhstan. The results, which were fairly consistent across both companies, were averaged and presented in Figure 22 and 23 below.

Services opportunities

Competitive supplier market already exists within Kazakhstan: demolition & site preparation, health services, professional services: legal, load & haul, energy services, earthworks, tunnelling, piles & caissons, building construction, civil works construction and maintenance, hospitality services, facilities light maintenance, professional services: financial & business advisory, insurance services, and telecom and data systems.

High potential to be developed in country but lack the required investment: light vehicle maintenance, heavy vehicle maintenance, computer maintenance & system servicing, personnel services: training, blasting, crushing & grinding, recovery activities, paving & surfacing, site improvements including landscaping, environmental services, fleet management, professional services: accounting, personnel services: manpower, banking & financial services, supply chain services, transport/logistics, and security.

Medium potential given some technical/financial support: waste management (recycling and disposal), laboratory activities, drilling, management & technical maintenance services, equipment maintenance, and electrical equipment installation & maintenance.

Limited potential due to limited market and/or entrepreneurs: environmental risk assessment services.

Low to no potential for development: Neither of the companies attributed this rating to a services category.

Fig 22. Services that present opportunities for development in Kazakhstan as identified by case study companies

(Scale: 1 = competitive supplier market exists in country, <math>2 = high potential to be developed in country but lacks investment; <math>3 = medium potential with technical/financial support, 4 = limited potential due to limited market and/or entrepreneurs; <math>5 = low to no potential for development)



Goods opportunities

Competitive supplier market already exists within Kazakhstan: uniforms, safety equipment, personal protective equipment (PPE), furniture and fixtures, fresh foods, cleaning and camp consumables, energy (fuel, gas), and bulk construction materials.

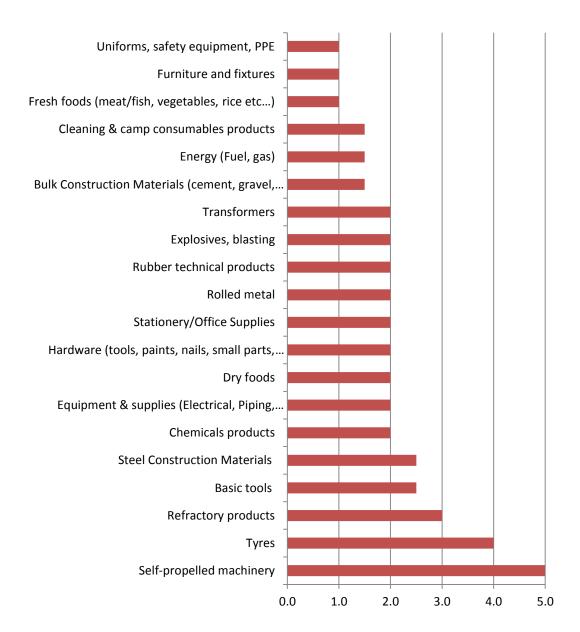
High potential to be developed in country but lack the required investment: basic tools, steel construction materials, chemical products, equipment & supplies, dry foods, hardware, stationery/office supplies, rolled metal, rubber technical products, explosives for blasting, and transformers.

Medium potential given some technical/financial support: refractory products.

Limited potential due to limited market and/or entrepreneur: tyres.

Low to no potential for development: self-propelled machinery.

Fig 23. Goods that present opportunities for development in Kazakhstan as identified by case study companies (Scale: 1 = competitive supplier market exists in country, <math>2 = high potential to be developed in country but lacks investment; <math>3 = medium potential with technical/financial support, <math>4 = limited potential due to limited market and/or entrepreneurs; <math>5 = low to no potential for development)



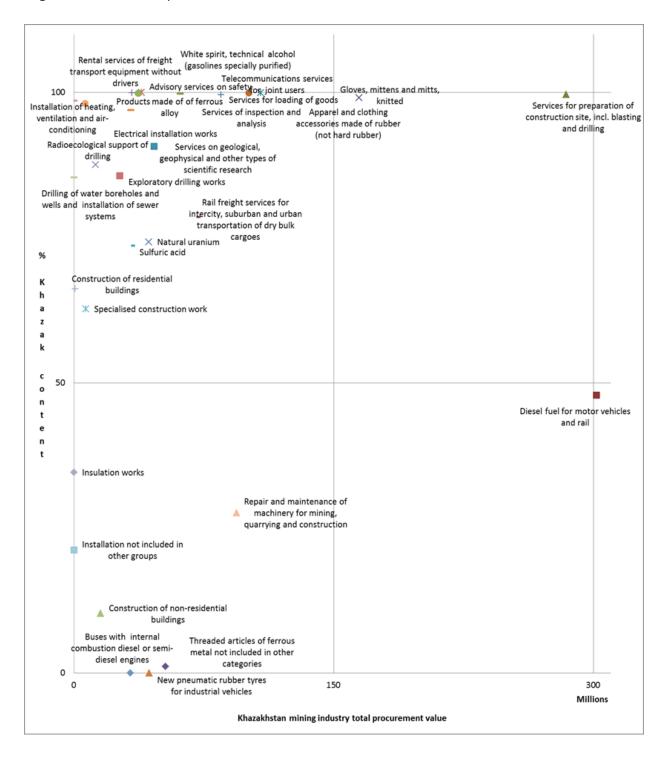
NADLoC was invited, for the purposes of this study, to nominate those goods and services that, with some support, have the potential to be competitive on a global level. The list generated by NADLoC, with total procurement spend and proportion of Kazakh content within that spend, is shown below in Table 21.

Table 21. Goods and services demanded by the mining sector with potential to be competitive

Description	Value of procurement in US\$ thousands	Kazakh Content %
Services for sale of pipeline gas fuel	5303633.7	0,01
Diesel fuel for motor vehicles and rail	1971402.7	47,87
Services for preparation of construction site, incl. blasting and drilling	1857520.4	99,62
Gloves, mittens and mitts, knitted	1075905.1	99,09
Telecommunications services for joint users	705183.7	99,95
Apparel and clothing accessories made of rubber (not hard rubber)	660563.8	99,93
Repair and maintenance of machinery for mining, quarrying and construction	613431.8	27,63
Services for loading of goods	555497.7	99,55
Rail freight services for intercity, suburban and urban transportation of dry bulk cargoes	464141.6	78,58
Services of inspection and analysis	401138.3	99,82
Threaded articles of ferrous metal not included in other categories	346750.0	1,14
Services on geological, geophysical and other types of scientific research	302307.1	90,69
New pneumatic rubber tyres for industrial vehicles	284041.4	0
Natural uranium	283022.7	74,28
Safety advisory services	254802.1	99,99
White spirit, technical alcohol (gasolines specially purified)	242239.9	99,85
Rental services of freight transport equipment without drivers	219575.2	99,91
Sulphuric acid	218155.5	73,64
Products made of of ferrous alloy	215613.5	96,96
Buses with internal combustion diesel or semi-diesel engines	214014.3	0
Exploratory drilling works	173602.7	85,64
Construction of non-residential buildings	101264.8	10,28
Radioecological support of drilling	82770.9	87,56
Specialised construction work	45940.9	62,74
Electrical installation works	41929.0	98,11
Construction of residential buildings	6072.7	66,18
Installation of heating, ventilation and air-conditioning	1454.0	98,63
Drilling of water boreholes and wells and installation of sewer systems	904.4	85,37
Insulation works	405.2	34,61
Installation not included in other groups	105.9	21,22

To give a sense of relative local economic development impact between purchases, the matrix below segments these goods and services into four quadrants: high relative spend/high Kazakh content; lower spend/high Kazakh content; high spend/low Kazakh content; and low spend/low Kazakh content. The matrix excludes sales of pipeline gas fuel, as the total procurement spend is approximately 2,5 times that of the next largest spend item.

Fig 24. Matrix of total spend value vs Kazakh content



7.1.4 Opportunities to Diversify Economy through Mining Supply Chains

Analysis conducted by NADLoC for the purposes of this study identified four main supply sectors to the mining industry that have potential linkages to other sectors in the Kazakhstan economy. As such, developing these supply sectors provides opportunities for diversification:

- Chemicals: the mining industry currently has a high demand for sulphuric acid, white spirits and technical alcohol. All are produced locally with fairly high levels of local content.
- Light industry: high demand items with a high local content supplier market include knitted gloves, mittens and mitts; and rubber apparel and clothing accessories.
- Metallurgy: for example, the industry consumes large volumes of threaded articles made of ferrous metals, however there is a low level of Kazakh content amongst local suppliers. Conversely, products made of ferrous alloy have very high local content levels.
- Production of machinery: this is an area of high demand but dominated by imports. Repairs
 and maintenance for mining, quarrying and construction machinery also show relatively low
 local content levels.

7.2 Kyrgyzstan Case Study

Detailed case study research was conducted on two mining companies, Kumtor Gold and Kyrgyzaltyn, with a view to identifying opportunities to increase domestic procurement.

The research also involved a focus group with managers from the following mining companies (mainly involved in exploration) and related organisations: Kyrgyz Mining Association, Andash Mining Company, Manas Resources, Kazakhmys, Kentoo (a local engineering, procurement and construction (EPC) contractor), International Business Council, Kyrgyzaltyn, USAID REFORMA project and Deloitte consultants. The objective was to gather information about current supply chain activities in the country, and identify barriers and opportunities for developing local sourcing.

Semi-structured interviews were also conducted with several domestic suppliers who had worked with the mining sector within the past five years. The interviews covered the following subjects:

- Business enabling environment for domestic suppliers
- Access to finance
- Access to business service providers
- Access to infrastructure
- Engagement with mining companies, e.g. tender process, quality, HSE, volume, terms of supply, payment etc.
- Partnerships with mining companies
- Competition from foreign suppliers
- Role of government in supporting SMEs
- Role of business associations in promoting SMEs

Kumtor Gold is the largest enterprise in Kyrgyzstan. 100% of Kumtor is owned by Centerra Gold Inc. whose shares trade on the Toronto Stock Exchange. The Kyrgyz Republic, via Kyrgyzaltyn JSC, is Centerra's largest shareholder, with a 33% stake.

The Kumtor gold mine, located in the Kyrgyz Republic, about 350 kilometres southeast of the capital, Bishkek, and about 60 kilometres north of the border with the People's Republic of China. The deposit is being developed by open-pit mining techniques utilising typical drill, blast, loading and haulage operations. The ore is delivered to the crusher and further to the mill, where the gold is extracted using carbon-in-leach technology. Kumtor is aiming to produce an average of 650,000 ounces of gold a year for the next decade. In 2012, a new Life of Mine (LOM) plan was been submitted to extend production till 2026.

Despite the fact that the Kumtor gold deposit was discovered in 1978, the development of the mine was delayed as the project was seen as being too costly. It was not until after Kyrgyzstan gained independence that it found itself in a position to attract western investment to start developing its own mineral resources. In 1992, the Government of Kyrgyzstan signed an agreement with Canadian Cameco Corporation, one of the world's largest uranium producers, to develop Kumtor deposit

In 2009, the Government of the Kyrgyz Republic, Centerra Gold Inc. and Cameco Corp. signed an Agreement on New Terms over the Kumtor deposit. This Agreement, after being ratified by the national parliament, resolved all of the legal disputes, expanded the Company's concession area, and adopted a simplified and stabilised tax regime for the Kumtor project. Under the new tax regime, gross revenue is taxed at a rate of 14%, which includes a 1% monthly contribution to the Issyk-Kul Region Development Fund. The Kyrgyz Republic, represented in the Company by Kyrgyzaltyn JSC, in its turn, increased its shares in Centerra up to approximately 33%.

The Government of Kyrgyzstan and Centerra are currently negotiating a restructuring transaction under which Kyrgyzaltyn would receive a 50% interest in the joint venture company that would own the Kumtor Project in exchange for its 32.7% equity ownership in Centerra and

US\$100 million which will be provided to Centerra by way of an adjustment to joint venture distributions otherwise due to Kyrgyzaltyn.²⁷

Kyrgyzaltyn is a state owned enterprise specialising in gold mining. Its key assets are Makmal Gold, Tereksai Mine, Solton-Sary Mine and a gold refinery. The company also has stakes in several joint ventures (representing interest of the Kyrgyz Government), such as Centerra Gold Inc. (Kumtor deposit in Kyrgyzstan and a number of deposits in Mongolia, Russia, Turkey and the USA), Altynken LLC (Taldy-Bulak Levoberezhny in Kyrgyzstan) and Jerooyaltyn CJSC (Jerooy deposit in Kyrgyzstan).

