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Increasing Local Procurement By the Mining Industry in West Africa

Road-test version

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Increasing Local Procurement By the Mining Industry in West Africa

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ACRONYMS

AfDB	African Development Bank
AU	African Union
BBBEE	Broad-Based Black Economic Empowerment
CAMRMRD	Conference of Ministers Responsible for Mineral Resources Development
CFR	Cost and Freight
CIC	Carbon-in-Column
CIL	Carbon-in-Leach
CIP	Carbon-in-Pulp
CSO	Civil Society Organizations
ECOWAS	Economic Community of West African States
EITI	Extractive Industries Transparency Initiative
EMDP	ECOWAS Mineral Development Policy
EPC	Engineering, Procurement, and Construction
EPCM	Engineering, Procurement, Construction, and Management
EU	European Union
FOB	Free on Board
GDP	Gross Domestic Product
HDSA	Historically Disadvantaged South African
HSE	Health, Safety, and Environment
IFC	International Finance Corporation
JV	Joint Venture
MoU	Memorandum of Understanding
NCOM	National Coalition on Mining
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organizations
OEM	Original Equipment Manufacturer
PPE	Personal Protective Equipment
PROMINP	Programa de Mobilizacao da Industria Nacional de Petroleo e Gas Natural
REC	Regional Economic Community
RFQ	Request for Quotations
RWI	Revenue Watch Institute
SEBRAE	Servico Brasileiro de Apoio as Micro e Pequenas Empresas
SME	Small- and Medium-sized Enterprises
SPX	Subcontractor and Partnership Exchanges
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
UNIDO	United Nations Industrial Development Organization
WACAM	Wassa Association of Communities Affected by Mining
WAEMU	West African Economic Monetary Union
WAMPOC	West African Mining and Power Conference
WTO	World Trade Organization

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Note on Road-Test Version

The content of this report is the work of consultants hired by the World Bank. It does not represent World Bank official position. This version of the report is a “road-test version” and is a work in progress. A complete version in French is available. Feedback and comments are welcome. Please send to Kristina Svensson ksvensson@worldbank.org.

EXECUTIVE SUMMARY

Regional organizations and national governments are increasingly focusing on **enhancing the benefits from mining sector investment**. The Africa Union’s African Mining Vision 2050 outlines a new resource-based industrialization and development strategy for Africa, based on downstream, upstream, and sidestream linkages, and both ECOWAS and WAEMU have developed mineral development strategies. National governments are also increasingly looking for ways to maximize benefits derived from investment in mining.

This document presents the outcomes of the World Bank project to **support local procurement by the mining sector in West Africa**. The project objectives were to (i) inform government policy related to supporting increased local procurement by the mining industry; and (ii) inform public debate/facilitate knowledge exchange between all major stakeholders, including regional organizations (ECOWAS and WAEMU), mining companies, civil society, and other supporting institutions (financial institutions, partners, training institutes, etc.). This report is the result of desk research, interviews, and analysis across West Africa, in particular in Ghana, Guinea, Senegal, Mali, and Burkina Faso; field research in Ghana, Guinea, and Senegal; research into benchmark countries; and stakeholder consultation, including three workshops held in Ghana and Guinea in September 2011. It also draws on research into global best practice.

This focus on local procurement represents a **shift in policy approach**: rather than concentrating on the contribution by mining companies through taxes, governments are increasingly exploring ways in which mines can become more closely integrated with local economies. This report provides guidance to policymakers for setting policies and developing regulations to create a supporting framework for increasing local procurement. Sections 6.1 and 6.2 outline the roles of regional organizations and national governments for developing this framework. Key considerations for policymakers include establishing a common approach to measuring, planning for, and reporting on local procurement, and developing the appropriate regulations for increasing local procurement, without resorting to protectionist measures.

There is a **compelling economic argument** to support local procurement in West Africa. Local procurement by mining companies can bring about **significant benefits to a wide range of stakeholders**. Mining companies can minimize their logistics and stock holding costs, reduce their lead times, increase security of supply as well as enhance their reputations and obtain a “social license” to operate. Local businesses, entrepreneurs, and communities can benefit from increased access to business growth opportunities, increased stability and diversity of markets, and improvement of business capabilities, including access to capital, productivity, technology, and HSE practices. Wider benefits include increased employment and skills, increased domestic and foreign investment, technology and knowledge transfer from international companies, exports and foreign exchange, and increased government tax revenues.

The opportunity to realize these benefits is particularly strong in West Africa due to the large scale of current and potential mining activity. The significant **established mining industry in West Africa** (supplying, for example, 9% of the world’s bauxite and 8% of the world’s gold) is expected to **continue to show strong growth** with a number of large gold, iron ore, and bauxite projects in advanced planning stages. Furthermore, there are **significant unexploited mineral resources** across the region, including iron ore, gold, and uranium, as well as copper and diamonds.

These levels of mining activity result in **significant procurement spend**, both in terms of capital investment and ongoing operational costs. However, **currently there is limited participation in mining supply chains** by companies based in West Africa, despite existing capacity and the potential to create further capacity. Wider markets (in particular oil and gas, infrastructure, and housing) also offer opportunities for enhancing enterprise sustainability. If countries in West Africa can meet, or even exceed, the level of local procurement seen in countries such as Chile, Canada, and Brazil, there is an opportunity for backward linkages to play a central role in sustainable economic development.

The way that **local procurement is defined** has a significant impact on the objectives and actions of stakeholders. To date, there has been no consistent approach to defining local procurement either within or across West African countries. Furthermore, many governments and mining companies consider “local” companies to be those which are registered nationally, rather than fully considering the degree of value addition and the levels of participation by local individuals. To achieve maximum socioeconomic benefit, it is proposed that preference be given to companies involved in actual manufacturing activity or service delivery, as well as to those with significant ownership, management, and employment of local citizens. A framework for defining and measuring local procurement that reflects these principles is proposed in this report.

While **regional and national mining policy and regulation** often require preference to be given to local companies that can match the cost and technical aspects of imported products, these provisions have often been insufficiently developed, disseminated, monitored, and enforced. Some efforts are underway to develop regulation to give effect to Mining Code provisions, notably in Ghana, where regulations are being developed in consultation with the mining sector. Furthermore, regional organizations and national governments have programs that aim to contribute to a supportive enabling environment for local business development and investment, including infrastructure and service provision and small and medium-sized enterprise (SME) and private sector development programs, but there are very few effective tailored programs of support.

Few **mining companies** in West Africa currently have a clear policy on supporting local procurement; however, there are some efforts underway to apply a more consistent, formal approach. In Ghana, the mining sector through the Chamber of Mines (with the support of the IFC) has undertaken a process of identifying opportunities for increasing supply and assessing support needs of local enterprises. To support realization of these opportunities, the Ghana Chamber of Mines has identified collective actions by the

mining companies to support local procurement,¹ with support from the IFC and the Ghana Minerals Commission. Elsewhere, a number of individual mining companies (e.g., in Mali and Guinea) have initiated individual programs, but there is little evidence of a cross-industry approach, even at a national level.

Potential opportunities for expanding local supply exist in a number of areas. For services conducted at the mine site and in-country, there is an opportunity both for local companies to expand into areas such as camp management, civil works, construction, transport, drilling, mining, and equipment maintenance; and for international companies to increase participation by local individuals in their operations. Supply of consumables also offers opportunities for establishing local or regional production capacity, in particular where logistics costs are high in relation to product value, and where raw materials and other inputs are locally available. Potential consumable opportunities include grinding media, lime, activated carbon, cyanide, and caustic soda. Some equipment consumables also offer longer-term opportunities, such as replacement parts for capital equipment (e.g., conveyor idlers). Other manufactured products offering opportunities are plastic products, uniforms, and personal protective equipment. Further detail on mining activity and potential opportunities can be found in Section 5.

This report sets out **recommendations on how each stakeholder can help realize these opportunities**. Brief summaries of the proposed roles of stakeholders follow.

Regional organizations have a key role to play in creating frameworks and guidelines that can then be implemented at a national level, as well as facilitating coordination across national governments. Specific actions include developing a harmonized list of products across the region that may be exempted from customs duties, promoting linkages and investment along the mining supply chain, developing a regional list of suppliers, and continuing to facilitate regional trade.

National governments need to set the appropriate policy and regulatory context to encourage local procurement, without resorting to protectionist measures, and provide a supportive enabling environment for enterprise development and investment. This includes requiring mining companies to develop local procurement plans, targeting reduction of concessions on import tariffs and duties, promoting linkages and investment along the mining supply chain, and potentially allocating revenues from mining to support local supplier development.

Civil society and communities have a role to play in supporting local procurement, through advocating for, and monitoring, increased local procurement along with support from regional organizations, national government, and the mining sector.

¹ These are reflected in the MoU signed by the Ghana Chamber of Mines, the Ghana Minerals Commission,

Mining companies are also a central part of the solution. Fundamentally, they need to ensure that local companies have “full, fair, and reasonable access” to opportunities. This can be achieved by sharing information on their procurement needs, helping to identify and assess the viability of suitable products and services for local supply, and broadening access to tenders and RFQs. Some levels of technical support (e.g., product testing and assistance in improving HSE standards) and financial support (e.g., preferential payment terms or supporting access to finance) are also required. A strong and active Chamber of Mines to drive the local procurement program and to ensure a common approach across the mining community has also been clearly demonstrated to be a major success factor.

There are few greater opportunities for sustainable economic development in West Africa than increasing local procurement by the mining sector. If a coordinated approach by all of the preceding stakeholders is adopted, combined with a strong commitment to implementation, the economies of many West African countries could be substantially transformed.

1 WHAT ARE THE OBJECTIVES AND SCOPE OF THE REPORT?

This report aims to support efforts to maximize local procurement by the mining sector by **providing policy recommendations for national governments and regional organizations**. It also aims to provide guidance to the private sector and civil society on steps for increasing local procurement. The report takes a **regional approach**, driven by the potential to realize economies of scale and build on areas of competitiveness across the West African region.

This report is based on desk research, interviews, analysis, and stakeholder consultation conducted as part of the World Bank project: *Increasing Local Procurement by the Mining Industry in West Africa*. This research focused on three selected countries: Ghana, Guinea, and Senegal. It also draws on previous studies conducted by the World Bank in Mali and Burkina Faso. Therefore, this work draws on desk research across West Africa and fieldwork conducted in five West African countries: Ghana, Senegal, Guinea, Mali, and Burkina Faso, as well as global best practice. It also draws on benchmarking of approaches to supporting local procurement in other countries (both in the mining sector and oil and gas sector), including consultation with stakeholders with experience across Chile, Trinidad and Tobago, Australia, Chad, and South Africa.

Ghana, Guinea, and Senegal were selected for field research based on the level of opportunity for increased local procurement (largely driven by current and future scale of mining activity), while ensuring a balance across mineral commodities, Anglophone and Francophone countries, and the existing industrial production base. This allowed similarities and differences across countries to be considered in developing recommendations for supporting local procurement.



Box 1. Case study countries: Country facts, mining potential, and industrial base

- | | |
|---------------------|--|
| Burkina Faso | <ul style="list-style-type: none">• Significant recent and planned developments in gold mining, with the mining sector projected to grow at 22% per year for 2010 and 2011:<ul style="list-style-type: none">- Three gold mines opened in 2008; a fourth mine opened in 2009- 7–8 new mines expected by 2011- Gold production of 33.74 tons expected in 2011, an increase of 32% |
|---------------------|--|

	<p>from 2010²</p> <ul style="list-style-type: none"> - Gold is expected to become the leading source of export revenues within 3 to 5 years • In addition to gold, large mineral deposits of copper, phosphate, zinc, manganese, and iron • Francophone • Country-specific study on mining sector and business enterprise development done in 2010
Ghana	<ul style="list-style-type: none"> • Large, well-established mining sector, with the main mines still having a relatively long life <ul style="list-style-type: none"> - GDP contribution: 6.7% of GDP in 2008 (mining and quarrying),³ approximately US\$1.9bn⁴ • Lead producer of gold in West Africa (49% of West African production), production of bauxite and manganese⁵

² Bloomberg. (2011). Burkina Faso Expects Gold Production to Rise 32% in 2011, Association Says.

³ Africa Economic Outlook. 2010. African Economic Outlook 2010. Available: <http://www.africaneconomicoutlook.org/en/countries/west-africa/ghana/>

⁴ Author's calculation: Based on African Economic Outlook and World Bank data.

⁵ Author's calculation: Based on USGS data.