- Makmal Gold is the main production unit of Kyrgyzaltyn. The Makmal gold deposit was
 discovered and explored in 1969-1977 and put into operation in 1986. The number of
 technical and production personnel exceeds 1200 people. Over the last 10 years, it has
 produced 21.7 t of gold and a project is being implemented to extend the combinate life
 until 2016.
- Tereksai, located in the south, is one of the oldest mining enterprises in the country. For a
 long time it was focused on mining of antimony, accompanied by the mining of gold. At the
 beginning of the 1990s, the main product became gold, and about 150 kg is produced
 annually. Reserves of gold in the Tereksai zone, including the Perevalnoye deposit, are
 estimated at 20-25 t of gold. There are 395 employees. The floatation concentrate is
 exported to China and Kazakhstan.
- The Solton-Sary deposit is located in 355 km from Bishkek city. Based on an evaluation by the Territorial Reserves Committee in 2005, reserves comprise 6,97 t of gold with average grade of 3.48 g/t, amounting to 2981.1 kg of gold.
- In operation since 1993, the refinery produces standard (bank) gold bars weighing about 11-13 kg, small gold bars weighing 1000 g and 100 g of the highest standard (999,9), and standard silver bars weighing about 25 kg (999,9 standard). Joint ventures were created by Kyrgyzaltyn to develop the Jerooy and Taldy-Bulak Levoberezhny deposits and process the produced precious metal at the refinery²⁸

Organisational maturity in domestic procurement

In order to establish the maturity of Kumtor and Kyrgyzaltyn in embedding domestic procurement into the strategy, policies and systems of their organisations, company representatives responsible for local content were asked to conduct a self-assessment. The results of the two companies are presented in Table 22. A self-assessment by Kumtor identified a fairly low level of maturity on integrating domestic content into large contracts; and supplier capability development. Relatively higher levels of commitment were apparent in recognising the business value to be gained from domestic procurement; meeting regulatory requirements; reporting; supply side analysis; and internal coordination. A self-assessment by Kyrgyzaltyn identified very low levels of maturity across all dimensions of embedding domestic procurement into company practice. According to the Kyrgyzaltyn representative this is due to the fact that Kyrgyzaltyn has to follow Public Procurement Law and regulations that do not allow for much room to support or give preference to domestic suppliers.

http://www.centerragold.com/sites/default/files/news-releases-en/cg-09092013-en.pdf

²⁸ http://www.kyrgyzaltyn.kg/

Table 22. Organisational Maturity Chart: Average of self-reported levels for Kyrgyzstan case study companies (Level 1 – Disengaged; Level 2 – Basic; Level 3 – Compliant; Level 4 – Committed; Level 5 - Leading)

Dimension	Level	Description	Level	Description
		Kumtor		Kyrgyzaltyn
Business value to be gained from domestic procurement	4-Committed	Business drivers clearly prioritise external stakeholder drivers and contribution to long-term economic development and thriving local communities.	2 - Basic	Business drivers are superficially understood by some personnel, but not consistently or systematically identified.
Specific regulatory requirements	4- Committed	DP commitments quantify how value for the company can be created from DP.	3 - Compliant	DP commitments go beyond meeting legislative requirements, and take into account other standards and good practice for DP.
Definitions	3- Compliant	Definition includes local citizen participation in ownership. Clearly defined criteria that define local community suppliers, that take into account the project or operation's Zone of Influence. Domestic procurement spend and local community procurement spend for the operation are clearly defined.	2 - Basic	DP definitions required by national legislation are adopted.
Demand side analysis	3- Compliant	Transactional and non-strategic demand are evaluated against agreed criteria (e.g. including risk, timing, complexity, impact on community) to identify potential opportunities for DP. Demand analysis includes a historical spend analysis and clarity of where currently procured from.	3 - Compliant	Transactional and non-strategic demand are evaluated against agreed criteria (e.g. including risk, timing, complexity, impact on community) to identify potential opportunities for DP. Demand analysis includes a historical spend analysis and clarity of where currently procured from.
Supply side analysis	4- Committed	BU has engaged with local businesses to complete a high-level assessment of capacity, needs and barriers, and included in local supplier database that is regularly updated. All supplier information is integrated with overall vendor database and information management systems.	2 - Basic	Local business database and statistics driven by requirements of government or financing partners. Little or no additional supplier assessment undertaken by the project or operation - reliance on using government or partner data. Multiple, or a single non- structured, databases of potential local suppliers are kept to log offers received from the market.
Domestic Procurement Strategy	3- Compliant	DP strategy has input from Community Relations unit and other relevant stakeholders. KPIs in DP strategy have a clear link to business drivers. DP strategies have all elements including performance targets and KPIs.	2 - Basic	A high level plan developed but lacks key elements such as business drivers, supply side analysis, preferrencing mechanisms and KPIs
Coordination	4- Committed	Senior management incentives and performance metrics give a significant weighting to DP. Procurement team see facilitating DP as a core part of their role. Structured approach to share good practices across the company.	2 - Basic	Some efforts driven by Community Relations function (e.g. encourage buyers to procure locally) but most procurement staff continue with "business as usual". Diffused accountability and responsibility.
Ethics	3- Compliant	Ethical risks identified for all key decision points in the procurement cycle, and the lifecycle of the project, with mitigations in place.	Level 2 - Basic	Informal discussions about ethical behaviours and risks.

Dimension	Level	Description	Level	Description
Preferencing	3- Compliant	Procedures are in place to implement preferencing mechanisms, such as reserving particular contracts for local suppliers, providing shorter payment terms and simplified tendering and contracts.	1 – Disengaged	No formal process on how to give preference to local suppliers. No space or opportunity for new entrants (procurement teams always rely on usual vendors). Some preferrencing is applied as part of procurement regular procedures: ex price preferencing due to logistics costs.
Communicating opportunities	3- Compliant	Site communicates upcoming opportunities, with adequate timeframes for capability development of local businesses.	2 - Basic	No customisation of documents and language to ensure effective communication with local suppliers. Reasons for failure in bids are provided if requested.
Integrating domestic content into large contracts	2- Basic	Major suppliers encouraged, but not enforced to procure locally. No formal weighting applied to give preference to existing large suppliers that source locally.	1 – Disengaged	No expectation placed on major contractors and suppliers to procure locally.
Supplier capability development	2- Basic	Local businesses not linked to the demand, receive some support through a capability program with a social focus (enterprise development). Generic / basic supplier assessments and contract monitoring is ad-hoc. Only contractors receive some training as part of Health & Safety requirements.	1 – Disengaged	No SME or local Supplier Development programmes Contracts terminated in the event of non-conformance.
Community- level enterprise development	3- Compliant	Some local businesses created by Community Relations function become suppliers in response to specific opportunities	2 - Basic	Operation responsive to inquiries from prospective community entrepreneurs, but no formal system in place. Some projects were initiated but no link with DP strategy. Some companies or cooperatives are created to become suppliers in response to external pressure or social agreements made.
Monitoring	3- Compliant	Framework and proper systems in place for measuring, monitoring and reporting. Baseline of DP performance is established, against which progress is/will be measured. Evaluation and monitoring includes performance of implementation partners and participants in Supplier Development programs.	2 - Basic	Occasional case studies collected for promotions.
Reporting	4- Committed	KPIs are part of the external communication reports and engagement with local community and government.	2 - Basic	Ad hoc collection on local spend data, reported internally, available

7.2.1 Demand Analysis

Kumtor Gold and Kyrgyzaltyn operate under different procurement and tax regimes that regulate their domestic procurement practices.

The Restated Investment Agreement of 2009 between Centerra and the Kyrgyz republic establishes a legal basis for Kumtor operations as well as a specific tax and customs regime. The agreement does not include any provisions for domestic procurement. Kumtor follows Centerra Gold's procurement process from pre-qualification to contract award and management.

Tax and customs duty exemptions that apply to Kumtor procurement include the following:

- Kumtor Gold Corporation and Kumtor Operating Company are exempt from all withholding obligations with regard to payments to third parties. However, these third parties are not exempt from the relevant taxes to which the withholding would otherwise have related, subject to benefits provided in any applicable international treaties;
- Centerra and its subsidiaries (including Kumtor Gold Corporation and Kumtor Operating Company) are exempt from paying taxes with respect to intra-group transactions, including for services, dividends, interest and other distributions or transactions; and
- The Kumtor Project is exempt from paying customs duties in relation to imported goods.

As a state-owned company, Kyrgyzaltyn follows the Law on Public Procurement (PPL). Procurement procedures include open tender, restricted tender, two-stage tender, request for quotation and direct contracting. Open tender is the default procedure. The PPL regulates eligibility and qualification criteria for public procurement procedures. The law determines specific deadlines for some stages in the PP procedure.

Domestic preferences may be applied to any kind of procurement contract. Kyrgyzaltyn can apply a 20% discount to the offer of any tenderer, who offers products of domestic origin, or 10% for local tenderers in the procurement of works. According to the PPL, domestic suppliers are individual entrepreneurs or legal entities, registered as such in the Kyrgyzstan. Sole sourcing is allowed from a list of domestic suppliers approved by the government. The list includes 32 industrial companies mainly with government participation.

Supply chain

Share of local and international suppliers reported by Kumtor and Kyrgyzaltyn are quite different. As illustrated in Figures 25 and 26 below, Kumtor and Kyrgyzaltyn reported that Kyrgyz suppliers respectively comprised 53% and 75% of their total number of current suppliers. Despite the fact that Kyrgyzaltyn scored significantly lower on procurement maturity self-assessment, the company has a higher share of local suppliers. Some of the factors that account for the difference in the share of local procurement between the two companies include:

- Scale of operations: Kumtor 's production volumes are about 40 times higher than Kyrgyzaltyn's. Accordingly, the two companies consume different volumes of production inputs, in particular, in the categories of bulk construction materials, chemical products and fuel. Whereas local companies can meet KyrgyzAltyn's smaller volume requirements, existing local supplies in these categories are not sufficient for Kumtor.
- Quality standards: KyrgyzAltyn's local suppliers follow the same system of quality standards, i.e. Soviet developed GOSTs. Many of Kumtor's production activities require inputs in compliance with international quality standards. Most local suppliers are unable to meet such standards.

• Level of sophistication of operations: Kumtor's operations use more advanced technologies and production processes, therefore their higher value added inputs tools and equipment - are more sophisticated and are not available locally.

Fig 25. Kumtor: Local vs International, % of total current suppliers

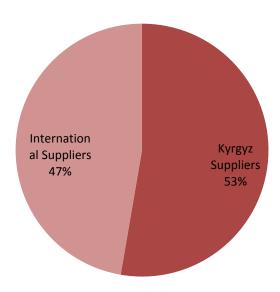
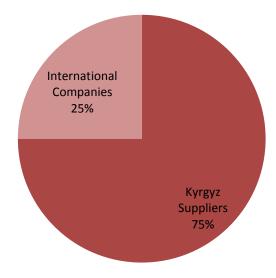


Fig 26. Kyrgyzaltyn: Local vs International, % of total current suppliers

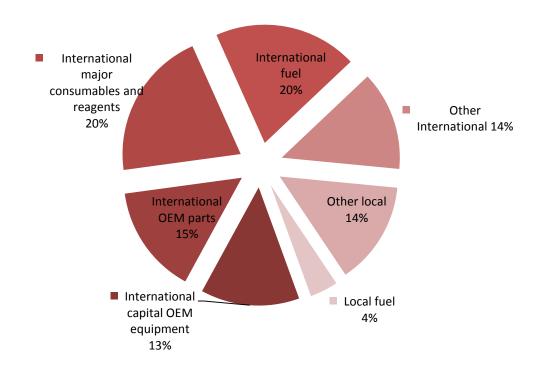


Some of the procurement challenges faced by Centerra, Kumtor's parent company, are related to the remote locations of their properties, requiring lengthy lead times for equipment and supplies. Furthermore, Kyrgyz operations are limited with respect to alternative suppliers of

major reagents and consumables, and any disruption at supplier facilities could result in suspension of operations. Major equipment and components and certain key consumables are imported.

Total spend for the Kumtor project was US\$ 406.3 million for the period June 2012 – May 2013. Kumtor defines 'local spend' as all items sourced from a company registered in Kyrgyzstan. Original Equipment Manufacturer (OEM) parts, capital equipment, major consumables and reagents are not available for purchase in Kyrgyz Republic. These items comprise 48% of total spend (fuel exclusive). Total spend for the period on consumables (goods and services) was US\$ 112.4 million (including US\$ 10.8 million for electricity), of which 50.91% was spent with Kyrgyz suppliers based in proximity to operations

Fig 27. Local vs International breakdown of Kumtor total spend, June 2012 - May 2013



Kumtor has launched a series of initiatives in 2013 in order to identify other potential Kyrgyz suppliers not currently in their supply chain. Kyrgyz suppliers are invited to attend business forums organised by Kumtor. The forums aim to:

- To review purchases made by the Company;
- Express future needs for materials, products and services;
- Provide information on basic requirements for suppliers and purchased products; and
- Provide information on procurement procedures.

In 2013, Kumtor has commenced a review of all items purchased internationally with the intent of identifying further items that could be bought in Kyrgyzstan. A database of items being purchased locally is maintained, so as to record successes and failures.

Kyrgyzaltyn reported that main categories of goods and services purchased internationally include complex and high tech equipment, as such equipment is not produced in Kyrgyzstan. The main suppliers are in Russia and China. Categories of goods and services that are exclusively procured locally include catering, earthworks, transport, civil construction, and drilling.

In many cases, Kyrgyzaltyn's terms of delivery and payment implicitly favour local suppliers. Due to the scale of operations and cash flow issues, Kyrgyzaltyn places small regular orders (e.g. once a quarter/month) within longer framework contracts. Such terms may not be attractive to international suppliers as the transportation costs of such small volumes of freights would be prohibitive.

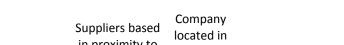
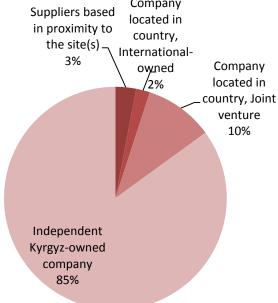


Fig 28. Kyrgyzstan located companies supplying Kyrgyzaltyn's operations



In cases where a foreign supplier has an advantage over domestic suppliers due to concessions on taxes such as VAT, these factors are taken into account in calculating the price of a bid. For example, the value of the tax concession is added to the price of a foreign supplier

Kyrgyzaltyn carries a demand analysis on an annual basis as part of the procurement planning process. Starting in September, the company develops workplans for the following year and this informs the procurement plan. The demand analysis includes a historical spend analysis and existing/known sources of supply.

Community Procurement

Kumtor's main motivation to procure locally, In addition to cost efficiencies, is the mitigation of social risk. In the past several years there has been growing pressure on Kumtor from local communities around the mine and central and local government to contribute more to the local economy. Access to the Kumtor project has been restricted on several occasions by roadblocks (e.g. in May 2013), leading to delays and shut down in production.

A priority for Kumtor is to procure from suppliers in communities near the mine and in the region of Issyk Kul. In evaluating bids, Kumtor assigns higher scores to companies from Issyk Kul. Some categories of goods and services are sourced only from local businesses e.g. meat, fruit and dairy products which are produced locally if possible i.e. some products are seasonal and need to be imported. These products are also sourced from local suppliers. In some instances, instead of placing a large order with one local supplier, the order is broken into smaller orders to accommodate more local suppliers (the example was shared of supplies of cheese).

Kumtor cited several success stories of switching purchases from international suppliers to local, such as electrical goods, tools, vehicle parts, IT equipment and services, cleaning material

etc.; a Toyota fleet full maintenance service agreement, including supply of spare parts with a Kyrgyz company; and 25mm grinding media.

Kumtor occasionally engages with the government to target the development of specific suppliers (as was the case with a local lime producer). Such initiatives are only ad-hoc and there is no systematic approach to supplier capability development. There appears to be no coordination or information sharing on local suppliers with other mining companies, nor formal or informal discussions of local supplier issues though business associations or other forums. The procurement department relies solely on their internal database of suppliers.

Kyrgyzaltyn representatives also reported that the company takes into account community relations and positive social impact by preferencing local suppliers and workforce. The company's operations are in remote, mountainous areas where levels of poverty are high. According to the procurement manager, 95% of the workforce is employed from local communities near the site.

Community Enterprise Development

Kumtor partners with international and local organisations to develop and implement community development projects, some of which are focused on SMEs and micro-enterprises. The projects are mainly focused on the region where the mine operates. Interestingly, Kumtor deliberately focuses its support on businesses sectors and enterprises that are not in their supply chain. The main reason offered for this approach is conflict mitigation, in an attempt to avoid accusations of unfair preference given to specific suppliers.

Examples of enterprise support projects include:

- Microcredit Line for Ton Farmers, a three-year credit program launched in 2012. Support is provided to give credit to animal husbandry, farms, small and medium-sized businesses at Ton. Ayil Bank's office in Bokonbayevo assists Kumtor in implementation. Credit is provided at a lower interest rate of 12% for a period of one to three years.
- A project supporting women's business initiatives has been implemented by Kumtor jointly with UN-Women.
- Kumtor, in cooperation with EBRD, Association AgroLid and the GIZ 'Deutsche Gesellschaft für Internationale Zusammenarbeit' has planned a training program designed to help villagers manage their businesses, ranging from fish farms, soil productivity, fruit processing, business planning and ecotourism. Participation in the EBRD trainings as well as the Centre's services will be free of charge.

As part of its operating agreement, Kumtor pays 1% of gross annual revenues into the Issyk-Kul Development Fund (IDF). Oversight is provided by a steering committee, which includes local government representatives and NGOs. Earlier this year, there were media reports of local government misusing the Fund and funnelling money for personal benefit. This fund, which received than US\$ 25 million from Kumtor since 2009, was designed to develop the socioeconomic infrastructure in Issyk-Kul Oblast, through e.g. business support, kindergartens, schools, sports clubs and irrigation infrastructure.

Kyrgyzaltyn has not reported any engagement in community enterprise development initiatives.

7.2.2 Barriers to Increasing Domestic Procurement

Government Perspectives

The following barriers to local supplier linkages were mentioned by government representatives:

- Lack of domestic manufacturing and higher value service capabilities, due to weak property rights, lack of technical and vocational skills, as well as lack of sources of financing.
- Lack of local content requirements in legislation. The government is planning to propose some amendments on local content in the subsoil legislation. However, there appears to be little understanding of international best practice. Government officials frequently referred to the Kazakh experience.
- Rigid supply chain practices of mining companies. This was particularly attributed to Chinese
 mining companies, as these are perceived to procure only from Chinese suppliers and
 Chinese contractors. Such practices often lead to conflicts with local communities that have
 high rates of unemployment.
- *Perceived corrupt practices within mining companies.* The perception exists that company leadership and procurement managers have vested interest in foreign suppliers.

Mining Operator Perspectives

The main barriers, as perceived by the mining sector, facing suppliers in Kyrgyzstan are:

- Low understanding of international procurement and Industry standards and procedures;
- Lack of technical knowledge/qualified staff;
- Lack of finance;
- Lack of production capabilities in the country. One interviewee expressed the view that
 "there are plenty of middlemen who can supply anything but not enough producers". It was
 thought that the customs union with Russia and Kazakhstan will exclude Kyrgyz middlemen,
 as Kazakh and Russian producers of equipment will be able to establish distribution centres
 directly in Kyrgyzstan
- Too small a market internally to develop producers; and
- Lack of technical knowledge and quality education.

Industry representatives suggested three key roles that the Government could play in overcoming barriers:

- Supporting the development of local producers;
- Taking into account the demand of the mining industry in developing economic development strategies and plans; and
- Implementing a national system of quality and safety standards that is in line with international standards.

Supplier/SME Perspective

Access to finance. Bank financing is viewed as unaffordable, with high interest rates (20% at National Bank level, 30-35% through other banks) and high collateral requirements. Companies often supply goods and services on pre-payment terms (customer pays part - usually 30-50% - of the contract value upfront and this cash is used to procure some or all inputs for the contract) and re-invest profits to develop their businesses.

Skills shortages. Technical and vocational skills, including marketing and business planning, emerged as requirements.

Lack of information on business opportunities in the mining sector. SMEs obtain information mainly through personal contacts or existing cooperation agreements. Few tender advertisements are published and mining companies do not actively engage with SME in tender preparation.

Competition from foreign suppliers, particularly with regard to low-cost goods from China. According to interviewed local suppliers, customs clearance is inexpensive for Chinese goods, no VAT is paid and goods do not require Kyrgyz government certification. Kyrgyzstan accession to the Customs Union is viewed positively by local companies as it will help them compete with Chinese suppliers. The suppliers participate in various catalogues and databases (such as Bishkek Modern, Yellow pages, Construction and Maintenance, Construction and Repair, Tender.pro).

Import duties concessions for mining suppliers. Domestic producers have to pay 12% import VAT and 10% customs duties on their imported inputs. Mining companies' inputs (and in Kumtor's case, all operations-related imports) are exempt from import taxes and customs duties. Local suppliers who do not have such exemption cannot compete with exempt foreign suppliers.

Political instability, insecurity of property right, corruption. The violent change of government in 2010 was followed by a wave of property rights redistribution in the mining sector. Licences were revoked and many mining companies left the country. Domestic suppliers lost established business relations in the mining sector. Some SMEs who invested in inputs for supplies under existing contracts incurred serious losses.

Standards and certification. The quality and certification of local supplies are often not acceptable to international mining companies.

SME representatives suggested the following as key roles that the Government could play in overcoming barriers:

- Providing a stable political environment;
- Development of standards and certification of products;
- Influencing the transparency of mining sector procurement;
- Improving access to finance;
- Reducing import taxes and customs duties on inputs;
- Developing a database of mining sector supply and demand; and
- Introducing local content policies.

7.2.3 Opportunities for Increased Domestic Procurement

Services opportunities

Kyrgyzaltyn, Kumtor and other mining companies that participated in the focus group took part in a self-completion survey to identify goods and services with potential for market development in Kyrgyzstan. The results, which were fairly consistent across the companies, were averaged and presented in Figure 29 below.

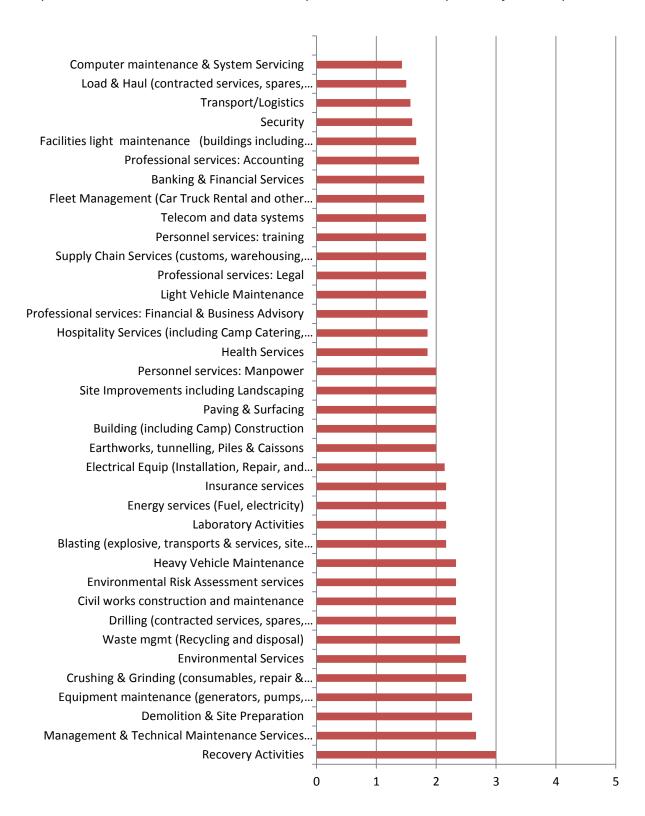
Competitive supplier market already exists within Kyrgyzstan: computer maintenance and system servicing, load and haul (contracted services, spares, consumables, maintenance), transport/logistics, security, facilities light maintenance (buildings, including air conditioning), accounting services, banking and financial services, fleet management (car truck rental and other vehicles), telecommunications and data systems, personnel training, supply chain services (customs, warehousing, transports), legal services, light vehicle maintenance financial and business advisory professional services, hospitality services (including camp catering, laundry, etc.), and health services.

High potential to be developed in country but lack the required investment: earthworks, tunnelling, piles & caissons, building (including camp) construction; paving and surfacing, site improvements, including landscaping, personnel services: manpower; electrical equipment (installation, repair and maintenance), blasting (explosive, transports and services, site preparation), laboratory activities, energy services (fuel, electricity), insurance services, drilling (contracted services, spares, consumables, maintenance, tyre tracks), civil works construction and maintenance, environmental risk assessment services, heavy vehicle maintenance; waste management (recycling and disposal), crushing and grinding (consumables, repair & maintenance), and environmental services.

Medium potential given some technical/financial support: equipment maintenance (generators, pumps, crushers etc.), demolition and site preparation, management and technical maintenance services (engineering, planning, survey), and recovery activities

Fig 29. Services that present opportunities for development in Kyrgyzstan as perceived by mining companies

1 = competitive supplier market exists in country, 2 = high potential to be developed in country but lacks investment; 3 = Medium potential with technical/financial support, 4 = limited potential due to limited market and/or entrepreneurs; 5 = low to no potential for development



Goods opportunities

The responses of Kyrgyzaltyn and Kumtor differed in terms of identifying goods that have potential for market development in Kyrgyzstan. These are presented as separate in Figure 30 below. The difference in responses can be explained by the differences in the scale of operations, level of sophistication of operations and quality standards requirements of the two companies.

Competitive supplier market already exists within Kyrgyzstan: cleaning and camp consumables products; furniture and fixtures; and stationery/office supplies.

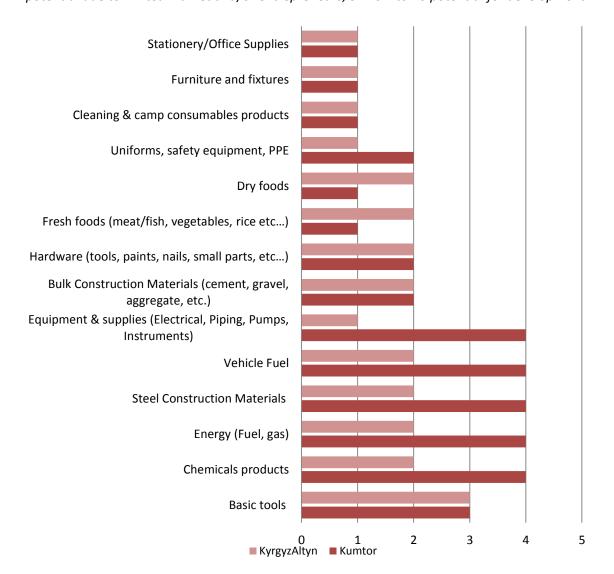
High potential with investment: bulk construction materials (cement, gravel, aggregate, etc.); and hardware (tools, paints, nails, small parts, etc.).

Medium potential with technical/financial support of potential suppliers: basic tools.

Limited potential (form Kumtor's perspective): equipment and equipment supplies, fuel, energy and chemical products.

Fig 30. Goods that present opportunities for development in Kyrgyzstan as perceived by Kumtor and Kyrgyzaltyn

1 = competitive supplier market exists in country, 2 = high potential to be developed in country but lacks investment; <math>3 = Medium potential with technical/financial support, 4 = limited potential due to limited market and/or entrepreneurs; <math>5 = low to no potential for development



7.2.4 Opportunities to Diversify Economy through Mining Supply Chains

Mining sector upstream value chains and opportunities for local supplier development in Kyrgyzstan have not been studied to date. The findings in this section are based on the opportunities identified by mining companies, triangulated with customs statistics on main categories of imported goods, reports of the government and international organisations on the development of the industrial sector in Kyrgyzstan and interviews with suppliers, government officials and business associations.

Production linkages with high potential for development

These linkages are the 'low hanging fruit' where domestic capabilities enable local firms to produce competitively, in that they require low skills, or where the country enjoys competitive advantages in the natural resource base or human capital endowment. The following measures can be taken to improve linkages in this category:

- Technical assistance and access to finance to improve quality standards, upgrade business skills (marketing, management, logistics);
- Better matchmaking between mining companies and suppliers through supplier databases;
- Simplification of procurement procedures to accommodate less sophisticated local suppliers;
- Adjustment of procurement practices to accommodate lower supply volumes of SMEs; and
- Adjustment of payment terms by mining companies (upfront payments) to help local suppliers overcome lack of access to loan finance operational and capital.

Agricultural and foods processing businesses. There are abundant local producers in most categories of food consumed by the mining sector. Some issues include low quality and small volumes of supplies, as these businesses tend to be SMEs.

Sewing businesses. These are the most developed small scale industries, where over 200,000 people are employed, out of which over 80% are women. The majority of the sewing workshops are located in or nearby Bishkek. They have the potential to meet mining sector needs for uniforms and other textile products.

Construction, installation, assembly, earthwork and paving businesses. This is a well-developed sector with numerous suppliers in all regions of the country. Some local construction materials are used. Whereas these businesses enjoy abundant unskilled labor, there are shortages of skilled technical and vocational professionals. They also suffer from high costs of loan capital to finance their purchases of equipment, and imported inputs.

Construction materials and some production inputs, e.g. lime. The country has hundreds of deposits of construction materials, mining and chemical raw materials. There are three cement plants with a capacity of 1 million tons per year (the Kant Plant), 300 thousand tons (Tehnolin LLC) and 70 thousand tons (the Kurment plant), dozens of brick factories and quarries for the extraction of sand and gravel, loam, clay, limestone, and gypsum. Some issues include low quality of products and low volumes of supply.