	<ul style="list-style-type: none"> • Significant base of economic activity already established, including local businesses and branches of international businesses • Anglophone
Guinea	<ul style="list-style-type: none"> • Large bauxite mining industry, with Guinea the lead producer of bauxite in West Africa <ul style="list-style-type: none"> - 24% of GDP in 2008,⁶ approximately US\$916.7m⁷ - 91% of West African bauxite production⁸ • Strong growth expected in iron ore mining (over 80m tons from a number of projects) • A number of bauxite expansion and alumina refinery projects that could produce more than 7m tons of alumina • Weak industrial production base and unstable economic growth, with growth potentially hampered by uncertain political regime • Francophone
Mali	<ul style="list-style-type: none"> • Established gold mining sector: 2nd largest gold producer in West Africa (25% of West African production)⁹ <ul style="list-style-type: none"> - GDP contribution: 6.8% of GDP in 2008,¹⁰ approximately US\$596m,¹¹ 75% contribution to exports revenues

⁶ Africa Economic Outlook. (2010). African Economic Outlook 2010. Available: <http://www.africaneconomicoutlook.org/en/countries/west-africa/guinea/>

⁷ Author's calculation: Based on African Economic Outlook and World Bank data.

⁸ Author's calculation: Based on USGS data.

⁹ Author's calculation: Based on USGS data.

¹⁰ Africa Economic Outlook. (2010). African Economic Outlook 2010. Available: <http://www.africaneconomicoutlook.org/en/countries/west-africa/mali/>

¹¹ Author's calculation: Based on African Economic Outlook and World Bank data.

	<ul style="list-style-type: none"> • Potential growth in gold (17 companies engaged in exploration) as well as iron ore, cement production, uranium, and bauxite • Weak and undiversified industrial base (mainly agro-food and textile, contributing 5.9% of GDP in 2008)¹² • Francophone country-specific study on local procurement to mining conducted in 2009
Senegal	<ul style="list-style-type: none"> • Mining activity includes gold, phosphates (43% of West African production of phosphates)¹³ • Mining and quarrying: 17% of GDP in 2008,¹⁴ approximately US\$2.2bn¹⁵ • Growth expected across a range of commodities (including gold, heavy mineral sands), with potential development of iron ore and uranium resources • Some existing industrial base (manufacturing sector contribution to GDP is 13.9%, 2006 estimate)¹⁶ • Francophone

Although research and analysis focused on these countries, wider research was conducted across the region, to inform recommendations at a regional level.

In September 2011, three workshops were conducted as part of this project: a national workshop in Guinea, a regional workshop for mining companies (in Ghana), and a workshop for all stakeholders from the region (in Ghana). The regional workshops involved representatives from 11 countries in West Africa. The findings from these workshops have been reflected in this report.

This report begins by discussing the economic case for supporting local procurement in West Africa (Section 2). Specific product and service opportunities for West Africa that have been identified to date are presented in Section 3. Section 4 then discusses how “local procurement” can be defined, and Section 5 presents existing efforts to support local procurement in West Africa. Section 6 sets out recommended policy measures for regional organizations and national government, as well as recommended steps to be taken by the private sector and civil society to support increasing local procurement.

¹² Africa Economic Outlook. (2010). African Economic Outlook 2010. Available: <http://www.africaneconomicoutlook.org/en/countries/west-africa/mali/>

¹³ Author’s calculation: Based on USGS data.

¹⁴ Africa Economic Outlook. (2010). African Economic Outlook 2010. Available: <http://www.africaneconomicoutlook.org/en/countries/west-africa/senegal/>

¹⁵ Author’s calculation: Based on African Economic Outlook and World Bank data.

¹⁶<http://globaledge.msu.edu/countries/senegal/statistics/>

2 WHY SUPPORT LOCAL PROCUREMENT IN WEST AFRICA?

With **mining investment expanding rapidly** in West Africa, the mining sector has been identified as a potential catalyst for economic development. This is supported by a range of strategy and policy frameworks, including the African Mining Vision 2050, which identifies a resource-based industrialization and development strategy for Africa based on developing downstream, upstream, and sidestream linkages.

There is an extensive **established mining industry in West Africa**, with the region supplying 9% of the world's bauxite (dominated by Guinea), and 8% of the world's gold, (primarily by Ghana and Mali). West Africa also produces significant volumes of uranium, diamonds, manganese, lead, phosphates, and iron ore, with top producing countries also including Mauritania (iron ore) and Senegal (phosphates).

Strong growth in mining activity is expected, with large iron ore projects planned in Guinea, Liberia, Senegal, Côte d'Ivoire, Sierra Leone, Mauritania, and possibly in Ghana and Togo, planned expansion in uranium mining in Niger, and a number of new gold mine developments or expansions across West Africa including Burkina Faso, Senegal, Mauritania, and Côte d'Ivoire. In iron ore alone, planned investment is approximately US\$14bn, with projects expected to be implemented from 2011. Furthermore, there are **significant volumes of unexploited mineral resources** across the region, including iron ore, gold, and uranium.

Table 1. West Africa Mineral Resources: Key Commodities Production and Growth Potential

Key commodities	Production scale	% of global production	Key production countries and % of West African production	Countries showing growth potential
Bauxite	18,892,000 tons	9%	Guinea (91%)—5th largest producer in the world (2008), 8% of world production Sierra Leone (5%) Ghana (4%)	Planned growth in bauxite production in Guinea , including development of alumina production Ongoing rehabilitation of the Western Rail line in Ghana will reduce transportation cost and increase freight capacity
Gold	159 tons	8%	Ghana (49%)—4% of world	Significant development of mines in Burkina Faso, Senegal, Côte

Key commodities	Production scale	% of global production	Key production countries and % of West African production	Countries showing growth potential
			production Mali (25%)—2% of world production Guinea (12%)— 1% of world production	d'Ivoire, Sierra Leone, and Mauritania Expansion of the CIL plant at Gold Fields, Tarkwa mine (the largest mine in Ghana)
Uranium	3,575 tons	7%	Niger (100%)— 7% of world production	Prospecting and/or exploration in Burkina Faso, Ghana, Guinea, Mali, Mauritania, Nigeria, Senegal, Sierra Leone
Diamonds	Not available			Development opportunities in Guinea, Sierra Leone, Liberia, and Ghana
Manganese	380,000 tons	3%	Ghana (83%)— 3% of world production Côte d'Ivoire (17%)	Development in Côte d'Ivoire and Burkina Faso (Tambao Area)
Lead	57,960 tons	1%	Nigeria (100%)— 1% of world production	
Phosphate rock	1,489,000 tons	1%	Togo (57%)— 0.5% of world production Senegal (43%) Burkina Faso (0.2%)	Senegal: Exploitation of a newly discovered phosphate deposit (Matam District/North of Senegal), with proven reserves: 40m tons
Iron ore	11,012,000 tons	0.5%	Mauritania (99%)—0.5% of world production	Significant planned investment in Guinea, Senegal, Liberia, Côte d'Ivoire and Sierra Leone:

			Nigeria (24%)	<ul style="list-style-type: none"> • Major project in Guinea could produce 70m tons/yr (Simandou-Zogota by 2015) • Senegal: by 2013, plans to exploit Faleme iron ore deposits (South East of Senegal) and produce 15–25m tons/yr, although these seem to be delayed <p>Expansion in Mauritania</p> <p>Mali plans to produce 600,000 tons/yr (Sahara Mining Tienfala project)</p> <p>Potential for developing iron ore deposits in Ghana and Togo</p>
Cement	13,445,000 tons	0.5%	Nigeria (36%) —0.2% of world production Senegal (22%) Ghana (12%) ¹⁷	Investment in cement production planned in Senegal (Dangote Cement Plant: 2.5m tons/yr) Investment in cement production planned in Mali
Key commodities	Production scale	% of global production	Key production countries and % of West African production	Countries showing growth potential
Copper	33,000 tons	0.2%	Mauritania (100%) —0.2% of world production	Potential for growth in production in Burkina Faso , linked to gold mining
Coal	682,912 tons	0.01%	Nigeria (73%) —0.01% of world production Niger (27%)	Nigeria estimated to have over 3bn tons of reserves

¹⁷ Other countries with cement activities include Burkina Faso, Côte d’Ivoire, Mali (clinker crushing), Niger, Senegal, Sierra Leone, and Togo.

Heavy minerals	Senegal Sierra Leone	Senegal: Grand Cote, project to realize 85,000 tons/yr of zircon, 20,000 tons/yr of rutile and leucoxene and 650,000 tons/yr of ilmenite
Zinc		Burkina Faso: Development of Perkoa mining

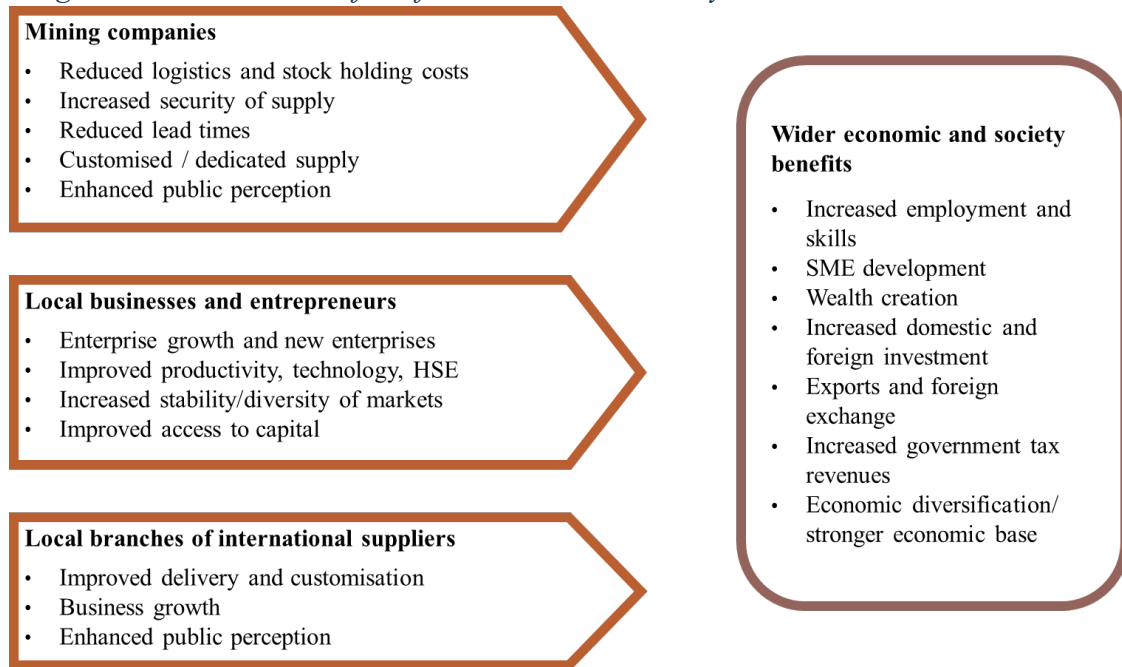
In addition to the preceding mining activity, West Africa produced 2.6% of the world's crude petroleum in 2008 (795 million barrels), with Nigeria and Côte d'Ivoire producing 99% of this (96.7% and 2.8% respectively). Production is expected to grow in Ghana and Niger (e.g., an estimated 324-million-barrel resource at Agadem oilfield in Niger is to start production in 2011). There is also significant exploration activity in Mauritania (for example, Chinguetti Oilfield, including Chinguetti and Tevet Areas, an estimated 123-million-barrel resource).

Further detail on mining sector activities in Ghana, Guinea, and Senegal is provided in Appendix F.

As mining is such a large part of the West African economy, it has the potential to be a **significant catalyst for wider economic development**. Overall, there is currently only **limited participation in mining supply chains** by companies based in West Africa. The majority of mining inputs are imported into the region, including a number of non-specialized products where capacity already exists locally or within the region. A few countries have made some progress in developing the local supply base. For example, Ghana, in addition to hosting a range of service providers (including, for example, engineering, civil works, environmental assessments, laboratory services, spare parts provision, and maintenance and repair), hosts some production capacity in cement, lime, explosives emulsion, plastic piping, and some steel product fabrication facilities. However, there is an opportunity to catalyze broader economic development, including the development of an industrial base to serve regional markets.

While there are costs involved in developing a local supply base, mining companies, local businesses, and local communities stand to gain from **potential benefits** of increased local procurement, as shown on the following page.

Diagram 1: Potential Benefits of Local Procurement By Stakeholder



While West Africa faces significantly different challenges and opportunities from those faced by other countries and regions, international experience shows that **countries can successfully capitalize on extractive industry investment** to support development of local supply industries. For example:

Box 2. Benefits of local procurement: Global cases

Norway's oil and gas supply chain:¹⁸

- Supplies 50–60% of capital inputs and 80% of the operational and maintenance inputs
- Employs 5% of its private-sector labor employed in oil and gas supply chains
- Exports approximately 46% of its sales to other countries (with 7 in 10 companies involved in exporting)

Brazil's oil and gas supply industry:

- Local supply has increased from 57% to 75% from 2003 to 2008
- Contributes US\$9.3bn to the economy
- An agreement between Petrobras and SEBRAE—a national small business support

¹⁸ Heum. (2008). Local Content Development—Experiences from Oil And Gas Activities in Norway.

association—has generated US\$113m in transactions for local materials and equipment supplies¹⁹

Chile's mining supply clusters:

- Significant spend reported by mining companies:
 - Of US\$484m in procurement in 2004, Escondida reported 47.6% from the Region II Antofagasta, 33.7% from the rest of the country, and 18.7% imported²⁰
 - Barrick Gold's "regional purchases of goods and services" at the Zaldívar gold mine totalled US\$378m in 2010²¹
 - BHP Billiton's Spence mine reported 86% of its purchases as being national purchases in 2008, representing a spend of US\$467m. Of these national purchases, 35% of the suppliers were in the Antofagasta region²²
 - State-owned copper companies Codelco purchased 90% of goods and services from national suppliers, representing a spend of US\$2.4bn²³
- However, some of this local procurement likely consisted of imported goods bought through local agents or imports through regional and national sales offices.²⁴ The inconsistencies in measuring local procurement are highlighted by the local purchasing statistics of Teck Cominco, which spent 12% of total spend on locally based suppliers at the Quebrada Blanca mine in 2009. While this may seem low compared to the 80–90% reported by Codelco and BHP Billiton, Teck Cominco explicitly defines local procurement as "regional procurement" and notes that there are inconsistencies in its measurement across operations²⁵

In **Canada**, the Diavik mine local procurement strategy resulted in operational expenditure of over US\$1bn allocated to indigenous groups and 90% of outsourcing contracts to local or aboriginal firms.²⁶

In **Tanzania**, the Private Sector Initiative led to companies from a range of industries,

¹⁹ Jenkins et al. 2007. *Business Linkages: Lessons, Opportunities and Challenges*, p. 29.

²⁰ Minería Escondida. 2004. *Sustainability Report 2004*, p. 33.

²¹ <http://barrickresponsibility.com/2010/en/performance/society.html?noexit=true>

²² Spence: 2008 Year in Review.

²³ <http://www.codelco.cl/english/desarrollo/reporte/2009/pdf/report.pdf> p.13

²⁴ ICCM (2007). *The Challenge of Mineral Wealth: Using Resource Endowments to Foster Sustainable Development—Chile Case Study*, p. 33.

²⁵ Teck. (2009). 2009 Sustainability Report.

²⁶ Jenkins et al. (2007). *Business Linkages: Lessons, Opportunities and Challenges*, p. 45.

including mining, increasing their local supplier spend from US\$21m to US\$50m in the first year.²⁷

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http://www.sbp.org.za/uploads/media/Psi_Tanzania_Leveraging_Sustainable_Development_May_2003.pdf

3 WHAT ARE THE OPPORTUNITIES FOR WEST AFRICA?

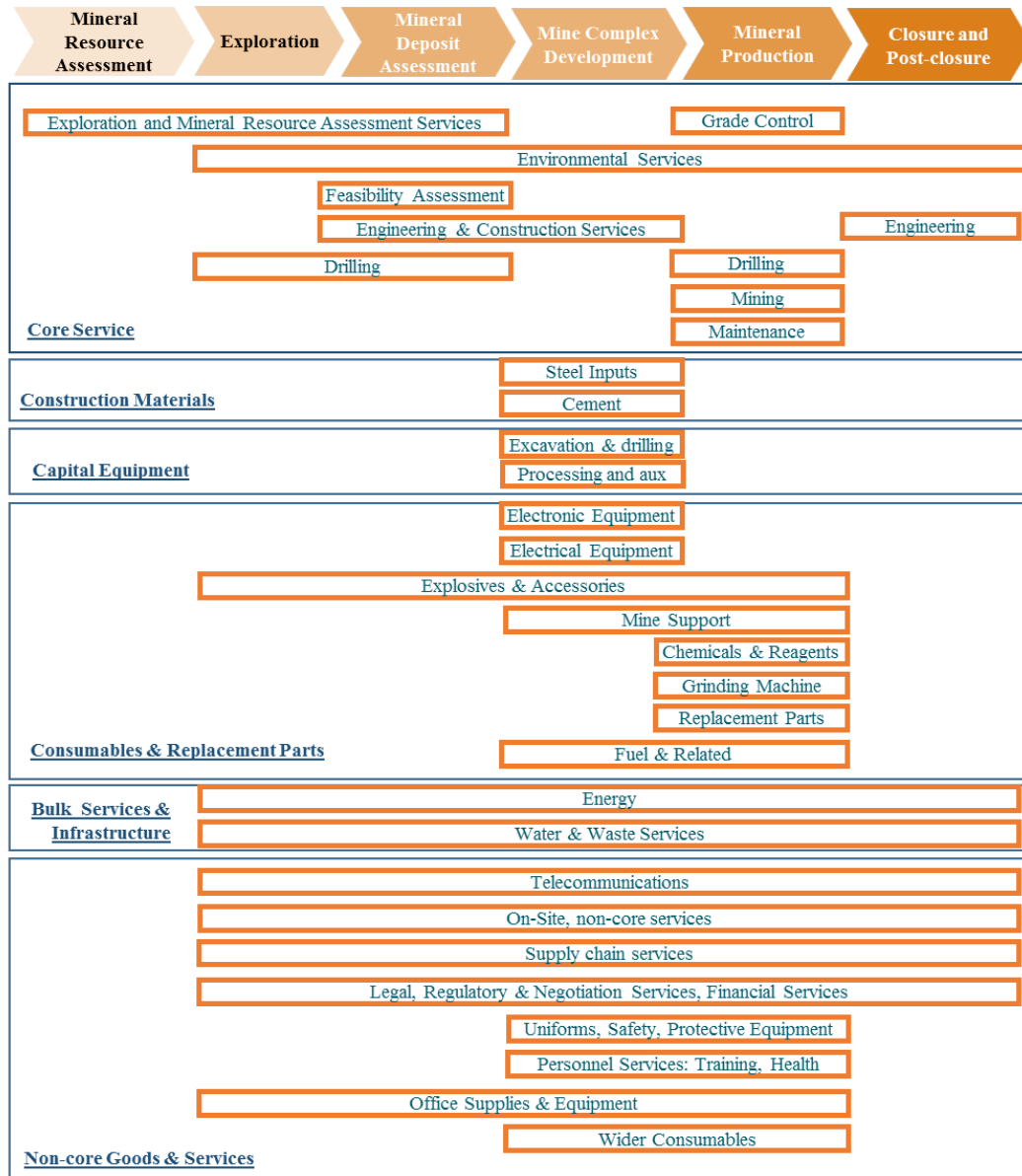
Given the large existing and potential mine developments across the region, this section presents an overview of the extent of local procurement and outlines potential opportunities for West Africa, and it provides further information on these opportunity areas.

Mining activities present a range of opportunities across mine inputs, which can be classified into the following broad categories:

- 1. Services**, including services that are core to a mine's operation such as mining and drilling, and wider support services to mine operations
- 2. Capital goods and construction materials**
- 3. Consumables and replacement parts**, including consumables used as part of mineral extraction and processing, and replacement parts
- 4. Bulk services and infrastructure**, including water, electricity, telecommunications, transport infrastructure, and waste management
- 5. Non-core goods**, such as uniforms, medicine, etc.

Procurement of these inputs varies across the various stages of mining, from resource assessment to mine closure, as illustrated below.

Diagram 2. Inputs by Stage of Mine Development



These input areas are discussed below, along with considerations that affect opportunities for West Africa, based on factors applied by mining companies when making sourcing decisions. The current extent of local procurement for selected products and services across the broad groupings of inputs required by mines, and comments on potential opportunity areas, are also discussed below.

3.1 SERVICES

Services cover a wide range of activities, including corporate support services, core

exploration and mining services, and wider support services to mine operations.

Corporate support services such as legal, regulatory, and negotiation services (e.g., land and mining permitting and approval) and financial/risk services (e.g., construction funding, risk analysis, insurance, banking) tend to be conducted at a corporate level, and therefore are not often supplied within the region or country. These may, however, be supplied in partnership with local firms. Furthermore, where specific local or regional knowledge or networks is beneficial, local service providers are often used. This may be the case where services relate to national regulation, such as business registration, dealing with tax and compliance issues, and accessing investment incentives.

Core mining services are driven directly by levels of exploration and mining activity, exploration, and mineral resource assessment. Key activities include:

- Exploration services: geoscientific surveying and mapping, remote sensing/ground-penetrating radar, aerial photography, geological logging, resource modelling and estimation
- Sample analysis: Sample preparation, laboratory analysis and assaying
- Drilling services
- Mining services

As mining and drilling services tend to be supplied on site, there tends to be a significant local presence. Exploration services are often shorter in duration, and therefore do not require a permanent on-site presence. Sample analysis services tend to be driven by scale of required analysis, as samples may be logistically quite difficult and costly to transport, therefore justifying investment in local or regional capacity depending on scale requirements. In addition, quality and reliability are important considerations for sample analysis, in particular for exploration core drilling samples, as these are used to inform investment decisions in mine development. Quality and reliability of grade control sampling may be less important, however, mines often use local laboratories and cross-check results with laboratories elsewhere.

As drilling and mining requires significant on-site presence and relatively large numbers of staff, these service providers also tend to be major contractors of support services and support goods.

Supply chain services include the following: purchasing and procurement functions and materials management (including vendor selection and performance), logistics (including transport, receiving and verification, warehousing and inventory management, consolidation/ deconsolidation, internal distribution of goods, documentation, and customs processing). In addition, specialized transport and logistics suppliers may provide services for abnormal or hazardous loads (e.g., cyanide, fuel). Associated services related to the supply chain also include contract management, strategic sourcing, and information systems. Some of these activities may be done in-house, including purchasing and procurement; however, most transport and logistics tend to be outsourced.

Maintenance and repairs of machinery and process plant are critical services, often supplied by capital goods suppliers, along with replacement parts, for OEM equipment. General maintenance and repair services are also required, although these are less critical. These may be done in-house, or by a mine camp/village management service provider.

Feasibility, design and engineering, EPC and related services are driven by mine or processing plant development projects, and tend to be supplied across a range of areas:

- Site and environmental surveys (including geotechnical and hydrological surveys)
- Socioeconomic studies, local stakeholder consultation, and public relations
- Environmental services: surveying and planning (including closure and restoration planning), impact assessment, waste management (including tailing treatment, cyanide breakdown, wastewater treatment, acid rock drainage prevention and control, surface water management), erosion control, restoration and closure (landscaping, plant and animal relocation, monitoring, etc.)
- Concept design, engineering, procurement, construction and commissioning of mine developments, tailings storage, site infrastructure and transport infrastructure (road, rail, air, and port), treatment plants, etc.
- Civil works, including road construction, dam construction, bulk services, etc.
- Fabrication of metal structures, including tanks
- Installation and commissioning of capital equipment, electrical infrastructure (e.g., substations and electricity reticulation), etc.

Other general services required by mines include the following:

- Personnel services, driven by staff numbers, and include:
 - Health and safety services—determined by health and safety conditions
 - Counselling
 - Education and training, including health and safety
 - Labor brokers
 - Payroll accounting services
- Mine camp construction and management, including catering, cleaning, security services
- Staff transport, including management transport to and from the mine (e.g., by air, by road) and mineworker transport (e.g., buses)
- Communication services

These tend to be supplied by local companies and are on-site, as they are not critical to mining activities and do not require a high level of specialization. However, inputs to these services (e.g., food, beverages) are often imported, rather than sourced locally, due

to limited local production capacities.

These types of services have a significant wider market, across hospitality and tourism and general consumer and retail markets.