Drilling. There are 10-15 active drilling companies which provide drilling services to exploration and mining companies. Issues include insufficient or outdated drilling equipment, absence of qualified specialists, and difficult and burdensome requirements established for import of drilling equipment and fluids used for drilling.

Production linkages with medium potential for development

Some capacity and capabilities exist which are within the potential reach of local linkage firms. The primary barrier in this category of domestic linkage development will be investment and targeted government- private sector strategies to upgrade technology, facilities and skills to meet the quality and scale requirements of the mining sector. Additionally, these linkages require the same support measures as high level production linkages.

Design, engineering, procurement, construction management. There are a number of providers, such as Ken-Too Project and Research Institute, Aziarudproekt CJSC, Eco-Service LLC, Ala-Too Project and Research Institute, and Poisk LLC. These organisations, which used to be part of Soviet ministries, suffer from out-dated technologies and lack of qualified specialists.

Laboratory services. Basic laboratory services are offered by a number of laboratories, of which Central Laboratory subordinate to the Ministry of Geology as well as Alex Stuart, the international certified laboratory should be specifically mentioned. Mining companies use them for simpler lab test, and send samples for more complex test abroad.

Production linkages beyond feasible reach of local suppliers

A combination of technological barriers and small market size leads to local suppliers being relatively disadvantaged. These categories mainly include goods that are heavily imported in Kyrgyzstan (refer to Table 23):

- Fuel
- Steel Construction Materials
- Goods with a high technological component machinery, equipment and tools.

Table 23. Kyrgyzstan's Top 10 Import Categories, Jan -Sept 2012

	Value (US\$ thousands)	%
Mineral fuels, crude oils and its products	816 247.1	21.70%
Vehicles	480 893.1	12.80%
Machinery and mechanical appliances, nuclear reactors, boilers, parts	261 105.8	6.90%
Electrical machinery and equipment and parts	187 031.7	5.00%
Ferrous metals	118 058.0	3.10%
Ferrous metal products	116 854.4	3.10%
Pharmaceutical products	110 673.3	2.90%
Plastics and its products	97 086.3	2.60%
Timber and its products	92 910.0	2.50%
Cereals	77 924.9	2.10%

7.3 Tajikistan Domestic Procurement Practices

Due to the relatively smaller scale of mining operations in Tajikistan, the project did not engage in detailed case studies in this country. Instead, data on demand and supply and domestic procurement barriers was collected through an abbreviated questionnaire sent by email and followed up with phone interviews. The following companies were invited to take part in the survey:

- Zerafshan, a Tajik-Chinese venture developing Jilau and Taror primary gold ore deposits in Sughd region. The Chinese ZiJin Mining Group Co Ltd has a 75% stake in the joint venture;
- Aprelevka, a Tajik-British mining company. Kairakkum gold mine and a gold processing plant are the main assets;
- Pakrut LLC, a gold mine that is 100% held by the British company Kryso Resources Ltd;
- Anzob Mine, a Tajik-American Limited Liability conducting underground mining, processing and production of mercury-antimony concentrate; and
- Rumri Gold, a Tajik- Canadian joint venture exploring the Rumri gold field in Tavildara district of eastern Tajikistan.

Despite numerous follow-up attempts, only one completed questionnaire was returned, from the junior mining company involved in the exploration of the Rumri gold deposit. A brief interview was also conducted with the operations manager of Anzob Mine.

Several domestic suppliers who have worked with the mining sector within the past five years were also engaged through semi-structured interviews, covering the following subjects:

- Business enabling environment for domestic suppliers, including access to finance, access to business service providers, and access to infrastructure;
- Engagement with mining companies, including tender process, quality, HSE, volumes, terms of supply, payment etc.;
- Competition with foreign suppliers; and
- Role of government in supporting SMEs.

The government perspective on domestic procurement was explored and interviews were conducted with the State Committee on Investments and the State Property Management (GosKomInvest). The Committee promotes mining sector investment and champions mining sector reforms, including a mining strategy, changes to the mining legislation to bring it in line with international standards, and improvements to the country's mineral licensing regime.

To gain civil society perspectives on the subject, the National Association of Small and Medium Businesses of Tajikistan (NASMB) and the Chamber of Commerce and Trade of Tajikistan were also engaged.

7.3.1 Barriers to Increasing Domestic Procurement

Government Perspectives

As described previously, domestic procurement and local content are new issues for the Tajik government. There is little understanding of mining sector supplier issues as there are no large mining operations in Tajikistan. However, GosKomInvest welcomed the local content discussion and expressed an interest in engaging with the World Bank in follow up work. With regard to local content regulations, Kazakh subsoil legislation was mentioned as a model regulatory framework.

From GosKomInvest's perspective, the main issues hindering mining sector local production linkages include:

- Lack of government capacity and experience to prepare investment proposals and tender documentation and conduct negotiations for large mining projects, inclusive of local content. The Konimansur tender process has been going on for several years and has proved a steep learning curve for Tajik government;
- Lack of an overarching government strategy for industrial development;
- Lack of an 'information space' in the industrial sector, specifically, the lack of supply and demand databases; and
- Gas and power supply issues. Many producers of inputs for the mining sector, such as cement plants, had scaled down or shut down production as a result of losing their source of power, as Uzbekistan stopped supplying natural gas to Tajikistan due to disputes over irrigation water.

Mining Operator Perspectives

The two participating mining companies expressed the following issues facing domestic procurement in Tajikistan:

- Lack of local industrial capacity;
- An acute shortage of highly qualified technical specialists, geologists and senior managers;
- Lack of facilities for training, retraining and improvement of professional skills of local staff;
 and
- Lack of access to finance and infrastructure, high tax rates, and customs duties on imported inputs.

Supplier/SME Perspectives

SMEs commented that in the past three years the enabling environment for SMEs has improved, through the introduction of a 'single shopfront' process for receiving permits, licences and registration. Their views on barriers focused on:

- Access to finance, specifically, high interest rates and unaffordable collateral requirements;
- Access to infrastructure, including electricity connections, availability of railroads and highways, particularly for suppliers of bulk freights such as industrial salt;
- Availability of information on business opportunities;
- Limited understanding of tender procedures, with limited assistance provided by mining companies with regard to tender preparation;
- Competition from Chinese suppliers of goods and services. It was perceived that Chinese
 contractors in particular were bringing their own low skilled workforce rather than using
 Tajik workers;
- Low levels of skills especially in vocational and technical professions; and
- Need for government support to overcome supplier development barriers; including developing and introducing international systems of quality standards and certification; subsidising loans; tax and customs duties concessions for SMEs; and training of personnel.

7.3.2 Opportunities for Increased Domestic Procurement

The junior miner that responded to the self-completion survey identified a number of goods and services that have potential for market development in Tajikistan. The results are presented in Figures 31 and 32 below.

Fig 31. Services that present opportunities for development in Tajikistan as perceived by a junior miner

1 = competitive supplier market exists in country, 2 = high potential to be developed in country but lacks investment; <math>3 = Medium potential with technical/financial support, 4 = limited potential due to limited market and/or entrepreneurs; <math>5 = low to no potential for development

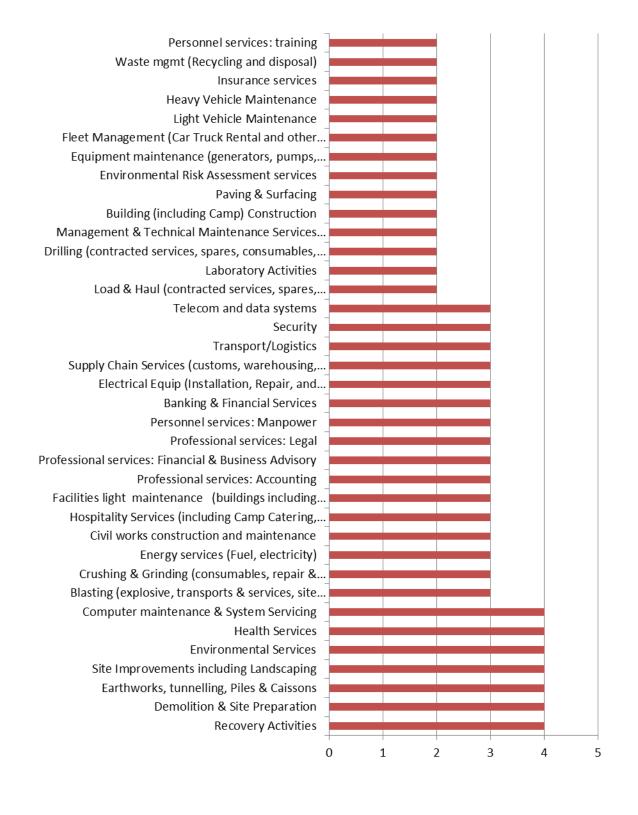
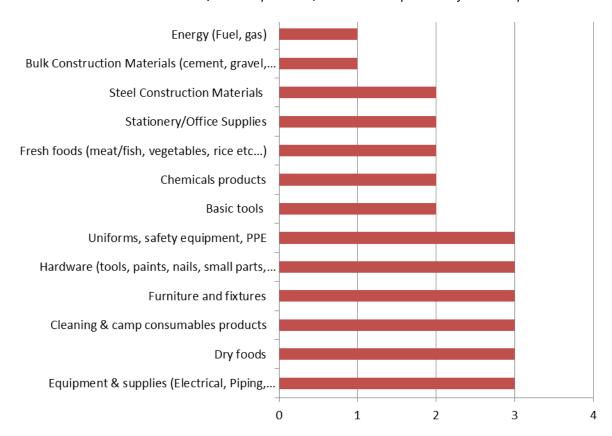


Fig 32. Goods that present opportunities for development in Tajikistan as perceived by a junior miner

1 = competitive supplier market exists in country, 2 = high potential to be developed in country but lacks investment; <math>3 = Medium potential with technical/financial support, 4 = limited potential due to limited market and/or entrepreneurs; <math>5 = low to no potential for development



7.3.3 Opportunities to Diversify Economy through Mining Supply Chains

To date, there have not been any studies of mining sector upstream value chains in relation to opportunities for local supply development in Tajikistan. High-level findings in this section are based on information collected during interviews with stakeholders in Tajikistan, questionnaire responses of a junior mining company, as well as customs statistics information and reports of the government and international organizations on the development of the industrial sector in Tajikistan.

Any detailed analysis of mining production linkage opportunities would need to include the perspective of TALCO, the aluminium smelter, as the company is the largest consumer of local industrial supplies. TALCO was not covered by the scope of this study.

Production linkages with high potential for development

These include sectors with low skills, and where the country enjoys natural competitive advantages in the natural or human capital, for example:

- Construction, earthworks and paving works. Tajikistan was a major source of construction, earthwork and paving workforce in the former Soviet Union. There are numerous local companies in various regions of the country.
- Agricultural and foods processing businesses. The country is a large producer and exporter of agricultural products. The sector is dominated by individual farmers and small producers.
- Textile and clothing businesses. There are many large companies and SMEs in the textiles and clothing industry that formed around cotton. Tajikistan's largest export commodity.

These companies have capabilities to supply uniform and other textile needs of mining operations.

Similar to the case of Kyrgyzstan, improving linkages in this category would be facilitated by measures such as:

- Technical assistance and access to finance to improve quality standard and upgrade business skills (marketing, management, logistics);
- Better matchmaking between mining companies and suppliers through supplier data bases;
- Simplification of procurement procedures to accommodate less sophisticated local suppliers;
- Adjustment of procurement practices to accommodate lower supply volumes of SMEs; and
- Adjustment of payment terms by mining companies (upfront payments) to help local suppliers overcome lack of access to loan finance (operational and capital).

Production linkages with medium potential for development

Some capacity and capabilities exist which are within the potential reach of local firms. The primary barrier in this category of domestic linkage development will be investment and targeted government-private sector strategies to upgrade technology, facilities and skills to meet the quality and scale requirements of the mining sector. Additionally, these linkages require the same support measures as described above for high level production linkages. Some examples are:

- Construction materials production inputs. Tajikistan has a large resource base of construction material and produces many types of construction materials including cement, brick, sand and gravel, loam, clay, limestone. A major issue facing the sector is the lack of natural gas as the traditional source of power.
- *Chemical products*. There are several chemical plants that can potentially supply the sector Tajikhimporm, Tajikazot, Isfara Chemical Plant as well as small producers.
- Design, engineering, procurement, construction management. There is a number of stateowned organisations providing these services. However, they suffer from outdated technologies and lack of qualified specialists.

Production linkages beyond feasible reach of local suppliers

These categories, hindered by a combination of technological barriers and market size, mainly include goods that are heavily imported in Tajikistan (see Table 24 below), i.e. fuel, steel construction materials, vehicles, and goods with a high technological component such as equipment and tools.

Table 24. Tajikistan's Top 10 categories of import goods 2011²⁹

	US\$ thousands	%
Petroleum products	674,620	17.4%
Vehicles	374,615	9.7%
Alumina, bauxite	249,504	6.4%
Machinery, mechanical devices, nuclear reactors, boilers	231,298	6.0%
Wheat	218,294	5.6%
Timber and timber products	202,934	5.2%
Airplanes and spare parts	193,783	5.0%
Electrical machines and equipment	164,835	4.3%
Wheat products	140,805	3.6%
Ferrous Metals	136,374	3.5%

²⁹ Customs Service, Tajikistan Government, http://www.customs.tj/rus/

8. Recommendations

The pilot study has identified a range of constraints faced in Kazakhstan, Kyrgyzstan and Tajikistan in seeking to maximise local content outcomes by building respective industrial bases. A number of these constraints present opportunities for the World Bank to further support these countries in this pursuit. The opportunities, outlined below in a set of recommendations, are specifically related to working with the governments to promote upstream linkages, especially in mining-effected regions. These recommendations are not premised on quick fixes. Change is incremental and involves alignment of policy direction within and across all layers of government, industry cooperation and the management of significant public expectation around the benefits flowing from mining sector investment.