The extent of local procurement of services and potential opportunities for increasing local procurement is described as follows:

Table 2. Extent and Potential of Local Procurement of Services

Product or service	Extent of local procurement	Potential opportunities
Legal services	Tend to be supplied internationally, however some use or partner with local service providers—for example, Webber Wentzel (based in South Africa) recently signed a Memorandum of Understanding with a leading West African law firm Bilé-Aka, Brizoua-Bi & Associés, based in Côte d’Ivoire	Opportunity for increasing partnerships between local and international service providers
Mining and drilling services	<p>Tend to be supplied locally by locally based, foreign-owned companies, e.g.,</p> <ul style="list-style-type: none"> • PW Mining: offices in Ghana and Nigeria; they have supplied services to Nigeria, Ghana, Sierra Leone, Burkina Faso, and Mali. Services include contract mining, roads and bridges, water and wastewater treatment, water distribution, civil works and bulk earthworks and dam construction, offshore pipeline and cable contracts, offshore oil and gas field services and petrochemical, power station, and industrial plant civil construction works. • BCM: based in Ghana; provide mining services in Ghana, Mali, Niger, and Guinea. Services include open pit mining, road upgrades, civil earthworks, and dam construction • Moolmans: supply contract mining to Sadiola mine in Mali and Siguirin in Guinea; head office in South Africa <p>Some locally owned companies:</p>	<p>Opportunity for expanding activities within West Africa, such as corporate services for on-site operations (e.g., BCM’s global headquarters are based in Ghana)</p> <p>Short-term opportunity for locally owned companies to develop capacity in:</p> <ul style="list-style-type: none"> • Waste haulage • Secondary crushing • Interim mining services while international service providers are mobilizing fleets • Auger and RC drilling (as well as less specialized drilling, such as boreholes) <p>Medium opportunity for:</p> <ul style="list-style-type: none"> • Locally owned mining service providers • Locally owned diamond core drilling companies

Product or service	Extent of local procurement	Potential opportunities
	<ul style="list-style-type: none"> • Locally owned drilling company in Mauritania; however did not retain contract due to delays in obtaining spare parts <p>Mining subcontracts, for example, in haulage, awarded to locally owned companies (e.g., Ghana: Banlaw, Engineers and Planners)</p> <p>Drilling services provided on-site, mostly by international companies</p> <ul style="list-style-type: none"> • WADS: based in Mali, with operations in Burkina Faso, Guinea, Mali, and Mauritania, and also have supplied Ghana, Côte d’Ivoire, Niger, and Senegal • Boart Longyear 	
Design, engineering, and environmental consultancy	<p>Provided by international companies, where some may have offices in West Africa; some may “fly in and fly out” to provide services.</p> <ul style="list-style-type: none"> • AMC • Senet • Knight Piesold: consultancy based in Ghana; other locations worldwide including South Africa • Golder Associates: consultancy based in Ghana, other locations worldwide including South Africa • SRK Consulting, consulting engineering company with worldwide offices, including in Ghana <p>Services may be provided in partnership with local consultants, e.g., tropical environmental consultancy in Senegal</p>	<p>Potential opportunities for local suppliers to develop capacity for engineering and design components rather than smaller subcontracts</p> <p>Potential opportunity to attract international companies to establish offices in West Africa</p>
Logistics and distribution services, including general logistics,	<p>Mix of foreign-owned and locally owned companies supplying transport and logistics services (e.g., customs clearing, trucking):</p>	<p>Opportunity for spare parts warehousing, where current supply of spare parts must often be ordered from</p>

Product or service	Extent of local procurement	Potential opportunities
fuel distribution, chemicals supply, tire supply, and inventory management	<ul style="list-style-type: none"> • In Ghana: Allship, Holman petroleum, Kofi Ababio, Inter-mine services • In Senegal: Afrilog, Bollore • In Mali: Afrilog, Ben & Co • In Guinea: UMS and Transco • Across West Africa: Bollore, Shell, and Total (fuel distribution) <p>Limited involvement of local companies in procurement of goods, as this tends to be in-house, although Afrilog does procurement of general goods</p> <p>Tire management offices based in West Africa (West Africa Tyre Services, Trentyre, OTR), also may do tire reforming</p>	<p>supplying countries. Supply to a number of mining companies should reduce stockholding required and reduce costs for mines by reducing inventory costs and urgent procurement of spare parts (which is sometimes done at great cost by airfreight).</p> <p>Opportunity for local service provider for supply of lubricants</p> <p>Opportunity for local trucking companies (Mali, Senegal), but upgrading of practices and equipment required to meet mining industry standards</p>
Analysis and testing, including ore samples, water, oil, etc.	<p>Local capacity in analysis, including:</p> <ul style="list-style-type: none"> • SGS Ghana, with offices in West Africa in minerals services include Burkina Faso, Ghana, Guinea, and Mali • Pasteur Institute in Senegal • Senelabo (ore) • ALS laboratories: operations in Ghana, Mali, and Burkina Faso • BRGM in Senegal (geochemistry) 	<p>Potential to expand range of testing services provided (including water analysis), as well as scale of ore analysis, in particular as exploration activity increases in Senegal, Mauritania, Burkina Faso, etc.</p>
Analysis and testing, including ore samples, water, oil, etc.	<p>Some exploration and mining companies send samples outside the region for testing, e.g., in Senegal an exploration company used services based in Canada, as results were important for its exploration and feasibility program and attracting investment, and a mining company indicated that it felt that not enough capacity existed at the nearest ore laboratory in Mali to handle samples</p>	

Product or service	Extent of local procurement	Potential opportunities
Equipment distribution, rental, spare parts supply, training, maintenance and repairs, technical support	<p>Tend to be supplied by foreign-owned OEM agents, where sufficient market scale has justified investment, e.g.:</p> <ul style="list-style-type: none"> • BIA provides distribution services for Liebherr in some countries where it does not have its own offices, along with other OEMs • Sandvik Mining and Construction: Ghana—65 staff members, three offices (Accra, Obuasi, and Tarkwa) • Caterpillar: distribution, repair and servicing, training provided by a network of companies, including Mauritrac in Mauritania, Burkina Equipements in Burkina Faso, Manutention Africaine in Mali, Côte d’Ivoire and Niger, and Manutention Guinea, Saudequip in Senegal (subsidiaries of JA Delmas, a French company) <p>Some distribution services supplied by locally owned companies, e.g.:</p> <ul style="list-style-type: none"> • Riepcolimited (Ghana) <p>Some specialized locally owned repair and maintenance service providers, e.g., Electrofax motor rewinding in Ghana, network of repair companies used by a phosphate company in Senegal</p> <p>Some maintenance done in-house by mining companies</p>	
Civil works and construction, including construction of mine camps, tailing dams, roads, subcontracts to contractors for major capital projects	Some local service providers, including Engineers and Planners in Ghana, Batipro in Guinea	<p>Opportunity for existing civil works companies to expand services to the mines and EPCs, e.g., Burkinabe company Kanazoe, which has expertise in constructing roads</p> <p>Opportunity to provide prefabricated buildings to mine sites</p>
Metal fabrication,	May be supplied locally by	Opportunity for expanded

Product or service	Extent of local procurement	Potential opportunities
e.g., fuel tank construction	subcontractors to EPCs, e.g., by Constructions Métalliques Africaines and Transafricaine de Travaux et Services in Senegal, Imagri in Mali, CCCMG in Burkina Some intra-regional supply—Senegalese companies have supplied services to other West African countries including Mauritania	supply of metal fabrication
Mine village management, including cleaning, maintenance, catering, nonhazardous waste management	Supplied locally, although companies may be foreign-owned, e.g., in Mali ESS, in Ghana Stellar, in Senegal SODIAL, SODEXO	Potential for increased procurement from locally owned companies, including where mines are currently undertaking these services in-house
Environmental rehabilitation	Some services provided locally, e.g., plant propagation	Opportunity to expand range of services provided, including planning for rehabilitation In the longer term, expansion of scale of rehabilitation services as mines enter closure phases

Box 3. Local supplier example: Electrofax

Electrofax is an electrical engineering company based in Takoradi, Ghana, which provides design and supply of electrical infrastructure, mostly serving the mining sector. The owner had 17 years' experience as an electrical engineer with Ghana Manganese before starting the company. Main projects have included installing local electricity reticulation infrastructure, and relocating a substation. In 2007, he invested in a workshop to supply motor rewinding, partly financed through loans. Currently, he is working on expanding the business into rewinding and repair of medium-voltage motors.

3.2 CAPITAL GOODS AND CONSTRUCTION MATERIALS

Capital equipment required by mines includes the following:

- Machinery for excavation and loading, including trucks, shovels, and draglines

- Machinery for crushing, grinding, including crushers and grinding mills
- Machinery and equipment for processing and preparation, e.g., autoclaves, concentrators, and separators
- Auxiliary equipment for ventilation, pumps and pipelines, fuel storage and refuelling systems, and materials handling, including bulk transport infrastructure such as rail lines and loading
- Auxiliary equipment for heap leaching (used for gold processing, typically for lower-grade gold ore), e.g., geotextiles, irrigation system (including piping, etc.), conveyor and other materials handling
- Drills and drilling equipment
- Electronic equipment, including process monitoring and control, global positioning systems, communication equipment
- Electrical equipment and supplies: motors and generators, batteries and chargers, power transmission equipment and systems, wire and cable, etc.
- Lamps and lighting systems
- Cement, used both for construction and as an input to heap leaching of gold ore
- Steel and basic steel structures

Many capital goods items tend to be very specialized (e.g., autoclaves, draglines, crushers), and manufactured making use of proprietary technology by OEMs.

Cement tends to be sourced as close to the mine site as possible where it is of sufficient quality, to reduce high logistics costs.

The extent of local procurement of capital equipment construction material is described further below, along with potential opportunities for increasing local procurement. Cement is discussed below, but it is also used as an input into heap leaching of gold ore.

Table 3. Extent and Potential of Local Procurement of Capital Equipment and Construction Materials

Product or service	Extent of local procurement	Potential opportunities
OEM capital equipment	Imported	Potential to expand activities to include assembly, e.g., drill assembly
Kilns	One local supplier in Ghana of kilns and furnaces for mines' gold rooms, Caesar Kilns, which supplies to some mines in Ghana (along with	Opportunity to expand production more widely in region

	providing relining services)	
Plastic products	In Ghana most mines procure HDPE pipes produced by Interplast or Duraplast from imported raw materials In Senegal, some piping needs were met by pipe producers in Côte d'Ivoire	Opportunity to expand range of piping produced locally, e.g., yelomine piping used for heap leaching operation Storage tanks
Steel inputs	Imported	Medium/long-term opportunity to develop downstream iron beneficiation capacity
Cement	Produced in Senegal by SOCO CIM and Ciment du Sahel and supplied to Mali Ghacem clinker crushing in Ghana, supplied to Ghana and Burkina Faso Cement produced in Guinea by Ciment du Guinee, a subsidiary of Holcim Construction of cement plant in Mali	Potential to expand supply, in particular to meet wider cement needs, with feasibility driven by high logistics costs for importing cement Higher-grade cement may be required to meet mine standards, which would mean adjusting input rations
Electrical equipment	Some local supply of services	Assembly of small motors Battery assembly

Box 4. Local supplier example: Caesar Kilns and Furnaces

Caesar Kilns and Furnaces, based in Kumasi, Ghana, manufactures kilns and furnaces for the gold mining industry (and then has an ongoing role in maintaining and relining the furnaces). The owner is a qualified electrical engineer who spent many years working in the “gold room”; he saw a clear opportunity for local supply as all products were imported and the servicing done internationally. The company was established in 1997; they sold their first kiln in 2000, followed by some smaller kilns to small-scale mines. The owner has grown the businesses slowly by reinvesting profits and careful management of cash flow.

3.3 CONSUMABLES, INCLUDING PROCESSING INPUTS, ENERGY, AND WATER INPUTS

Mines tend to require a constant supply of certain consumable inputs, and depending on remoteness from supply centers, may keep a significant store of consumables and spare parts on site. Key consumables include fuel, explosives, process consumables, off-road tires, and spare parts.

Explosives and accessories (blasting agents, breaking systems, explosives, detonators): Demand is driven by open pit mining overburden removal and ore blasting, and underground mining blasting. Drivers of location include transport restrictions on mixed explosives; therefore mixing is often in close proximity to the mine site. Associated services include on-site storage and down-hole services, often supplied by explosives companies.

Lime is a key processing input, with demand driven by processing a range of commodities (in addition to being a key input in cement manufacturing), including:

- Gold processing: cyanide leaching for gold recovery
- Copper flotation treatment
- Alumina transformation to aluminum
- Iron ore preparation and steel refining
- Uranium separation process

Location is driven by limestone resources and feasibility of exploitation and transport and logistics costs. Hydration tends to be done closer to the end user, as the volume increases substantially.

Caustic soda is a major input to alumina production, as well as an input into some gold processes.

Other consumable inputs include:

- **Cyanide** (used for gold ore processing) and sodium cyanide (used in the Bayer process for bauxite processing)
- **Acids**, including sulphuric and hydrochloric acids
- **Flocculants** are used in separation processes
- **Ammonium silicate**
- **Sulphur dioxide**
- **Steel balls** used as grinding media (demand driven strongly by gold and bauxite grinding)
- **Ferro-silicon**, used in diamond processing

- **Activated carbon**, used for gold processing

Other consumables/spare part inputs include:

- **Mine supports**, including split-sets, anchor bolts, rebars, and wire mesh, for underground mining activities
- **Replacement parts**, including bearings, cutting edge parts including excavator teeth, belts (including power transmission), brake systems, hose, valves and fittings, hydraulic system components, liners, tires
- **Vehicle fuel and related**, driven by scale of transport activity at the mine site

Some of the preceding consumables may be used across a wide range of applications; for example, lime is also used across agriculture, construction and cosmetics; activated carbon is also used in the beverages industry.

The extent of local procurement of consumables is described further below, along with potential opportunities for increasing local procurement. Cement is discussed in the previous section, but it is also used as an input into heap leaching of gold ore.

Table 4. Extent and Potential of Local Procurement of Consumables

Product or service	Extent of local procurement	Potential opportunities
Fuel and lubricants for haulage trucks and generators	Some local production at refineries in Ghana and Senegal, however a large proportion is imported	Development of downstream oil and sector as part of wider oil and gas sector development
Tires	Imported, mostly manufactured by Michelin and Bridgestone Some tire reforming activity in Ghana (OTR tires)	Potentially an opportunity to produce small tires in Ghana, in particular given rubber plantation and production, although this may not be driven by mining sector demand This would require significant technical and managerial input (the Bansa tire factory stopped production in 1999 but there is potential for it to re-open)
Explosives	Supplied by international companies, with emulsion mixing done within the region by subsidiaries	Potentially opportunity to develop raw material supply capacity—ammonia

Product or service	Extent of local procurement	Potential opportunities
	<p>BME:</p> <ul style="list-style-type: none"> • Mali: two emulsion facilities • Mauritania: emulsion plant, also supply packaged product and accessories • Ammonium nitrate and calcium nitrate sourced from Omnia's nitric acid in South Africa • Packaged explosives, shocktube assemblies, and electronic detonators produced in South Africa <p>AEL:</p> <ul style="list-style-type: none"> • Bulk manufacturing facilities and one shock tube assembly plant in Ghana • 2 distribution sites in Mali, 2 in Guinea, 3 in Burkina Faso, and 1 through its partner in Nigeria <p>Maxam:</p> <ul style="list-style-type: none"> • Sites in Mali 	production
Lime	Hydrated lime produced by Carmeuse (foreign-owned company) in Ghana and supplied to mines in Ghana, Mali, Niger, and Burkina Faso (100,000 tons)	<p>Potential for developing raw material supply, given presence of limestone in the region</p> <p>Potential for development of additional hydrated lime production facilities linked to limestone resources (e.g., in Mali)</p>
Grinding media	<p>Part of Ghanaian demand supplied locally by Western Forging and Western Steel</p> <p>Planned steel balls facility in Mali</p>	Potential to expand supply to meet required market scale; requires improvements in quality
Chemicals: • Cyanide	Imported	Potential for production of cyanide, caustic soda, hydrochloric acid, ammonia,

Product or service	Extent of local procurement	Potential opportunities
<ul style="list-style-type: none"> • Hydrochloric acid • Sulphuric acid • Caustic soda • Activated carbon • Sulphur (used for phosphates processing) • Ammonia (used for phosphates processing) 		and activated carbon
Wear parts/and “ground-engaging tools”	<p>Imported, with major supply companies including Esco and Hensley</p> <p>Some wear parts locally manufactured on a pilot basis in Ghana, e.g., steel crusher liners by Tema Steel</p>	Potential for investment in wear parts production facilities
<p>Crucibles and other refractory items:</p> <ul style="list-style-type: none"> • Small crucibles used for sample analysis • Large crucibles used in mine’s gold rooms 	Two local suppliers in Ghana of small crucibles, who also supply more widely in the region, Nyarko-Mensah Ceramics and Sapat Ceramics	Potential opportunity to produce large crucibles

3.4 BULK SERVICES AND INFRASTRUCTURE

Energy requirements are often served by mines themselves, in particular where these are remote from existing electricity generation and distribution grids. Key forms of electricity supply include diesel generator farms (biodiesel is an option but is not yet currently widely used) or coal-fired plants.

Most mines supply their own water needs, e.g., through dam construction, and mines tend to source dedicated telecommunications equipment from various service providers to supply telecommunications on-site.

Table 5. Extent and Potential of Local Procurement of Bulk Services and Infrastructure

Product or service	Extent of local procurement	Potential opportunities
Electricity	<p>Tends to be supplied locally within region, although inputs may be imported (in particular where electricity plants use heavy fuel oil or where mines rely on generator farms which run on diesel):</p> <ul style="list-style-type: none"> • In Niger, 85% of electricity generated at the Tchirozérine coal-fired power plant (2 3 18.8MW) is supplied to COMINAK and SOMAIR uranium mines, and coal consumption is set to increase by 2.5 times from the current 160,000 tons/yr to 400,000 tons/yr due to mine development. • Some investment by mining companies in electricity generation and distribution infrastructure: e.g., China is to invest in electricity generation in Niger, and Clenergen Ghana Limited will install a 2MW gasification biomass power plant on-site to provide power to Ghana Manganese Company Ltd 	Some potential for biodiesel production, e.g., using jatropha or palm oil

3.5 NON-CORE GOODS

Non-core goods required by mines include uniforms and safety and protective equipment, including:

- Overalls
- Protective helmets
- Lamps
- Boots
- Eyewear
- Fire protection equipment

- Air quality monitoring devices

Demand for these products is driven by number of staff, type of mining, and mine conditions (e.g., different requirements for underground and open pit mining).

Mines also require a wide range of general goods, including the following examples:

- Office supplies and services
- Stationery
- Office machines
- Furniture
- Software and IT services
- Medicine
- Food and beverage products

In the case of software and IT services, inputs required by mines may be highly specialized, including mine production management, ore deposit modelling, and fleet management software.

The extent of local procurement of non-core goods is described further in the table below, along with potential opportunities for increasing local procurement.

Table 6. Extent and Potential of Local Procurement of Non-Core Goods

Product or service	Extent of local procurement	Potential opportunities
Food and beverages	Some produced within the region; some processed food and beverages may be imported	Wider opportunities to develop agri-processing sector and agricultural production; could be linked to supply to mines
Training services	Some in-house training (e.g., health, safety, and environmental services) Some continuous training provided by local schools: Institute of Mining in Senegal, management schools, English language institutes	Opportunity for development of local training service providers Projects for mining schools in Senegal and Mali; opportunity to link schools into a strong regional academic/ technical institution and include more countries (Guinea, Burkina, Niger, Côte d’Ivoire, for example)
Software services	Imported; may have representation in the region, e.g., Gemcom, which has established an office in Ghana	

Product or service	Extent of local procurement	Potential opportunities
Core trays	Some supplied locally by local companies	
Bags, e.g., • Sample bags (for gold mining) • Packaging for phosphate production	Some procured locally, e.g., by ICS from COFISAC in Senegal and within region (Côte d’Ivoire) Some imported	Opportunity for existing manufacturers to expand product range of bags from within the region to meet mine needs Opportunity for locally owned suppliers to supply bags
Uniforms, safety and protective equipment	Personal protective equipment almost entirely imported and often supplied by small, locally owned companies: CODAC in Senegal, Adam’s in Burkina Uniforms often procured by local cut/ make/trim or styling/tailoring companies: SCI Thier Creation in Senegal, Promo Services in Mali, Confection in Guinea Confection, with assistance from the IFC, is entering into a partnership with North Safety (a foreign company), for supply of pre-cut material, as well as design and production support	Opportunity to expand production of uniforms Medium-term/longer-term opportunity to manufacture less complicated safety equipment, such as gloves and helmets

3.6 SPECIFIC OPPORTUNITIES—REGIONAL MARKETS

The opportunity for the supply of activated carbon, sodium cyanide, caustic soda, and helmets are explored further in the discussion that follows as examples of opportunities that have been identified as being attractive, relatively large opportunities, but for which no production occurs in West Africa currently. In addition, a certain minimum scale of production is required to justify investment; therefore the regional market size is assessed, along with further detail on inputs required, production processes, and existing suppliers.

1. Activated carbon

Studies conducted in 1999 found that there is abundant agricultural waste of raw

materials (e.g., coconut shells, palm kernels) in Ghana, which could be used in the production of activated carbon.²⁸ The study identified steam activation as the most suitable production method. The CEO of the Chamber of Mines, Ms Joyce Aryee, also highlighted the potential for local production in Ghana in 2006.²⁹

Table 7. Specific West Africa Regional Mining Applications, Market Demand Indications, Processes, Pricing, and Companies for Activated Carbon

Mining applications	<p>Used for adsorbing gold in cyanide leach solution, used in CIL, CIP, and CIC plants</p> <ul style="list-style-type: none"> • Reduces carbon consumption • Reduces gold losses <p>Hydrometallurgical gold recovery involves a leaching step</p> <ul style="list-style-type: none"> • Gold, which is dissolved in an aqueous medium, is separated from residues through absorption onto activated carbon
Wider applications	<p>Used to remove mercury vapor from both water and air streams³⁰</p> <ul style="list-style-type: none"> • Mainly use powdered activated carbon (PAC) in mercury control technology³¹
Market demand indications	<p>Global activated carbon demand forecasted to grow 9% p.a. between 2010 and 2014, demand predicted to be 1.7m metric tons in 2014³²</p> <p>US largest national market and is likely to act as main demand driver through 2014³³</p> <ul style="list-style-type: none"> • Based on US environmental regulations mandating mercury removal at coal-fired power plants by 2014 • PAC segment expected to form two-thirds of total US product demand in 2014

²⁸ Lartey et al. (1999). Developing National Capability for Manufacture of Activated Carbon from Agricultural Wastes.

²⁹ <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=101553>

³⁰ <http://www.bethlehemapparatus.com/carbon-processing.html>

³¹ <http://www.the-infoshop.com/press/fd139267.shtml>

³² Freedonia Group Inc. (2010). World Activated Carbon.

³³ Freedonia Group Inc. (2010). World Activated Carbon.

	<p>Total global imports in 2009: US\$1.08bn</p> <ul style="list-style-type: none"> • Biggest importers: Japan (13%), US (12%), Germany (8%) <p>West African imports:</p> <ul style="list-style-type: none"> • Ghana US\$3.8m (2008), imported from Philippines (62%), Netherlands (24%), India (6%) • Burkina Faso US\$2.3m (2010), imported from Philippines (76%), India (15%), Ghana (4.8%) • Guinea US\$251,000 (2008), imported from India (54%), Netherlands (34%), Indonesia (12%)
Production inputs and process	<p>Produced from organic-based materials, e.g.:³⁴</p> <ul style="list-style-type: none"> • Coconut shells • Palm-kernel shells • wood chips • Sawdust • Corn cobs • Seeds <p>The raw material is first carbonized (requiring 600–900°C³⁵) then activated by chemicals or by steam—see the following process diagram on activated carbon production</p>
Pricing examples ³⁶	<p>Supplier: Tangshan Tianhe Activated Carbon Co., Ltd. (China)</p> <ul style="list-style-type: none"> • Coconut shell activated carbon • FOB Price: US\$1,100–1,700/Ton • Min. Order: 1 Ton <p>Supplier: Beihai Herong Activated Carbon Co., Ltd.</p> <ul style="list-style-type: none"> • FOB Price: US\$1,200–1,800/Ton
Examples of companies	<p>Norit</p> <p>Chemquest</p> <p>Carbon Link</p>

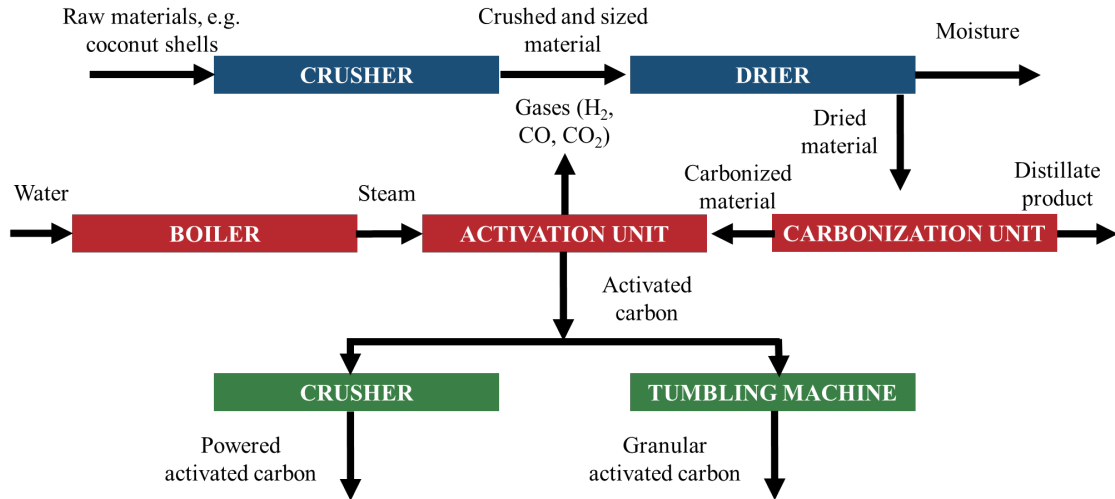
³⁴ Lartey et al. (1999). Developing National Capability for Manufacture of Activated Carbon from Agricultural Wastes.

³⁵ Lartey et al. (1999). Developing National Capability for Manufacture of Activated Carbon from Agricultural Wastes.