Amongst the three countries, Kazakhstan is by far the most comparatively advanced in seeking to capture economic value from domestic procurement by the mining industry. The key questions the Kazakh government faces are: (1) how the mining sector can be used to increase diversification and (2) how to adapt protectionist measures currently within local content regulations and select instruments that develop local suppliers yet are consistent with WTO rules. This study has identified certain goods and services consumed by the industry that have strong linkages to other sectors. The recommendations below elaborate on ways in which these supply sectors can be targeted for further development.

Kyrgyzstan and Tajikistan, at earlier stages of domestic procurement maturity, would benefit greatly from technical assistance on how to increase local content, and related to this, how to enhance mining supply industrialisation through supplier linkages programs.

The recommendations also consider interventions to address other crucial elements, such as Technical and Vocational Education, green technologies with potential to be commercialised by local SMEs, local content advisory for specific mining investment transactions, credit guarantee schemes, visibility of domestic procurement in the framework of EITI, and expansion of the World Bank's current enabling environment interventions in Kazakhstan to Kyrgyzstan and Tajikistan.

8.1 Technical assistance on enhancing industrialisation through upstream mining linkages

There is an opportunity for the World Bank to support the governments of Tajikistan and Kyrgyzstan to develop and implement local procurement strategies and policies. Such policies and strategies would be mindful of existing levels of economic development, the countries' international obligations e.g. to WTO, as well as of promoting transparency and investment in the mining sector. The proposed technical assistance would be provided to Kyrgyzstan (to the Ministry of Economic Development and to the State Agency of Geology) and Tajikistan (to GosKomInvest, the Main Geology Department and Ministry of Energy and Industry).

Strategy Development

Without a vision, it is unlikely that detailed policies can be developed to effectively support the development of linkages into and out of the mining sector. This vision is required at the highest level of government, since it involves the mobilisation of adequate resources, the development of coordinated policies which span a variety of ministries and the capacity to bring all key stakeholders on board. Governments can encourage mining companies to jointly develop an explicit and long-term strategy to promote the development of production linkages.

To achieve this, both governments and mining companies need an informed knowledge base which enables them to map out a desired future. Beyond knowledge of the basic resource itself, there is the need to understand the key linkages into and out of the mining sector, their skills and training needs, and their enabling environment requirements. Similarly, mining companies need to be aware of the government's strategy and its thinking on policy development, as well as to have an informed map of existing and potential local suppliers and

customers. They also need to have an informed view of the strategic locational strategies and supply chain development capabilities of its first-tier suppliers and customers.

Policy Capacity

Beyond the development of strategy lies the crafting of policies. This may involve World Bank support in building institutional capacity in a range of different ministries, e.g. ministries responsible for the mining sector, for the development of industry, for trade policy, for the development and regulation of infrastructure, for skills development, capability building and innovation and for the environment.

Underlying successful implementation of a strategy is the capacity of government employees and the routines which back their behaviour. Governments may have ambitious local content policies in relation to the capabilities to implement these policies. In some cases, they may specify local content in detail without any clear knowledge of the technologies involved or the whether there is an underlying industry capability to meet demand. Policy incentives and sanctions need also to be fit-for-purpose but primarily designed to be enabling.

Attempts to accelerate the development of the mining related industries can lead to a policy environment in which FDI is incentivised by conditions which are by their very nature contradictory in intent against other prevailing policies. For example, investors may offer duty-free imports of inputs while local suppliers are required to pay import duty on their inputs. Thus, not only is the ensemble of policies failing to promote backward linkages (by providing for duty-free importation of inputs in this case), but also they may in fact actively restrict local linkages (since they penalise the costs of domestic suppliers).

Kyrgyzstan

As per the National Development strategy 2013-2017, the Government's priority is to increased revenue and economic benefits from mining through (1) production diversification and integration into the world economy; (2) improved investment climate; (3) introduction of new and green technologies; and (4) better balance of interests of mining companies, the government and communities.

One of the policy measures is the development of the medium-term strategy for development of the mining industry for 2013-2015. The Ministry of Economy is responsible of the mid-term strategy. USAID project REFORMA and its contractor Deloitte and Kyrgyz Mining Association are developing the strategy, however, it does not appear that local content / domestic procurement is intended to be part of the strategy. There is an opportunity to strengthen the gap during the development of the implementation plan later this year. The Ministry of Economy will need specialised technical advice in this area as it appears to be outside the scope and experience of the current USAID REFORMA implementers.

In Kyrgyzstan, there is also scope to engage with the Ministry of Economy to include mining sector- manufacturing linkages in the implementation of the following activities belonging to the government's manufacturing sector development program for 2013-2015. The program addresses the following priorities:

- Development of proposals to establish industrial zones;
- Identification of competitive advantages of regions and development of regional industrial development plans;
- Development of a draft program for a vocational and technical education system to meet the needs of industry;
- Introduction of product quality and safety assurance systems to meet international standards; and
- Creation of international accredited testing laboratories.

Tajikistan

In Tajikistan, there is a scope to engage with GosKomInvest and other ministries responsible for mining sector reform, through the World Bank's Private Sector Competitiveness project, to ensure that local supplier linkages captured in government policy and regulations for the sector.

8.2 Scope mining sector linkage initiatives for the development of domestic suppliers

A supplier linkage program can provide an effective way to leverage the broader benefits of FDI more closely into the domestic economy, encouraging local sourcing of inputs, including labour, and strengthening relationships with domestic firms in research and product development. Key elements of such an initiative include:

- Framework for assessment and selection of participating companies;
- Database detailing products and capabilities of local SMEs and mining investors to provide easy access to interested participants;
- Technical assistance facility;
- Financing facility;
- Programmes for skills development (training, curriculum reform);
- Promotional and marketing services (including matchmaking events, roadshows); and
- Quality standards technical assistance.

Pilot linkages projects are recommended for Kyrgyzstan and Tajikistan. This would involve identifying those economic sectors which would benefit most from the implementation of a linkage program, to focus on sectors with a high economic development impact. A pilot project could more easily be implemented in a low-technology sector such as works and services-earthworks, construction materials etc., as technology intensive projects, e.g. in value added manufacturing, would require significantly more resources and a longer timeframe for implementation.

The linkage initiatives could be set up with other development partners, to complement their existing programs:

- OECD Central Asia Business Linkage Program, part of the OECD Eurasia Competitiveness Programme
- GIZ Minerals for Development Project
- USAID and GIZ regional trade projects, in particular quality standards and certification components

One example of a successful linkage program in the region is the BP Azerbaijan Enterprise Centre. The World Bank could support a study tour involving a group of stakeholders in Kyrgyzstan and Tajikistan, so that they can benefit directly from the lessons learnt of BP and its partners. Other best practice examples are found in Chile and Brazil.

Kazakhstan

In Kazakhstan, the two mining companies interviewed for the study identified that, with some investment, technical and financial support, a number of goods and services procured by the mining sector have potential to be developed in Kazakhstan.

 Goods: cleaning and camp consumables; explosives; stationery/office supplies; dry foods; energy (fuel, gas); and bulk construction materials; hardware; equipment and supplies; chemical products; basic tools; rubber technical products; refractory products; and rolled metal. Services: security services; insurance services; financial business and advisory services; hospitality services; civil works construction and maintenance; building (including camp construction); earthworks, tunnelling, piles and caissons; and energy services; telecommunications and data systems; personnel services training; supply chain services; banking and financial services; personnel services; accounting services; environmental services; site improvements; paving and surfacing; recovery activities; crushing and grinding; and blasting.

Within these, NADLoC identified four main supply sectors to the mining industry that have potential linkages to other sectors in the Kazakhstan economy. As such, their development provides opportunities for diversification: chemicals, light industry, metallurgy; and production of machinery.

The study identified that Kazakhstan could benefit with more structured supplier linkages programs that offer training, advisory services and access to finance. DAMU appears to be the only option available to SMEs, and was described as focused more on financing than advisory services, and an overly bureaucratic system. Even if SMEs are successful with accessing finance through DAMU, they still have to go through the mainstream banking system that on-lends DAMU money.

The next stage of analysis for the World Bank, to inform design of pilot linkages programs targeted to these goods and services, might involve answering the following questions:

- Which of these goods and services, if developed, simultaneously support the Government of Kazakhstan's drive for diversification? Specifically, which have linkages to targeted sectors such as transport, pharmaceuticals, telecommunications, petrochemicals and food processing?
- Which of these goods and services have the potential to be sourced from mining regions, and contribute to the greatest multipliers at a local level?
- For which of these goods and services are SME upgrading interventions most likely to catalyse value added activities, rather than remain locked into low value added activities?
- Of these goods and service which have high economic development impact (i.e. contribute to diversification and local level multipliers and have high value add), which have the potential to be internationally competitive and have export potential?

A supplier linkages program should address institutional strengthening of existing associations in mining regions and relevant SEZ's; and the development and maintenance of a reliable and up to date local supplier database.

8.3 Technical assistance in Technical and Vocational Education

All three countries would benefit from support such as the World Bank is currently providing in partnership with Kazakhstan's Ministry of Education and Science, a project to raise the relevance, quality, and efficiency of Technical and Vocational Education (TVE) through an improved policy framework and institutional capacity.

The program should be expanded to Kyrgyzstan and Tajikistan, and adapted in Kazakhstan. In all three countries, the focus would be on the TVE needs of targeted supply sectors to the mining industry, and include:

- Development of the National Qualifications System and occupational standards in selected priority sectors, and an upgrade in the assessment of the qualifications and institutional accreditation of TVE institutions;
- Modernisation of the governance, management, and financing policies and structures for TVE; and
- Strengthening of the skills delivery capacity of TVE institutions.

8.4 Support green technologies in the Kazakh mining sector with potential to be commercialised by local SMEs

The World Bank could encourage innovation and environmentally friendly goods for the mining sector that have the potential to be commercialised by Kazakh suppliers. Opportunities should be explored in consideration of the green economy focus of Kazakhstan's upcoming Expo 2017.

The existing World Bank Technology Commercialisation Project could be leveraged, which is conducted in partnership with Kazakhstan's Ministry of Education and Science. The project includes a competitive grant program selected and overseen by the International Science and Commercialization Board to finance R&D projects conducted by groups of senior scientists and junior researchers, and to develop a world class research infrastructure in the International Materials Science Centre. Also included is a Technology Commercialisation Office to finance and broker partnerships between Kazakhstani scientists and local and international technology markets.

The program could be expanded to specifically target energy and water saving technologies applied by the mining industry.

8.5 Technical assistance on allowable supplier development instruments in a WTO environment

Applied in the right context, trade related investment measures may help domestic suppliers connect to GVCs and upgrade their capacities. The current mandatory requirements in Kazakhstan may be a disincentive for mining firms and their large suppliers and contractors in selecting Kazakhstan as a host country for the location of GVC activities. The challenge is to identify which incentives are consistent with a WTO environment.

The World Bank is currently involved in a project 'Improvement of Competitiveness through Reduction of Trade Barriers' in partnership with the Kazakhstan Ministry of Economy and Budget Planning and Ministry of Industry and New Technology, through the Joint Economic Research Program (JERP) 2012–2013. The Bank is:

- Supporting Government efforts to acquire knowledge and capacity in updating the analysis
 of the impacts of Kazakhstan's continued integration into the Common Economic Space
 (CES) and the upcoming WTO accession on trade dynamics in different sectors and with key
 partners;
- Undertaking an institutional assessment of trade policy formulation and implementation;
- Analysing Kazakhstan's exports survival performance; and
- Supporting continued policy dialogue, knowledge transfer, and capacity building in the analysis of nontariff measures.

All three countries would benefit from an expert assessment of which measures are appropriate to support the development of target sectors supplying the mining industry.

8.6 Local Content advisory for specific mining investment transactions

A further recommendation is to provide World Bank's local content expertise to the governments of Kyrgyzstan and Tajikistan to support them in tender preparations and negotiations to ensure the inclusion of domestic supplier considerations when awarding concessions and licenses to mining companies. Two potential transactions what could benefit from the World Bank's support are:

Jerooy project in Kyrgyzstan. The first tender for the development of this gold deposit failed this year as only one bid was submitted. The tender documentation included a US\$ 52 million 'social package' – a list of potential investments in social infrastructure development. The government plans to conduct another tender before the end of the year. With the World Bank's assistance,

the social package could be revisited to include measures to increase domestic procurement and support local businesses, and ensure that such measures are aligned with the industrial base and the level of economic development of the Talas region, and are within the government's capacity to enforce and monitor.

Konimansur project in Tajikistan. The tender process for this large silver deposit has been ongoing for the past four years. Presently, the government is conducting negotiations with a consortium led by Glencore and Kazzinc. If negotiations fail, the government plans to retender Konimansur³⁰. One of the measures that Kazzinc is considering, in preparation for project implementation, is training of the local workforce at its training facilities in Kazakhstan³¹. World Bank/IFC technical assistance could help the government of Tajikistan and the prospective operator coordinate their efforts in local content development and ensure that these efforts are aligned with the Sughd region's development priorities.

8.7 Establish Credit Guarantee Schemes for supply sectors

To address the dominant theme of lack of access to affordable finance, the World Bank could assist all three governments in establish credit guarantee schemes (CGS) aimed at mining suppliers. International experience suggests that a CGS can help improve lending to SMEs by outsourcing part of the risk to a third party, i.e. a credit guarantee facility which provides an insurance for banks against loan default in exchange of a fee. In case of default, the lender recovers the value of the guarantee, provided by the credit guarantee facility. The advantage of such a mechanism is that it allows SMEs with insufficient or lack of collateral but with high cash flow potential to access formal bank credit. As a side-effect, by working with SMEs, the banks can gradually develop expertise in assessing their risk and specialise in lending to the SME sector.

One example is the OECD CGS for Manufacturing SMEs. Kazakhstan also has a CGS for agribusiness. In setting up a CGS, Central Asian governments would benefit from looking at international experience to take into account lessons learned from both successful and failed schemes in other countries. For example, experience shows that it is important to clearly define the mission of the guarantee scheme to reduce the conflict of interests between the guarantor and lending institutions participating in the management of the guarantee scheme.

Furthermore, schemes were particularly successful when lending institutions were actively involved in the evaluation of the SME risk, allowing the banks also to gain expertise and specialise in SME lending (e.g. in Chile). To increase the positive impact on the SME sector, the CGSs could also target a specific sector or group of firms (e.g. in Lithuania). Finally, conducting impact analysis and monitoring the beneficiary firm's business development is crucial to assess the tool's effectiveness.