³⁶ http://www.alibaba.com/products/activated_carbon/IN--9.html

The process flow of activated carbon production is as follows:

Diagram 3. Process Flow for Activated Carbon



2. Sodium cyanide

Table 8. Specific West Africa Regional Mining Applications, Market Demand Indications, Processes, Pricing, and Companies for Sodium Cyanide

Mining applications ³⁷³⁸ 39	<p>Mainly used to extract gold and other precious metals</p> <p>Gold has a high affinity for cyanide, which stabilizes the gold species in solution and induces gold metal to oxidize and dissolve</p> <p>Minimal sodium cyanide solutions required, from 0.01% to 0.05% cyanide (100 to 500 parts per million)</p> <p>About 75% of sodium cyanide is used for gold and silver processing (only forms 6% of total cyanide usage; rest is used in industrial applications)</p>
Wider applications ⁴⁰	<p>Sodium cyanide is used in chemical industries, often as a chemical intermediate</p>

³⁷ <http://www.tgm.gr/tabid/76/Default.aspx>

³⁸ Suresh, B., and Kumamoto, T. (2010). Sodium Cyanide. Available: <http://www.sriconsulting.com/CEH/Public/Reports/770.9000/>

³⁹ http://www.cyanidecode.org/cyanide_use.php

⁴⁰ Suresh, B., and Kumamoto, T. (2010). Sodium Cyanide. Available: <http://www.sriconsulting.com/CEH/Public/Reports/770.9000/>

	<ul style="list-style-type: none"> • Dyes • Pharmaceuticals
Market demand indications ⁴¹⁴²	<p>Demand for sodium cyanide is linked to gold price and is likely to continue to grow along with increased mining operations</p> <p>Demand is dampened by several factors:</p> <ul style="list-style-type: none"> • Processing of lower-quality-grade gold and other minerals would not increase cyanide requirements • Delays in starting large-scale investment projects due to the global financial crisis <p>Total global imports of US\$507m in 2009</p> <ul style="list-style-type: none"> • Biggest importers: Mexico (15%), Russian Federation (8%), Peru (6%) <p>Total West African demand in 2009:</p> <ul style="list-style-type: none"> • Burkina Faso: US\$6m (2009), imported from South Korea (64%), Australia (35%) • Ghana: <ul style="list-style-type: none"> - Imports of US\$6m (2009), imported from US (57%), South Korea (23%), Belgium (19%) - Total market size estimated at about 50,000 tons • Côte d'Ivoire: US\$5.6m (2009), imported from Australia (32%), Belgium (28%), Ghana (18%)
Production inputs and process	<p>Produced by treating hydrogen cyanide with sodium hydroxide</p> <p>Produced in solid briquettes or as a liquid</p> <ul style="list-style-type: none"> • The strength of the reagents differs by form: 98% of the briquette is sodium cyanide while 28–33% of liquid solution is sodium cyanide⁴³ <p>Highly toxic product</p>
Pricing examples	<p>Briquettes:</p> <ul style="list-style-type: none"> • Approximately US\$1,700/ton • Logistics costs from Australia to Ghana: approximately US\$120/ton
Examples of	Australian Gold Reagents

⁴¹ Suresh, B., and Kumamoto, T. (2010). Sodium Cyanide. Available: <http://www.sriconsulting.com/CEH/Public/Reports/770.9000/>

⁴² Based on HS283711: “cyanides and cyanide oxides of sodium.”

⁴³ http://www.cyanidecode.org/cyanide_use.php

companies	Orica
	DuPont
	CyPlus
	Cyanco

3. Caustic soda (sodium hydroxide)

Interest in establishing sodium hydroxide production facilities in Ghana has been expressed by two companies, although progress in assessing feasibility is unclear. Furthermore, the Private Enterprise Foundation in Ghana has developed a salt industry strategy—if implemented this would support the feasibility of caustic soda production (where salt is a key input in production).

Table 9. Specific West Africa Regional Mining Applications, Market Demand Indications, Processes, Pricing, and Companies for Caustic Soda

Mining applications	<p>Used in gold mining to remove the gold from the activated carbon in a process known as elution</p> <p>Used to dissolve aluminum as an aluminate</p> <ul style="list-style-type: none"> • Bauxite ore is heated in a sodium hydroxide solution under pressure at approximately 150 to 200°C <p>Demand in China is currently driving growth in caustic soda production⁴⁴</p> <ul style="list-style-type: none"> • Developed markets are growing slowly • China is largest consumer of caustic soda (28%) as well as largest producer
Wider applications	<p>Used in wide range of applications, including the manufacture of pulp and paper, soap and detergents, petroleum products, and chemical production⁴⁵</p> <ul style="list-style-type: none"> • Also used in water treatment, food, textiles, metal processing, glass making <p>Used to produce sodium cyanide</p> <ul style="list-style-type: none"> • Sodium cyanide is produced by treating hydrogen cyanide with sodium hydroxide

⁴⁴ <http://www.icis.com/V2/chemicals/9075189/caustic-soda/uses.html>

⁴⁵ <http://www.icis.com/V2/chemicals/9075189/caustic-soda/uses.html>

Market demand indications	<p>World demand for caustic soda was 59m tons in 2008⁴⁶</p> <ul style="list-style-type: none"> • Pulp and paper (14%) • Inorganic chemicals (13%) • Organic chemicals (12%) • Alumina from bauxite (11%) <p>The supply of caustic soda is influenced by the chlorine derivatives markets⁴⁷</p> <p>Global imports of sodium hydroxide in aqueous solution in 2009: US\$3.6bn</p> <ul style="list-style-type: none"> • Australia (16%), USA (11%), Brazil (8%) <p>West Africa biggest importers of sodium hydroxide in aqueous solution in 2009:</p> <ul style="list-style-type: none"> • Guinea US\$36m (2008), imported from US (84%), Saudi Arabia (10%), Brazil (5%) • Côte d'Ivoire US\$6.5m (2009), imported from France (82%), Belgium (6.7%), Morocco (5%)
Production inputs and process	<p>Most caustic soda is co-produced with chlorine by the electrolysis of a sodium chloride solution</p>
Pricing examples	<p>Southern African liquid import prices trading between US\$400 and US\$700/ton CFR (Durban) in February 2011</p> <p>Prices for caustic soda were between US\$380 and US\$440/ton FOB for North Africa in 2011⁴⁸ (prices prior to civil unrest in Egypt, which is an export market to rest of North Africa and the Mediterranean)</p>
Examples of companies	<p>AGC Chemicals BASF SE Bayer AG Egyptian Petrochemical Company (Egypt) Georgia Gulf Corp. Gujarat Alkalies and Chemicals Limited</p>

⁴⁶ CMAI. (2009). Chlor-Alkali market report.

⁴⁷ CMAI. (2009). Chlor-Alkali market report.

⁴⁸ <http://www.icis.com/Articles/2011/02/01/9431038/n-africa-caustic-soda-prices-set-to-rise-as-egypt-unrest-continues.html>

Occidental Chemical Corp.
 Olin Corporation
 PolyOne Corporation
 The Dow Chemical Company
 TCI Sanmar (Egypt)

4. Personal protective equipment (PPE)—Helmets

Table 10. Specific West Africa Regional Mining Applications, Market Demand Indications, Processes, Pricing, and Companies for Personal Protective Equipment

Mining applications	Used to prevent injury or harm to mineworkers Drivers of demand include: <ul style="list-style-type: none"> • Stricter mining safety standards • Increased mining activity
Wider applications	Used in several other applications, including manufacturing and construction
Market demand indications	Global market for PPE is expected to be US\$33.3bn by the year 2015 ⁴⁹ Total global imports of headgear: US\$1.7bn (2009) ⁵⁰ <ul style="list-style-type: none"> • USA (18%), Germany (10%), France (9%) West African biggest importers: <ul style="list-style-type: none"> • Burkina Faso US\$1m (2009), imported from <ul style="list-style-type: none"> - France US\$648,000 (64%) - China US\$220,000 (21%) - USA US\$133,000 (13%) • Benin US\$625,000 (2009), imported from <ul style="list-style-type: none"> - China US\$586,000 (94%) - France US\$26,000 (4%) - India US\$10,000 (1%) • Ghana US\$425,000 (2009), imported from <ul style="list-style-type: none"> - China US\$352,000 (83%) - South Africa US\$29,000 (7%) - Malaysia US\$12,000 (3%)

⁴⁹ Global Industry Analysis. (2010). Personal Protective Equipment: A Global Strategic Business Report.

⁵⁰ HS650610 Safety headgear, not elsewhere specified.

Production inputs and process	Produced from polyethylene plastic mold ⁵¹ <ul style="list-style-type: none"> • Focus on light weight, durability, ease of molding, and non-conductivity to electricity 3 industrial classes ⁵² : <ul style="list-style-type: none"> • Class G: Good impact protection, but limited voltage protection, used for mining, construction, manufacturing • Class E: Protection against falling objects as well as high-voltage shocks and burns, used for electrical workers • Class C: Lightweight helmet with limited protection against falling objects and electrical shock
Pricing examples	In the US, Class E and G costs US\$9.50 if 36 or more are purchased ⁵³
Examples of companies	3M Company Alpha Pro Tech Ltd BartelsRieger Atemschutztechnik GmbH & Co Bekina NV Drägerwerk AG & Co Eurodress GmbH Honeywell Life Safety Jallatte Group, JSP Ltd. Latchways Plc Mine Safety Appliances Company Pacific Helmets (NZ) Ltd Scott Health & Safety

⁵¹ http://www.bullard.com/V3/products/head_face/head_protection/Hard_Hat_History/

⁵² <http://safetyproducts.lifetips.com/cat/63510/hard-hats-and-head-protection/index.html>

⁵³ <http://safetyproducts.lifetips.com/cat/63510/hard-hats-and-head-protection/index.html>

4 WHAT IS “LOCAL PROCUREMENT”? HOW CAN IT BE DEFINED AND MEASURED?

4.1 A COMMON APPROACH TO DEFINING LOCAL PROCUREMENT

While the broad objectives are generally well accepted, one of the fundamental challenges in developing any local procurement program is the lack of common understanding of what constitutes “local” content, or a “local” supplier. The types of questions that are often raised by stakeholders in this regard are as follows:

- Should a “local” company be defined by where it is registered, or by its ownership structure, its management, its staff complement, or a combination of these?
- How should a “local” company be geographically defined? Should preference be given to companies in the immediate vicinity of a mine (“local local”) over national or regional companies? Are some products and services inherently more suitable for regional supply (e.g., due to scale requirements) while are others best provided nationally? This is often linked to the size of enterprise to which local procurement refers: Does it focus only on micro-, small-, and medium-sized businesses, or on large enterprises as well?
- How should the level of local content be compared between a locally owned importer/distributor and a foreign-owned company that is manufacturing locally and sourcing its raw materials locally?

The variety of interpretations of “local” is evident when looking at different approaches employed across the world for different purposes, as shown below:

Box 5. Some global and West African examples: How is local procurement defined and measured?

Global:

- **World Bank** definition for “domestic preference qualification” is based on the percentage of local ownership of the firm.
- The **African Development Bank (AfDB)** defines “local firms” based on place of registration, a majority of board members being nationals, and level of shares held by nationals.
- The **Trinidad & Tobago** Local Content and Local Participation Policy aims to maximize the level of participation of its people, enterprises, technology, and capital through the development and increasing use of locally owned businesses, local financing, and human

capabilities in the energy sector; defines local content and participation in terms of “ownership, control and financing by the citizens of Trinidad and Tobago.”⁵⁴ It aims to support:

- Local participation: maximizing the depth and breadth of local ownership, control, and financing, in order to increase local value capture from all parts of the value chain created from the resource, including those activities in which Trinidad and Tobago people, businesses, and capital are not currently engaged, both within and outside of Trinidad and Tobago
- Local content: maximizing the level of usage of local goods and services, people, businesses, and financing

Kazakhstan:

- The 1996 Law on Subsurface and Subsurface Use (as amended) defines a “Kazakhstan manufacturer,” “Kazakhstan origin,” and “Kazakhstan content”:
 - A Kazakhstan manufacturer of goods must be registered as a legal entity under Kazakh law and produce goods of Kazakh origin, as confirmed by a “certificate of origin” issued by the Kazakh Chamber of Commerce and Industry.⁵⁵
 - Kazakh content is calculated as a percentage in preparation for the certificate of origin, and is based on the percentage of local materials costs and production costs incurred in Kazakhstan in the sales price of goods.
- The 2007 Public Procurement Law defines a “domestic provider of work and services” as a Kazakhstan resident individual or a legal entity whose workforce is no less than 95% local. For a “domestic entrepreneur” to be recognized as such, he/she must be resident and doing business in the country.

West African:

- **WAEMU/ECOWAS⁵⁶ rules of origin** define “originating products” for the purpose of applying Community preferential customs treatment as follows:⁵⁷
 - Unprocessed goods (e.g., animal, plant, and mineral products) and handmade products, without the need of a certificate of origin

⁵⁴ Republic of Trinidad & Tobago. (2004). Local Content and Local Participation Policy and Framework, p. 6.

⁵⁵ PriceWaterhouseCoopers. (2011). Local Content in Kazakhstan. Kazakhstan-Spain Multilateral Partnership Meeting, p. 7.