8.8 Increase visibility of domestic procurement in the framework of EITI in all three countries

Even though Kazakhstan has a strong regulatory framework for increasing local content, and systems for enforcement and transparent monitoring and reporting of non-compliance, unethical procurement practices are still prevalent. The high level of state intervention appears to be creating perverse incentives for market participants to work in a parallel, unregulated, procurement system. Further, relying on regulated avenues to influence domestic procurement may not be effective, as the proportion of procurement that is regulated is minor compared with total procurement activities undertaken by a company.

Kazakhstan's candidature of the EITI presents a platform for measures to increase the transparency of domestic procurement and reduce the potential for corrupt practices in

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³⁰ New report of on GosKomInvest press-conference, http://news.tj/ru/news/goskominvest-tadzhikistan-mozhet-obyavit-eshche-odin-tender-na-razrabotku-bolshogo-konimansura

³¹ Interview with GIZ Minerals for Development project

procurement. The World Bank could play a role in providing technical assistance on selecting effective measures which do not significantly add to the existing compliance burden on industry.

8.9 Expand current business enabling environment interventions in Kazakhstan to Kyrgyzstan and Tajikistan

Two existing World Bank programs in Kazakhstan that could be expanded/tailored to increase the ease of doing business in target supply sectors to the mining industry include:

- Improving Conditions for Doing Business to Increase Competitiveness and Facilitate Economic Diversification: In partnership with the Ministry of Regional Development, through JERP 2009–2013, the Bank provides technical assistance to:
 - Modernise the licensing and permits legal framework, reducing unnecessary barriers for firms to operate through the informed and orderly elimination of unnecessary licenses and permits; and a reduction of the regulatory burden on firms through a reduction of undue inspections; and
 - Elimination of business environment obstacles identified in the Doing Business report.
- Customs Development Project: This project aims to support the Customs Control Committee (CCC) in order to achieve the following:
 - Reduce customs processing time at border posts and clearance time at inland posts;
 - Reduce physical inspections of import declarations by customs and number of documents required for border and customs clearance for imports;
 - Increased effectiveness of total customs revenue collection;
 - Establishment of client service standards covering key customs outputs with improved performance on an annual basis; and
 - Improved perception of traders and other stakeholders regarding the frequency of unofficial payments to customs officials.

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Appendix 1: List of goods imported by the mining sector in Kazakhstan (NADLoC 2012)

	Imported	1					Produc	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volum	es	Produce /
Goods category	2009	2010	2011	Unit	Annual avg	Total	2011	Unit	Import
Chemical products	;								
Diagnostic or laboratory reagents on a substrate and preparation of diagnostic or laboratory reagents on a backing or without it	387	404	527	tons	24	121	0	tons	0%
Polyethylene with specific gravity 0.94 or more	47685	62588	62244	tons	86	431	2	tons	0%
Polyethylene, having a specific gravity of less than 0.94	16006	11512	2700	tons	19	95	2	tons	0%
Shampoo	12804	10741	7610	tons	30	148	126	tons	2%
Disodium carbonate	311564	177333	22301	tons	55	273	667	tons	3%
Other herbicides	12816	11563	6897	tons	48	240	1318	tons	19%
Cleaning and maintenance products, packaged for retail sales	93849	53145	14217	tons	79	393	2792	tons	20%
Motor oils, compressor lube oils, turbine lube oils	95627	63676	30634	tons	124	620	6200	tons	20%

Volumes 2009 7716513	2010 5019461	2011 2270805	Unit sq. meters	US\$ mill past 5 ye Annual avg		Volume 2011 825500	Sq. meters	Produce / Import
7716513			sq.	avg			sq.	
	5019461	2270805	•	25	124	825500	•	36%
18510								
10310	9205	7669	tons	58	288	6132	tons	80%
20694	13569	3520	tons	24	122	4928	tons	140%
19583	8582	3297	tons	24	121	82831	tons	2512%
841381	495841	67331	pieces	85	423	2000	pieces	3%
1856308	1143788	208402	pieces	67	337	57600	pieces	28%
8058	8119	6310	pieces	32	161	2000	pieces	32%
25046	16122	12	A a	10	00	0	A a ir	00/
35946 28478	16133 16969	13 2766	tons	18 25	90	0	tons	0%
	19583 841381 1856308 8058	19583 8582 841381 495841 1856308 1143788 8058 8119 35946 16133	19583 8582 3297 841381 495841 67331 1856308 1143788 208402 8058 8119 6310 35946 16133 13	19583 8582 3297 tons 841381 495841 67331 pieces 1856308 1143788 208402 pieces 8058 8119 6310 pieces 35946 16133 13 tons	19583 8582 3297 tons 24 841381 495841 67331 pieces 85 1856308 1143788 208402 pieces 67 8058 8119 6310 pieces 32 35946 16133 13 tons 18	19583 8582 3297 tons 24 121 841381 495841 67331 pieces 85 423 1856308 1143788 208402 pieces 67 337 8058 8119 6310 pieces 32 161 35946 16133 13 tons 18 90	19583 8582 3297 tons 24 121 82831 841381 495841 67331 pieces 85 423 2000 1856308 1143788 208402 pieces 67 337 57600 8058 8119 6310 pieces 32 161 2000 35946 16133 13 tons 18 90 0	19583 8582 3297 tons 24 121 82831 tons 841381 495841 67331 pieces 85 423 2000 pieces 1856308 1143788 208402 pieces 67 337 57600 pieces 8058 8119 6310 pieces 32 161 2000 pieces 35946 16133 13 tons 18 90 0 tons

	Imported						Produce	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volume	s	Produce /
Goods category	2009	2010	2011	Unit	Annual avg	Total	2011	Unit	Import
containing fibers obtained by a mechanical or chemical- mechanical method									
Of paper or paperboard used for writing, printing or other graphic purposes, not containing fibers obtained by a mechanical or chemical mechanical method, or content of such fiber is not more than 10% of the total weight fiber	7538	10848	11714	tons	11	57	0	tons	0%
Flat-bottom rails, new, mass linear meters of 46kg or more	55795	90692	43200	tons	36	180		tons	0%
Other glass unreinforced a thickness exceeding 3,5 mm but a small 4.5 mm in sheets, thermally polished and glass with surface ground or polished, not having an absorbent or reflecting soy but not otherwise worked	9298721	7363433	4310129	sq. meters	24	122	230	tons	0%
Napkins and nappies and similar sanitary-hygienic products	13467	15259	14963	tons	57	283	16	tons	0%
Refractory bricks, blocks, tiles and similar refractory ceramic constructional goods, other than those of siliceous fossil meals or similar siliceous rocks containing more than 50 wt.% elements MG, CA	34113	29582	21740	tons	29	145	2887	tons	13%

	Imported						Produc	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volume	es	Produce /
Goods category	2009	2010	2011	Unit	Annual avg	Total	2011	Unit	Import
Bars and rods of iron or non-alloy steel, containing indentations, ribs, grooves or other deformations produced during the rolling process or twisted after rolling; without processing than forged, hot-rolled, hot-drawn	221560	161557	8221	tons	131	656	60609	tons	737%
Pipes and fittings									
Casing pipes of iron (other than cast iron) used in drilling for oil or gas well, an external diameter not more than 168, 3 MM	67539	63466	32404	tons	116	580		tons	0%
Stranded wire, ropes, cables, slings and the like, of iron or steel, not electrically insulated	12870	9296	2977	tons	35	174			0%
Drill bits	365	432	237	tons	38	189			0%
Motor vehicles with power more than 100 kW but not exceeding 200 kW	905	1567	325	pieces	13	67			0%
Other instruments and rock drilling or earth, including parts	377	620	733	tons	17	85	1	tons	0%
Other welded pipe welded, circular section, of an external diameter exceeding 406,4mm, of iron or steel	30439	34628	18995	tons	50	252	89	tons	0%
Welding electrodes cored with black metal and coated with refractory material for electric arc	16317	17589	15549	tons	16	78	1504	tons	10%
Flanges of iron	2049	2500	3132	tons	29	144	424	tons	14%
PIPES external diameter not exceeding 168,3 mm, of circular cross section, of iron or non-alloy steel	30816	27522	9888	tons	24	122	2249	tons	23%
Pipe for oil or gas	4564	15390	34221	tons	33	166	8347	tons	24%

	Imported						Produc	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volume	es	Produce /
Goods category	2009	2010	2011	Unit	Annual avg	Total	2011	Unit	Import
pipelines, external diameter not exceeding 406.4 mm, casing pipes designed to work in environments containing hydrogen sulphide									
Other tubes and pipes for oil and gas pipelines with a circular section, of an external diameter exceeding 406,4mm of iron or steel	252898	2939	95	tons	253	1.264	8347	tons	8786%
Pumps and compre	essors								
Other turbocompressors, multi, other	625	697	1291	pieces	112	558			0%
Air conditioning unit, equipped with a fan to the engine and instruments for measuring the temperature and humidity, including air conditioners window or wall types, self split system	99135	123382	228101	pieces	27	136	4	pieces	0%
Other airconditioning equipment	9031	6401	7750	pieces	14	69	4	pieces	0%
Other refrigerating showcases and counters (incorporating a refrigerating unit or evaporator)	21649	24872	29701	pieces	21	105	39	pieces	0%
Air pump or vacuum, air or gas compressors and valves, cabinets, filters and/or without them	17455	15523	74387	pieces	31	156	189	pieces	0%
Centrifugal fans	24624	17112	12663	pieces	19	97	95	pieces	1%
Centrifugal pumps Submersible Multistage	7624	9528	4804	Pieces	37	185	182	pieces	4%
Other pumps	108814	108989	161804	pieces	24	121	13757	pieces	9%
Multi-shaft positive displacement rotary compressors screw	538	671	1777	pieces	13	67	189	pieces	11%

	Imported						Produc	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volume	es	Produce /
Goods category	2009	2010	2011	Unit	Annual avg	Total	2011	Unit	Import
Combining fridge - freezer with separate external door MI capacity exceeding 340 liters: refrigerators - freezers	24768	28755	21220	pieces	12	61	3266	pieces	15%
Air compressors on a wheeled chassis, towed, exceeding 2 cubic meters per minute.	1143	961	1150	pieces	10	48	189	pieces	16%
Volume rotor pumps, screw	4671	1817	1606	pieces	8	42	453	pieces	28%
Compressors volume back-and-forth with work pressure over 15 bar, capacity, more than 1 20 cubic meters. / W	46	253	391	pieces	16	82	186	pieces	48%
Other parts of pumps	3788	3172	1239	tons	37	187	6	US\$ million	n/a
Parts for air pump, vacuum, air and gas compressors and fans	2725	1023	938	tons	38	192	2	US\$ thousand	n/a
Filters and filtering	equipment								
Equipment and apparatus for filtering or water purification	448861	305340	262118	pieces	22	111	667	pieces	0%
Equipment for filtering oil or fuel in internal combustion engines	6370535	6188274	6577477	pieces	19	95	830	pieces	0%
Other equipment and apparatus for filtering or treating liquids	102514	116598	120269	pieces	30	152	667	pieces	1%
Equipment and apparatus for filtering or purifying other gases	87859	40822	25370	pieces	111	553	518	pieces	2%
Lifting equipment									
Other bulldozers, angledozers, trucks	186	264	163	pieces	31	154			0%
Other cranes	275	152	310	pieces	69	347			0%
Elevators and skip hoists, electrically operated	898	1157	1462	pieces	27	134	6	pieces	0%
Other trucks front shovel	923	1280	3526	pieces	72	361	21	pieces	1%
Equipment for lifting, handling, loading or unloading Drilling equipment	4336	2629	1862	pieces	12	61	92	pieces	5%

	Imported						Produc	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volum	es	Produce /
Goods category	2009	2010	2011	Unit	Annual avg	Total	2011	Unit	Import
Other boring and sinking machinery	959	1202	650	pieces	106	532	25	pieces	4%
Boring or sinking machinery	221	109	500	pieces	79	396	29	pieces	6%
Agricultural equipr	nent								
Precision seed drills with central drive and other drill	1118	538	424	pieces	63	315	152	pieces	36%
Harvester for OTHER	1369	518	155	pieces	139	695	259	pieces	167%
Other agricultural tractors (except for tractors, pedestrian-controlled) and forestry tractors with a capacity	793	428	125	pieces	71	355	1229	pieces	983%
exceeding 90 KW Machinery for sort	ing sifting s	enarating or	flushing						
Other machines for	3275	438	429	niococ	02	466			0%
crushing or disintegrating	32/5	438	429	pieces	93	400			U%
Other equipment parts for sorting, washing, crushing, grinding, mixing or kneading earth, stone, ores and other minirals; equipment for agglomerating, shaping, casting	7740	2620	1516	tons	45	223	7	US\$ mIn	0%
Machinery for sorting, screening, separating or washing	910	694	337	pieces	35	173	31	pieces	9%
Other fittings									
Bolting valves	2417	2170	2052	tons	25	123	0	tons	0%
Parts of taps, valves, valves and similar appliances for pipes, boiler shells, tanks, vats and similar containers, reducing valves and thermostatically controlled valves	1052	596	608	tons	35	174			0%
Multiphase AC motor: power more than 37 kW but not exceeding 75 kW	671	562	413	pieces	4	18			0%
Other static converters that are used with telecommunication apparatus,	320598	446999	678390	pieces	28	140	34	pieces	0%

	Imported						Produc	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volume	es	Produce /
Goods category	2009	2010	2011	Unit	Annual avg	Total	2011	Unit	Import
computers and their BLOROCHIE									
Other water heaters	212265	192613	114456	pieces	12	58	38	US\$ thousand	0%
Other pass-	1030	841	420	tons	20	102	4	tons	1%
through valves AC generators (alternators) greater than 750 kVA)	40	506	196	pieces	17	83	15	pieces	8%
Electrical equipme Other boards, panels, consoles, desks, cabinets, and causes of electrical equipment, control or distribution of	2885	2400	1907	tons	123	615			0%
current Boards, panels, consoles, desks, boards and grounds for other electrical equipment, with two or more products, for voltage more than	602	767	867	tons	24	120			0%
72.5 KV Electrodes for	69027	131374	120318	tons	61	306	338	tons	0%
electrolysis plants Electrodes used in furnaces	6227	4502	6095	tons	20	402	853	tons	14%
Automatic switches for voltages less than 72.5 kV	323	352	296	tons	20 13	102 63	111	pieces	38%
Railway equipmen	t								
Railway or tramway freight cars, not self- propelled Open, with non- removable sides higher up to 60 cm	591	791	2629	pieces	90	451			0%
Other Railway or tramway freight cars, not self- propelled	892	820	1274	pieces	22	223			0%
Trucks parts, chassis balance- carts and similar trucks cast iron or cast steel	17538	7955	7137	tons	28	138			0%
Equipment for railway or tramway track	12581	13402	5597	tons	20	100	89	tons	2%

	Imported						Produce	ed	Ratio
	Volumes				US\$ mill past 5 ye		Volume	es	Produce /
Goods category	2009	2010	2011	Unit	Annual avg		2011	Unit	Import
Railway or tramway freight cars, not self- propelled all types	6717	3777	3862	pieces	170	851	766	pieces	20%
Other containers (including containers for the transportation of liquids or gas)	15247	11865	21552	pieces	28	141	5196	pieces	24%
Vehicle parts railway locomotives or tramway or rolling stock	5272	4504	4821	tons	25	127	24	US\$ mln	n/a
Vehicles									
Buses 2800 cc petrol	441	377	173	pieces	24	118	0	pieces	0%
Cars more than 1000 cc, but not more than 1500 cc	1749	3471	6931	pieces	34	168		pieces	0%
Cars over 1800 cc, but not more than 2300 cc	1120	1228	2341	pieces	55	276		pieces	0%
Cars over 1800 cc, but not more than 3000 cc	47172	6308	5066	pieces	188	1.880		pieces	0%
Cars over 3000 cc	4112	3310	4339	pieces	281	1.406			0%
Cars (diesel or semi), from the BRA. Engine capacity exceeding 2500 cc	316	227	220	pieces	14	68			0%
Spotlights and other light bulb single-minded focus	305	561	445	tons	9	45			0%
2500 cc diesel buses	514	526	1064	pieces	48	240	91	pieces	9%
Car bodies, for the	679	1259	4104	pieces	18	91	385	pieces	9%
industrial assembly Cars over 1500 cc, but not more than 1800 cc Medicine	1749	2820	3503	pieces	34	168	8195	pieces	234%
Other medicines packings for retail sale	11460	12007	11706	tons	438	2.188	6255	tons	53%
Other tools and equipment for use in medicine	25777227	22439728	2124098	pieces	42	211	27	US\$ mln	n/a

Appendix 2: Consulted Stakeholders

KAZAKHSTAN	
Government	
National Agency for the	Kairat Bekturgenev, Chairman
Development of Local Content- NADLoC	Adilbek Bektibayev, Vice Chairman
10.0200	Yerkin Duiseyev, Managing Director
Ministry of Industry and New	Timur Toktabaev, Deputy Head of Subsoil Use Department
Technologies (MINT)	Serik Kameli, Director of Development of the Local Content
Mining Companies	
Kazakhmys	Rinat Berikbolov, Head of Local Content
	Zulfira Mukhamediyar, Corporate Communications Manager
	Mr Barmenkulov, Director Purchasing
	Mr Shamhalov, Director Trade
	Mr Amanzholov, Head of Commercial Department
Kazzinc	Ludmila Fasyanova, Head of Materials Procurement
	Olga Kleshenko, Senior Trade Representative
	Sergey Aliev, Head of Kazakh Content Development
	Irina Afanas'eva, Head of Analysis Department
Central Asia Resources	Zhanna Tazhibayeva, Director Finance
Junior Uranium Miner	Goran Latkovic, Purchasing and Logistics Department Director
Suppliers	
LSH International LLP	Lucas Somers, Managing Director, producer of metal rods
Sandvik Kazakhstan Ltd	Geoff Heather, Technical Director, original equipment manufacturer
ArcelorMittal	Chris Brodie, Consultant, mining services
Civil Society	
Mining Chamber (Association of	Yevgeniy Bolgert, President
Mining and Metallurgy Enterprises)	Maxim Kononov, Head of Research Department
Donors	
World Bank	Saroj Kumar Jha, Central Asia Regional Director
	Tatiana Sedova, STC
	Yerlan Akishev, STC
KYRGYZSTAN	
Government	
Ministry of Economic Development	Deputy Head of Natural Resource Policy, Almaz Alimbekov

Mining Companies	
Kumtor	Leslie Lowe, Head of Procurement Department
	Douglas Grier, Head of Sustainable Development
	Ryspek Toktugul, Finance Director
	Andrey Sazanov, Government Relations Director
	Bolotbek Idirisov, Compliance Department Yaroslava Melnyk, Institutional Procurement;
	Almaz Marajapov, Local Procurement
Kyrgyz Altyn	Buzurman Subanov, Deputy Head of Procurement Department
	Danyar Turganaliev, Head of Procurement
Andash Mining Company	Ashyrkulov Kuban, Director
Manas Resources	Brodie Ross, head of procurement,
Kazakhmys	Ivashenko Yuri and Asiya Tsoy, Procurement Department
Suppliers	
Kent Too,	Kyrgyz EPC contractor
Megatex Industry	Representative and supplier of South Korean mining and construction equipment
Golden Dragon Hotel	Accommodation and catering services
Korund	Supplier of mining and construction equipment, maintenance, repairs, spare parts and fuel & lubricants supplies
Alpstroy	Geodesic and surveying services, equipment for surveying and mapping, GPS systems
T&T technologies and tools	Supply and maintenance of tools
Civil Society	
Kyrgyz Mining Association	Valeriy Nikolaevich Bogdetskiy
International Business council,	Meerim Matkulova, Deputy Director
Donors	
IFC	Mai Nguen SME investment program manager
World Bank	Jyldyz Abdyrakhmanova, Mining sector STC Alex Kremer, Country manger
GIZ, Mineral Resources for Development project	Jonathon Hornbrook, Project Manager
TAJIKISTAN	
Government	
State Committee on Investments and State Property Management	Shukhrat Rakhmotboev, Deputy Chairma

Anzob	Tatiana Kirillova, Operations Director
Rumri Gold	Husein Abdulaev, Deputy Director
Suppliers	
Zeppelin Tajikistan	Mining equipment supply, maintenance and spare parts
Elegant	Construction materials supplier
Koni Namak	Supplier of technical salt
SAMO	Supply, installation and maintenance of communication and security equipment
GEOPROM	Geodesic equipment supplies and maintenance
Civil Society	
National Association of Small and Medium Businesses of Tajikistan (NASMB)	Matluba Uldjabaeva President
The Chamber of Commerce and Trade of Tajikistan	Larissa Kisslyakova Deputy Head
American Chamber of Commerce in Tajikistan	Ilkhom Makhkambaev President
Donors	
World Bank - Private Sector Competitiveness Project	Nabisher Juraev, STC

Appendix 3: Mining Company Questionnaire

SECTION ONE: GENERAL INFORMATION

A. Organisation Information

1. Organisation Name	
2. Name & Position of Interviewee	
3. Current annual revenue/turnover of the organ	isation over the past year in USD
4. How many projects/operations do you have in	country? Where are they located?
5. In which year did operations commence?	
6. What is the Mine lifecycle stage of project/ope	erations?
7. What is the current estimate of mine life before	e planned closure (years)?
8. Current Level of Investment in country in USD	
9. Planned investment over next 5 years in USD	

10.	Current Level of Employment ³²		
	Skilled Nationals		
	Semi Skilled Nationals		
	Unskilled Nationals		
	Total Number of Employees in country		
11. Copy of Company's yearly report, and any case studies of domestic/local community procurement. If this are available, please attach to this questionnaire and return to us.			Yes No
12.	Level of equity participation by Kyrgyz Nationals		

B. Company's Domestic Procurement Maturity Self-assessment

Please note, in order to progress to the next level, all items under the previous level will need to have been completed.

Dimension	Level 1 – Disengaged 2	Level 2 - Basic	Level 3 - Compliant	Level 4 - Committed	Level 5 - Leading	level
Business value to be gained from domestic procurement	No business case / business drivers established.	Business drivers are superficially understood by some personnel, but not consistently or systematically identified.	Business drivers agreed, documented and signed off by supply chain, corporate affairs and other key stakeholders. Business case approved by senior management and forms basis of DP Strategy development.	Business drivers clearly prioritise external stakeholder drivers and contribution to long-term economic development and thriving local communities.	The investment community recognizes DP performance as contributing to business value for the company.	

³² DEFINITION:

- Semi-skilled workers: usually workers who have trade or craft skills e.g. drivers, carpenters, welders, cooks, and security guards. Often, semi-skilled jobs require a minimum degree of formal training and language skills prior to commencement of employment.
- o **Unskilled workers:** usually performing work that does not require formal skills, language skills, training or education to perform effectively (e.g. cleaners, loaders, trench diggers, line cutters, etc.).
- Skilled Workers: manager, workers or people possessing special skills or knowledge usually attained/acquired through specialized training. In other words skilled workers have a certain skill set necessary to work in a specialised field e.g. chemists, architects, physicians, auto mechanics, etc.

Specific regulatory requirements	No commitment or understanding of legislative context for DP, including any relevant agreements made by the Company with other stakeholders. Site is not compliant with national laws	Some awareness of legislation, company agreements and commitments, however no documentation and no plan to address DP implications. Commitments to meeting legislative requirements that cannot be met are made.	DP commitments go beyond meeting legislative requirements, and take into account other standards and good practice for DP.	DP commitments quantify how value for the company can be created from DP.	Performance in DP is widely accepted for helping the company to be recognised as a model for leading-practice.
Definitions	No definition of domestic procurement relevant to operation or project.	DP definitions required by national legislation are adopted.	Definition includes local citizen participation in ownership. Clearly defined criteria that define local community suppliers, that take into account the project or operation's Zone of Influence. Domestic procurement spend and local community procurement spend for the operation are clearly defined.	Definitions of DP consider the value added to the local economy from the proportion of local content within a contract: * Raw materials * Manufactured product * Assembly * Salaries of employees of non-local origin	Definitions of DP are set to measure exclusively valueadd to the local economy from local content.
Demand side analysis	No documented DP demand suitability analysis.	No analysis of overall demand for DP. DP is ad-hoc.	Transactional and non-strategic demand are evaluated against agreed criteria (e.g. including risk, timing, complexity, impact on community) to identify potential opportunities for DP. Demand analysis includes a historical spend analysis and clarity of where currently procured from.	The demand analysis includes projected spend, volumes and timing for the next three years for each category of goods and services. Goods and services required from Tier 1 and 2 suppliers are evaluated for DP suitability.	Demand analysis shared with government & local agencies and used to develop the local market to be national and/or globally competitive.

Supply side analysis	No local supply side analysis. Local opportunities are based purely on spot sourcing and immediate availability of local businesses already known.	Local business database and statistics driven by requirements of government or financing partners. Little or no additional supplier assessment undertaken by the project or opeation - reliance on using government or partner data. Multiple, or a single nonstructured, databases of potential local suppliers are kept to log offers received from the market.	There is a structured local supplier database with supplier details, categories of goods and services is developed that is available to the procurement team. Demand profile is used to assist in identifying suppliers.	BU has engaged with local businesses to complete a high-level assessment of capacity, needs and barriers, and included in local supplier database that is regularly updated. All supplier information is integrated with overall vendor database and information management systems.	Supply and demand analysis shared with government & local agencies and used to develop the local market to be national and/or globally competitive.	
Domestic Procurement Strategy	No planning or strategy for DP.	A high level plan developed but lacks key elements such as business drivers, supply side analysis, preferrencing mechanisms and KPIs	DP strategy has input from Community Relations unit and other relevant stakeholders. KPIs in DP strategy have a clear link to business drivers. DP strategies have all elements including performance targets and KPIs.	DP strategies are revised every three years to reflect changing business drivers. Strategies seek synergies and partnerships with other company operations and neighbouring companies. Operation or project is able to influence key contractors to adopt a DP strategy.	Strategy is clearly connected to overall operational strategy. DP strategy delivers value and reach objectives as per business drivers.	

Coordination	Little to no coordination of activities to increase local participation in supply chain opportunities.	Some efforts driven by Community Relations function (e.g. encourage buyers to procure locally) but most procurement staff continue with "business as usual". Diffused accountability and responsibility.	Competent staff with DP responsibility. Supply Chain leads crossfunctional DP team and Steering Committee, with DP in performance targets for key people. Clear process for building workforce capability to deliver effective DP.	Senior management incentives and performance metrics give a significant weighting to DP. Procurement team see facilitating DP as a core part of their role. Structured approach to share good practices across the company.	Staff assumes additional responsibility to engage with external stakeholders to support development of key sectors.	
Ethics	Little to no targeted management of potential ethical issues.	Informal discussions about ethical behaviours and risks.	Overarching ethical risks clearly identified during risk assessment Specific sessions on managing unethical behaviours among staff as they relate to DP are included in training and inductions. Process in place and used to register all DP programmes where selected suppliers benefit.	Ethical risks identified for all key decision points in the procurement cycle, and the lifecycle of the project, with mitigations in place.	Ethical issues managed and identified collaboratively with key stakeholders, particularly suppliers, public officials and business leaders.	

Preferencing	No formal process on how to give preference to local suppliers. No space or opportunity for new entrants (procurement teams always rely on usual vendors). Some preferrencing is applied as part of procurement regular procedures: ex price preferencing due to logistics costs.	Only ad hoc preferencing identified, such as preferential weightings in tender adjudications.	Suitable preferencing mechanisms identified and implemented for suitable categories of goods and services	Procedures are in place to implement preferencing mechanisms, such as reserving particular contracts for local suppliers, providing shorter payment terms and simplified tendering and contracts.	Preferencing within a category is lifted as soon as a competitive local supplier base is developed.	
Communicating opportunities	No targeted, tailored communication or engagement with local suppliers No consistent method for informing local suppliers of tenders. Demand /tender opportunities are not available for communication.	No customisation of documents and language to ensure effective communication with local suppliers. Reasons for failure in bids are provided if requested.	Structured, targeted and appropriate plan for communications with local businesses. Requirements and standards are clearly communicated, adequate lead time is given and assistance with tender preparation provided. Tender documents are customised to enable local businesses to participate in the bids. Non-successful bidders are provided with one-on-one, feedback to support improvement	Site communicates upcoming opportunities, with adequate timeframes for capability development of local businesses.	Localised suppliers are able to understand and participate in any tender processes as effectively as any other medium-large supplier. Other large industry in the area share the mine's communication and tender model due to efficency in the inclusion of local businesses.	