⁵⁶ ECOWAS rules of origin (which cover all the WAEMU countries and seven others) have been harmonized with those of WAEMU since 2004.

⁵⁷ Protocol A/P1/1/03 Relating to the Definition of the Concept of Products Originating from Member-States of ECOWAS.

- Products that have been sufficiently worked or processed (i.e., industrial products) and are accompanied by a certificate of origin delivered by the identified national authorities.⁵⁸ For these products, community origin is conferred according to:
 - Local content: goods that have been produced in member states with a minimum of 60% originating raw materials content
 - Substantial transformation, as measured by a change in tariff classification: goods that are not wholly produced in member states, but their production requires the exclusive use of materials which are classified under a different tariff subheading from that of the finished product
 - Value-added: goods that are not wholly produced in member states, but have received a value-added of at least 30% of the ex-factory price of the finished goods. Value-added is defined as the difference expressed as a percentage of the ex-factory price before tax of the industrial product concerned and the value of raw materials, consumables, and packaging of foreign origin. The ex-factory price used is made essentially of the costs of raw materials, consumables, and packaging of both foreign and community origin, wages and salaries, duties and taxes, works and external services, and depreciation charges.
- In Ghana, **Newmont's** local procurement policy has clear definitions on how "local" procurement should be assessed and prioritized:
 - The highest priority is allocated to "local local" companies, which are defined as suppliers that are situated within the mine take area or in the geographical area affected by mine operations, and which are more than 50% Ghanaian-owned.
 - Following "local local" companies, preference is given to other "local companies," which include "local local," Ghanaian Owned, Participation, and Registered Companies, with preference applied in the following order:
 - Ghanaian Owned Company is one that is majority (> 50%) Ghanaian owned, either via a listing on the Ghana Stock Exchange, or equity placed with Ghana-based institutions and/or private investors.
 - Ghanaian Participation Company refers to a supplier that has an element of Ghanaian ownership.

⁵⁸It is the responsibility of member states to give approval to enterprises and products that fulfill the conditions of origin and to forward the list of such approved products and related dossiers to the ECOWAS Commission. This is reflected through the creation of a National Approval Committee (NAC) in each member state which screens applications for approval of products in each country. NACs consider products/enterprises based on the local content and tariff change criteria. The ECOWAS Commission is responsible for ratifying the recommendations of NACs, and it has the power to consider products based on the value-added criterion. The Commission is responsible for the distribution of the list of approved products to member states for implementation. As of February 2007, a total of about 1,100 enterprises and 3,500 products had been approved for ECOWAS's Trade Liberalization Scheme.

- Ghanaian Registered Company refers to a vendor who is an international or multinational company, registered in Ghana for the purposes of carrying out business in the country.

Last in order of preference are international companies—which are registered outside Ghana, with no known Ghanaian ownership.

Despite the significant variation demonstrated above, the local procurement preference appears to be made up of varying combinations of the following **four elements**:

- 1. Participation of citizens in ownership, management, and employment** of mining supply activities. Terms often used to describe this are “localization,” “local participation,” and “indigenization.”
- 2. Extent of value add** taking place locally, along the continuum of raw materials sourcing, manufacturing or production, and sales, distribution and associated services: “local sourcing,” “local content.”
- 3. Distinction in terms of geography** between the area immediately surrounding the mine—“local local” or “community content”—and at a subnational level—“regional content,” or more widely at a national level.
- 4. Size of enterprise**, where often micro-, small-, and medium-sized enterprises are targeted.

Decisions on how the preceding elements are balanced have a number of **benefits** and **trade-offs**. These are discussed below:

Table 11. Benefits and Trade-Offs in Defining Local Procurement

Elements for applying local procurement preference		Benefits	Trade-offs
Participation of citizens	Employment	Employment of local citizens Skills transfer and development of local citizens Local circulation of wages and indirect employment	
	Management /skilled employment	Employment of local managers Skills transfer and development of local managers Local enterprise development	Foreign staff may have higher levels of skills and experience than available local staff

Elements for applying local procurement preference		Benefits	Trade-offs
		(in the medium to long term), where staff gain exposure and skills required to establish businesses through employment in management positions ⁵⁹	
	Ownership	Wealth creation for local citizens Potential for gains through development of export activities in the longer term	Foreign ownership brings benefits such as technology, knowledge and access to capital—as such, preferences for local ownership should not discourage foreign investment and partnering with local companies ⁶⁰ (the proposed system does not preclude foreign-owned suppliers but would give greater recognition of spend to locally owned companies) An interpretation of disadvantaging foreign suppliers may attract opposition under WTO rules
	Extent of value add locally	Local manufacturing or service activities will contribute to employment and skills development, and technology and knowledge transfer	Trading and distribution activities (as opposed to manufacturing or service provision) do also support employment, and, for certain products, trading may ultimately expand to assembly and manufacturing activity

⁵⁹ This is particularly the case in Ghana, where a number of entrepreneurs supplying the mining sector had previously worked in management or in technical positions in mining companies.

⁶⁰ The case of North Safety investment in local distribution activities together with a local Guinean company shows how such partnerships can benefit each party.

Elements for applying local procurement preference	Benefits	Trade-offs
		An interpretation of disadvantaging goods of foreign origin would be contrary to WTO rules
Distinction in terms of geography	“Local local” (within the vicinity of the mine)	Local community development Enhanced community relations and public perceptions for mining companies.
	National	Employment of national citizens Development of strategic industries Increased government revenues Technology and knowledge transfer
	Regional	Development of projects where regional volumes are required for a viable production scale Potential for strengthening business relations across the region
Size of		Support for small, medium, and
		Possible disadvantaging of

Elements for applying local procurement preference		Benefits	Trade-offs
enterprise		<p>micro enterprises (SMMEs)⁶¹ supports enterprise formation and local employment</p> <p>Support for large enterprises will allow for realization of opportunities that require a minimum production scale for viability, e.g., more capital-intensive, large-scale activities)</p>	larger companies which are able to make a meaningful socioeconomic contribution where small, medium, and micro enterprises are preferred

Drawing on the preceding benefits and trade-offs, the **following principles for defining local procurement** are recommended to guide stakeholders in West Africa when developing a system to measure and monitor local procurement:

Table 12. Key Principles to Consider When Defining Local Procurement

Principle	Rationale
1. Preference should be given to companies where there is significant participation from local citizens across all three areas of ownership, management, and employment.	<p>Using all three areas to determine a local supplier (i.e., a broad-based approach) will ensure that companies cannot easily qualify as local without being legitimately “local,” i.e., avoiding the inclusion of companies that, for example, have no (or limited) local ownership or who are locally owned but with a majority of foreign employees.</p> <p>While there are some concerns over WTO compliance, exceptions for LDCs and</p>

⁶¹ The World Bank defines SMMEs in terms of head count, assets, and sales value as follows:

- Medium-sized: head count <300, assets #US\$15m, sales value #US\$15m
- Small: head count <50, assets #US\$3 million, sales value #US\$3 million
- Micro: head count <10, assets #US\$10,000, sales value #US\$100,000

Principle	Rationale
	developing countries as well as an increasing trend toward local procurement, provides some room to maneuver.
<p>2. Preference should be given to companies which demonstrate higher levels of local value addition.</p> <ul style="list-style-type: none"> • For manufactured products, companies that are involved in local manufacturing activity (i.e., where the majority of their products are being “substantially transformed” locally) rather than importing/trading activities • For services, companies where the majority of the service is undertaken, managed, and controlled locally rather than provided from elsewhere 	<p>Local manufacturing activity/service delivery clearly provides greater socioeconomic benefits.</p> <p>Providing incentives for locally owned importing activity can introduce unnecessary costs into the supply chain.</p> <ul style="list-style-type: none"> • Trading activities often adds margin without adding equivalent value • Mines’ concerns over variable quality and the influx of cheaper, lower-quality goods from China and Southeast Asia • Supporting trading activities by citizens may not be sustainable in the longer term— international suppliers may trade through local agents as an initial market entry point, following which they establish their own local entities <p>While there are some concerns over WTO compliance, exceptions for LDCs and developing countries, as well as an increasing trend toward local procurement, provides some room to maneuver.</p>
<p>3. Geographically, preference for a company which is located in the same country as the mine</p> <ul style="list-style-type: none"> • During individual discussions and workshops, the majority of stakeholders in West Africa recommended that “geographically local” should be defined as “national, then regional” (i.e., giving preference to national companies first, then regional companies) 	<p>By adopting a fully regional approach straight away, countries with a stronger existing supply base may be advantaged over countries with a weaker supply base.</p> <p><i>Note: As countries across West Africa achieve greater levels of market integration and economic convergence, the distinction at the national level could be phased out so equal preference is given to any country within the West African region (in line with wider efforts around regional integration). This recognition would be particularly important for value addition (for production facilities to take advantage of economies of scale) and for</i></p>

Principle	Rationale
	<i>ownership (to encourage business relationships across West African countries).</i>
4. No greater preference should be given based on the size of the company.	<p>Important socioeconomic contribution from all sizes of company</p> <p>Most West African countries have a limited number of strong local companies; preference should therefore not be restricted to a particular subgroup</p>

4.2 AN OVERALL FRAMEWORK FOR MEASURING LOCAL PROCUREMENT

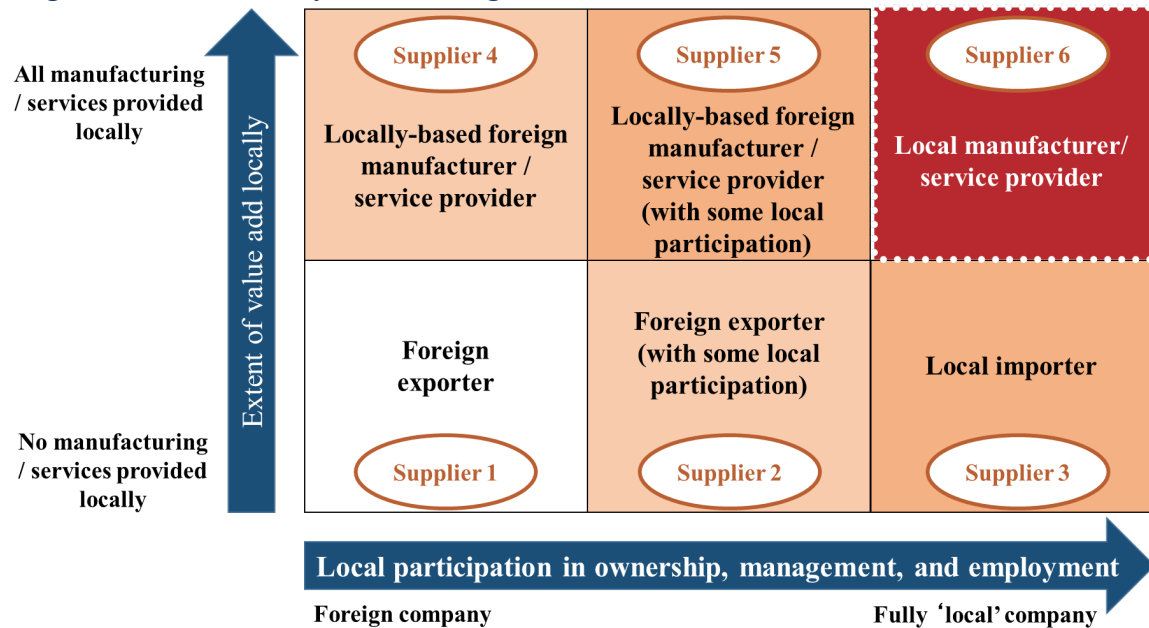
Building on the preceding three principles, a framework has also been developed for measuring local procurement, based on the principle of **categorizing suppliers** in relation to local participation and value-addition activities. This was achieved by considering the combinations created by both the different levels of **local participation** and **value addition** (and by setting the geographical definition of local as “national” and making no distinction regarding company size, as discussed previously). Note that to supplement or refine this approach, an assessment of value addition can also be done at the contract level, which would allow for differences in local participation and value addition from contract to contract.

This framework was developed in consultation with West African mining companies, governments, regional organizations, suppliers, and civil society.

Note also that this framework is developed for definitional purposes. It recognizes that while many products and services will not be feasible to source locally, it suggests that policies and initiatives be formulated in such a way as to encourage a “general movement” of identified opportunity products and services toward the upper right-hand quadrant.