Integrating domestic content into large contracts	No expectation placed on major contractors and suppliers to procure locally.	Major suppliers encouraged, but not enforced to procure locally. No formal weighting applied to give preference to existing large suppliers that source locally.	Specific performance criteria for major suppliers (% spend, portion of work) are communicated at all stages of the tendering process. DP is costed appropriately into contracts, and communicated clearly to large tenderers.	Collaboratively working with major contractors to improve DP performance, including their own DP Plans where necessary. A DP Management Plan is required of all those contracts that contribute to the desired local impact.	Major contractors and suppliers proactively seek opportunities to create linkages with local businesses. Contractor and project or operations work actively together in the region to identify opportunities, build capacity and develop networks (e.g. JVs, clusters)
Supplier capability development	No SME or local Supplier Development programmes Contracts terminated in the event of non- conformance.	Local businesses not linked to the demand, receive some suport through a capability program with a social focus (enterprise development). Generic / basic supplier assessments and contract monitoring is ad-hoc. Only contractors receive some training as part of Health & Safety requirements.	Detailed supplier capability assessments undertaken for those suppliers targeted for development. Some supplier coaching and training, but not yet formal or consistent program. Once off or short duration training withouth progress monitoring.	Comprehensive supplier development program aligned with the DP strategy, with adequate, ongoing budget allocation and effectiveness monitoring. Partnerships with service providers established to provide specialist business skills, including access to finance. KPI s are used to feedback and improve supplier development program.	Work with government and other key stakeholders to build thriving local businesses in sectors that align with industrial policy, including building capacity of trade/business associations and training and support organisations. Support high growth suppliers in becoming competitive in local and global markets, and able to meet international standards (e.g. in terms of quality, lead times, safety, working conditions and cost control). Support for SMEs to become independant (e.g. identify other markets, innovation, sales)

Community- level enterprise development	No structure or function to support community entrepreneurs.	Operation responsive to inquiries from prospective community entrepreneurs, but no formal system in place. Some projects were initiated but no link with DP strategy. Some companies or cooperatives are created to become suppliers in response to external pressure or social agreements made.	Some local businesses created by Community Relations function become suppliers in response to specific opportunities	Community Enterprise Development program is in place, with a clear link to local procurement opportunities. Dedicated supporting function (either in-house or external) and partnerships (e.g. with associations and government) are set up to support community entrepreneurs.	Company integrates a wider range program in partnership with government, civil society and donors (where relevant) to create the local enabling environment required for community entrepreneurs. Clusters are in place to meet regional industry needs, including mining. Nurtured community enterprises survive after contract is over.
Monitoring	No monitoring of DP activities or performance.	Occasional case studies collected for promotions.	Framework and proper systems in place for measuring, monitoring and reporting. Baseline of DP performance is established, against which progress is/will be measured. Evaluation and monitoring includes performance of implementation partners and participants in Supplier Development programs.	Impact indicators feedback into the DP strategy implementation. Process and responsibilities for corrective action established, where required.	Collaborative effort to improve indicators of diverse, thriving local economies.
Reporting	No internal or public reporting on performance.	Ad hoc collection on local spend data, reported internally, available	Local spend indicators are measured and reported internally.	KPIs are part of the external communication reports and engagement with local community and government.	External verification and reporting of performance against policy. Other stakeholders report and verify operation's DP effectiveness and contribution to economic development

SECTION TWO: SUPPLY CHAIN DEVELOPMENT

A. Procurement of Goods & Services

What is your current level of annual procurement spend related to the project/operation(s)?

How is this total annual spend distributed across the following types of suppliers? Indicate % in the table below.

What proportion of the total number of suppliers is represented by this type of company? Indicate % in the table below.

	Suppliers based in proximity to the site(s)	C	Company located in country		
		International- owned	Joint venture	Independent Kyrgyz-owned company	International Company
% of total annual spend	%	%	%	%	%
% of total current suppliers	%	%	%	%	%

1.	Do you have a list of lead contractors / large suppliers used by the company for any procurement?	Yes No
2.	Do these lead contractors / large suppliers have any equity participation by Kyrgyzstani Nationals in their companies	Yes No
		If Yes
		SPECIFY
3.	What methods do you use for procurement of goods and services? If multiple answers, please describe which monetary range are applicable.	Restrictive or Preferential Procurement (incl Sole Sourcing
		Spot orders)
		Competitive quotation
		SPECIFY METHOD
		Range in US\$: from US\$ XXto US\$ XX= (example: Competitive quotation)
		Range in US\$: from US\$ XXto US\$ XX=
		Range in US\$: from US\$ XXto US\$ XX=
		Range in US\$: from US\$ XXto US\$ XX=
4.	Could you please provide information on your company procurement process (tender/evaluation process, request for quotation, sole sourcing/spot order etc)	
5.	Are Kyrgyzstan-owned service providers asked to provide quotations restrictively for particular goods or services?	Yes No
		Comment

6.	Are payment terms the same for all suppliers regardless of size, contract value location and ownership of service provider?	Yes		No		
					If no, how do the terms differ?	
7.	Regarding your tendering procedures for large contracts (for instance over USD 5m), have you included specific Local Content questions relating to workforce and supply chain developments?	Yes		No	If yes, what is the threshold and what	
8.	How do you intend to support local content development with lead contractors / large suppliers?	questions	s are askedr			
9.	What activities do you conduct to identify local goods and services suppliers and to make them aware of contracting/procurement opportunities. It could be through:		reach forums		Web/ Print advertisement	
	contracting/procurement opportunities. It could be through.	Screening of Radio/TV	f suppliers		Others	
		Commen	†		Others	
10	(Government bodies, Chamber of Commerce, Unions, Business Based Organizations, Companies, Development Banks and Agencies, NGOs etc.) to discuss about goods and services	Yes		No		
	(equipment, spare parts, consumables etc) in order to optimise your local sourcing in country or about ideas on how to develop those in the next 5 years?	Comment		•••••		

11. For the following **GOODS** & **SERVICES**:

Score the potential for domestic procurement, to the best of your knowledge <u>from 1 to 5</u>:

- 1 = competitive supplier market exists in country,
- 2 = high potential to be developed in country but lacks investment;
- 3 = Medium potential with technical/financial support,
- 4 = limited potential due to limited market and/or entrepreneurs;
- 5 = low to no potential for development

Services Opportunities	a) Score by current use in your supply chain from in country suppliers (1 – 5)	b) Representing opportunities for development (1 – 5)
Load & Haul (contracted services, spares, consumables,		
maintenance)		
Blasting (explosive, transports & services, site preparation)		
Crushing & Grinding (consumables, repair & maintenance)		
Laboratory Activities		
Recovery Activities		
Drilling (contracted services, spares, consumables,		
maintenance, tyre tracks)		
Management & Technical Maintenance Services (Engineering,		
planning, survey)		
Energy services (Fuel, electricity)		
Demolition & Site Preparation		
Earthworks, tunnelling, Piles & Caissons		

Paving & Surfacing Civil works construction and maintenance Site Improvements including Landscaping Environmental Services	
Site Improvements including Landscaping	
Environmental Services	
Health Services	
Hospitality Services (including Camp Catering, laundry ect)	
Gardening and landscaping	
Environmental Risk Assessment (Oil & Gas, Mining, Agri-	
business, Construction) services	
Equipment maintenance (generators, pumps, crushers etc)	
Facilities light maintenance (buildings including air con)	
Fleet Management (Car Truck Rental and other Vehicles)	
Light Vehicle Maintenance	
Heavy Vehicle Maintenance	
Professional services: Accounting	
Professional services: Financial & Business Advisory	
Professional services: Legal	
Personnel services: Manpower	
Banking & Financial Services	

Insurance services	
Computer maintenance & System Servicing	
Waste mgmt (Recycling and disposal)	
Electrical Equip (Installation, Repair, and Maintenance)	
Supply Chain Services (customs, warehousing, transports)	
Transport/Logistics	
Personnel services: training	
Security	
Telecom and data systems	
Other (specify)	

Goods Opportunities	c) Score by current use in your supply chain from in country suppliers (1 – 5)	d) Representing opportunities for development (1 – 5)
Basic tools		
Bulk Construction Materials (cement, gravel, aggregate, rebar fencing, lumber, etc.)		
Chemicals products		
Energy (Fuel, gas)		

Equipment & supplies (Electrical, Piping, Pumps, Valves,	
Fittings, Insulation, Vessels, Instruments)	
Fresh foods (meat/fish, vegetables, rice etc)	
Dry foods	
Cleaning & camp consumables products	
Furniture and fixtures	
Hardware (tools, paints, nails, small parts, etc)	
Stationery/Office Supplies	
Steel Construction Materials	
Uniforms, safety equipment, PPE	
Vehicle Fuel	
Other (please list other relevant categories):	

12. What are the main challenges / limitations for	Multiple answers are possible:	
contracting/sourcing goods and services in country		
6,000,000,000,000,000,000,000,000,000,0	a. Local companies do not have previous experience	
	with the Industry	
	b. Unable to meet international procurement and/or	
	quality standards	
	c. Tender procedures (did not understand tender documents in	
	accordance with the required Scope of Work/could not write	
	compelling proposal in required language)	
	d. Not competitive due to price, quality, volume	
	and/or schedule	
	e. Lack of technical knowledge/qualified staff	
	f. Lack of resources (admin/insurance)	
	g. Lack of transportation/logistics	
	(unable to deliver to project site)	
	h. Lack of finance	
	i. Other reason (please specify)	
If you want to share additional information or provide comments use the s	chace below:	
if you want to share additional information of provide comments use the s	space below.	

SECTION THREE: EMPLOYMENT, SKILLS AND TRAINING in Lead Contractors and Suppliers

A. EMPLOYMENT

13. Does the company have in place Procurement/HR pol promote the employment of Kyrgyz Nationals within Contractors and Suppliers?		Yes		No	
		Comment	·····	<u></u>	
14. Is there formal monitoring and evaluation of the imple of this HR policy within your Supply chain	ementation	Yes		No	
		Comment			
B. SKILLS & TRAINING of supplier workforce					
15. Has your Company undertaken a formal analysis of the skills available in the local market?	Yes		No		Specify
16. Could you highlight the workforce development challenges that you have identified for your Suppliers?					
17. Has your Company communicated its skill requirements and/or supplier workforce challenges with the relevant authorities?	Yes		No		Specify
18. Has your Company undertaken a formal analysis of Supplier training plans required to meet its skills requirements?	Yes		No		Specify
19. Has your Company engaged any local educational institutions or developed in house training programmes for your supplier?	Yes		No		Specify
20. Does your Company have plans to develop local training service providers, possibly in partnership with established service providers?	Yes		No		Specify

Appendix 4: Supplier and SME Questionnaire

No	Question
1	Types of goods/service supplied by your business entity
2	shareholding/ownership of the business entity –
	national, foreign, %
	male/female owned
4	What is the main market for your products?
	Local() Export()
	Indicate main export markets
5	% of female employees, in which functions
6	Have you supplied goods/ works/ services to mining companies in past 5 years?
8	Are you still supplying the mining industry? Yes (), No()
	If no, what made you drop out?
9	Within the past 5 years, have you attempted to borrow for purposes of investing in your business?
10	If you attempted to borrow and did not succeed, what were the main reasons given by the lender?
	Collateral unacceptable
	Insufficient profitability
	Problems with credit history
	Concerns about level of debt already incurred
	Others (specify)
11	If your enterprise did not apply for credit or a loan what were the main reasons
	Collateral unacceptable
	Insufficient profitability
	Problems with credit history
	Concerns about level of debt already incurred
	Others (specify)
12	Does your business have problems accessing infrastructure or utility services?
	Roads/ railroad
	Electricity
	Water
	Waste removal
	Others (specify)
12	Is your company short of/ has inadequate skills in:
	Accounting
	Marketing
	Business planning
	Others (specify)
14	Does your company use services of external providers of business support services ?
	Accounting
	Marketing
	Business planning
	Others (specify)
15	How do you receive information about upcoming business opportunities in the mining industry?
	What are the ways in which you think mining companies should be providing visibility of opportunities?

No	Question					
17	Do mining companies provide any assistance with tender preparation?					
18	What are the main obstacles for winning (more) mining sector contracts?					
	Lack of information about business opportunities					
	Pre-qualification requirements					
	Quality requirements					
	HSE requirements					
	Corrupt practices					
	Payment terms					
	Others (specify)					
19	Do you participate in any training programs organized by mining companies?					
	Quality standards					
	Health, safety, environment					
	Tender preparation					
	Accounting and reporting					
	Others (specify)					
20	Do you compete with foreign companies for contracts in the mining industry?					
21	Do you think foreign companies have unfair competitive advantage? Please describe					
22	Is there any government support of domestic SMEs/ industrial enterprises?					
	Please describe					
23	What support can the government provide to SMEs to make them more competitive suppliers:					
	Facilitate access to finance e.g for CAPEX – expensive machinery, etc					
	Lower taxes and customs duties on import of raw materials for SMEs					
	Collect and publish information Mining industry demands					
	Develop standards and certification for services and goods in line with mining projects requirements					
	Introduce local content policies for the mining sector					
	Vocational and business trainings					
	Education develop curriculum in line with mining industry needs					
	Infrastructure support (roads airport, storage etc)					
24	Do you participate in any industry or SME associations? If yes, how do they help your business grow?:					
	Access to information about tenders					
	Access to potential customers					
	Marketing support					
	Advocacy					
	Others (specify)					
25	Does your company participate in any supplier database?					