This framework is graphically represented as follows:

Diagram 4. Framework for Measuring Local Procurement



Here are some examples to illustrate how the preceding model can be applied to different types of suppliers:

- Supplier 1 is a company which has limited or no participation by local citizens (e.g., is internationally owned and has international management and employees), and does not manufacture its products locally (or provide services from a local base). This supplier would therefore be considered to be a “foreign exporter.” It is important to note that Supplier 1 may well be registered locally and may also have some type of local presence (e.g., a sales office) and may even have some local employees. However, unless participation by locals and local value addition are at *meaningful* levels (the thresholds for defining these are discussed below), the company is, to all intents and purposes, a “foreign exporter.”
- Supplier 6 is on the other end of the spectrum: this is a locally owned company, with local management and employees, which manufactures its products locally. As such, this company can be considered a “local manufacturer/service provider.”
- The other categories are also very important to track as they represent important *degrees of “localness.”* Supplier 4, for example, is an internationally owned company which is manufacturing products locally (or providing services from a local base). Arguably this company has a greater socioeconomic impact than Supplier 3, which may have high levels of local ownership, management, and employees but is simply importing products and selling them to the mines.

In order to maintain simplicity in the framework, **only two levels for value addition** are presented here (i.e., whether a company is adding meaningful value locally or not) and

three levels for local participation (to reflect the variety of local participation that exists). Clearly more categories can be created by increasing the number of thresholds. Measurement could also be done on a continuous scale (e.g., based on percent local ownership or percent value add). This simpler framework provides a sensible balance between simplicity of data gathering/ reporting and capturing important subtleties between different types of suppliers.

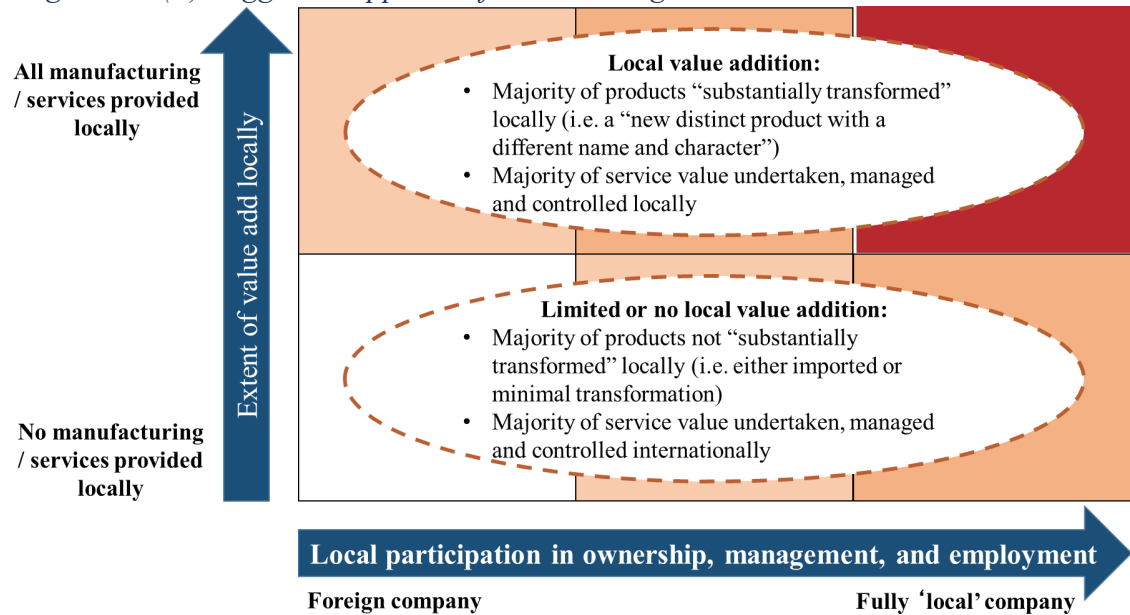
It assesses value addition based on a supplier's *predominant activities*. For example, if a company with very high local participation imports 90% of its products and manufactures the remainder, it will be considered a “local importer” for the purposes of this classification. Alternatively, value addition could be assessed on a continuous scale—for example, value addition could be measured either at an enterprise level or at the contract level, with measurement based on contract value less imported inputs. While this would require more detailed reporting and assessment, this could be feasible if applied to a portion of total spend (e.g., 80% of spend by contracts or by supplier).

4.3 DEFINING THRESHOLDS FOR VALUE ADDITION AND LOCAL PARTICIPATION

Once the overall framework has been adopted, the next step is to define the thresholds for value addition and local participation, that is, to answer the key questions of “what level of local ownership, management, and employment is required for a company to qualify as having strong local participation?” and “what level of value addition is required for a company to qualify as a manufacturing company?” The application of these thresholds will determine which of the preceding categories any given supplier will fall into.

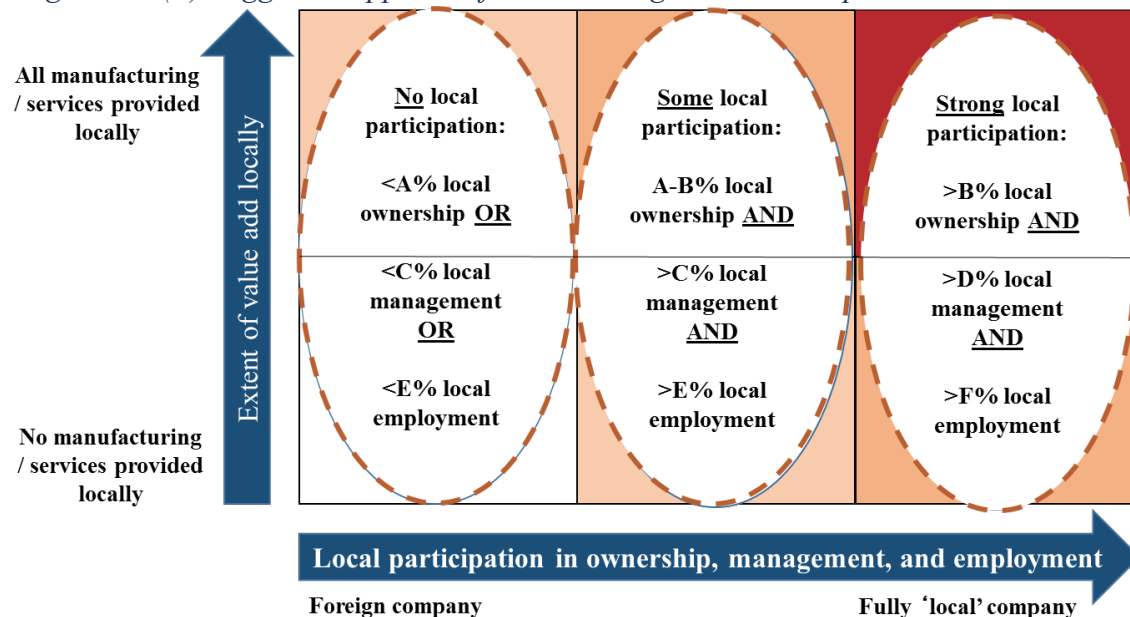
In terms of *value addition*, one suggested approach is as follows:

Diagram 5. (A) Suggested Approach for Measuring Value Addition



Local participation, as discussed above, is determined by assessing ownership, management, and employment of local citizens. The actual thresholds for the three levels of local participation should be decided by the stakeholders in individual countries (see Appendix A for some initial input on these based on workshops held in West Africa):

Diagram 6. (B) Suggested Approach for Measuring Local Participation



Combining the preceding thresholds for value addition and local participation provides a

full definition for each of the six categories of suppliers:

Box 6: Supplier Categories

<p>Foreign exporter</p>	<p>A company which has ,A% local ownership or ,C% local management or ,E% local employment; AND (If it is a manufacturer) does not substantially transform its products locally or (if it is a service provider) does not undertake, manage, and control the majority of its services locally</p>
<p>Foreign exporter (with some local participation)</p>	<p>A company which has A–B% local ownership and .C% local management and .E% local employment; AND (If it is a manufacturer) does not substantially transform its products locally or (if it is a service provider) does not undertake, manage, and control the majority of its services locally</p>
<p>Local importer</p>	<p>A company which has .B% local ownership and .D% local management and .F% local employment; AND (If it is a manufacturer) does not substantially transform its products locally or (if it is a service provider) does not undertake, manage, and control the majority of its services locally</p>
<p>Locally based foreign manufacturer/service provider</p>	<p>A company which has ,A% local ownership or ,C% local management or ,E% local employment; AND (If it is a manufacturer) does substantially transform its products locally or (if it is a service provider) does undertake, manage, and control the majority of its services locally</p>
<p>Locally based foreign manufacturer/service provider (with some local participation)</p>	<p>A company which has A–B% local ownership and .C% local management and .E% local employment; AND (If it is a manufacturer) does substantially transform its products locally or (if it is a service provider) does undertake, manage, and control the majority of its services locally</p>
<p>Local manufacturer/service provider</p>	<p>A company which has >B% local ownership and .D% local management and .F% local employment; AND (If it is a manufacturer) does substantially transform its products locally or (if it is a service provider) does undertake, manage, and control the majority of its services locally</p>

Once a mining company categorizes all of its suppliers into the preceding six categories, it will be able to determine its current spend in each category as well as begin the process of setting targets and putting plans in place to increase the spend in the categories which represent greater value addition and greater levels of local participation. Furthermore, by

applying weightings to each category (based on a stronger preference for categories that represent greater value addition and greater levels of local participation), a “total procurement spend” can also be calculated (see the section that follows for a discussion on proposed indicators).

Note: This framework can be adapted to categorize or measure suppliers (or contracts) at a greater level of detail, although this would require more data gathering and assessment.

Box 7. Local content measurement: Brazil oil and gas industry

- Certain bulk materials assumed to be from Brazil
- Only 80% by value of inputs evaluated, to include the highest-value items, to improve efficiency
- The extent of imported content is calculated as:
 - For goods: value of direct/third-party components imported (inclusive of freight and insurance) as a proportion of sales price
 - Services: value of imported human resources (value of man-hours) and imported capital goods (rental, leasing), and imported goods / consumables as a proportion of services fees

Thresholds are then set for these, under which procurement can be considered to be local, and for which 100% of the value counts toward a measure of local procurement.

The Brazilian system of classification of local content provides an example of a system that contains greater detail in some aspects of its application.

4.4 DEVELOPING INDICATORS TO MEASURE AND MONITOR LOCAL PROCUREMENT

The development of indicators that reflect current and future (targeted) local procurement spend by the preceding categories is core to the monitoring process. There are a number of elements that need to be tracked on an ongoing basis (and captured in a mine’s local procurement plan)⁶² these are summarized as follows:

- Current spend (distinguishing between capital and operational) for each category:
 - Foreign exporter
 - Foreign exporter (with some local participation)
 - Local importer

⁶² See Section 6.2, which provides recommendations on the use of local procurement plans.

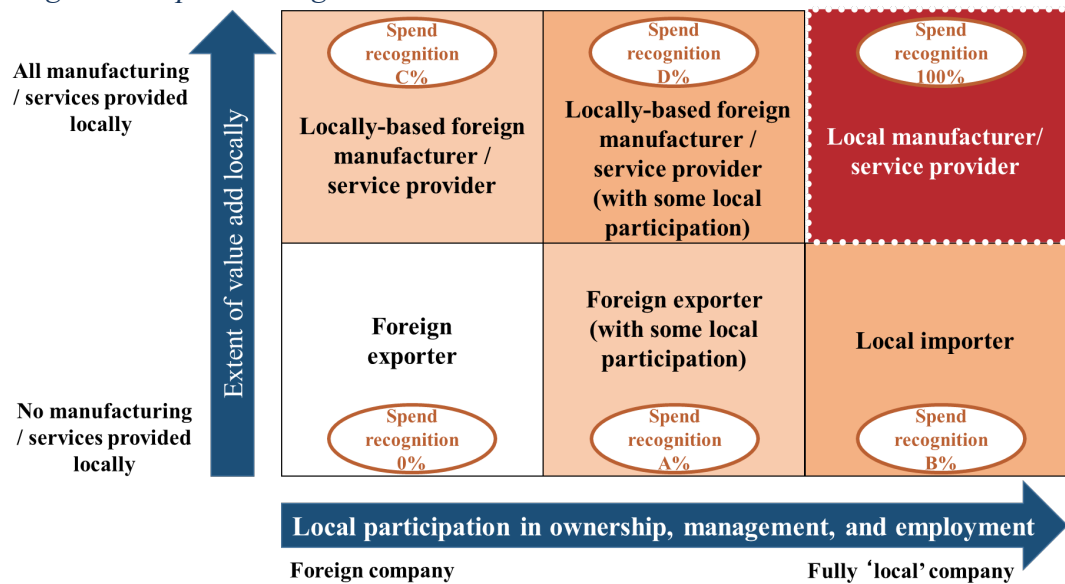
- Locally based foreign manufacturer/service provider
- Locally based foreign manufacturer/service provider (with some local participation)
- Local manufacturer/service provider
- Number of contracts for each category
- Target spend and number of contracts:
 - Short term (2 years)
 - Medium term (2 to 5 years)
 - Long term (5 to 10 years)
- For each of the preceding types, both national (the primary measure) and regional information could be captured.

Note: An alternative approach could also be to assess enterprises (or contract spend) based on continuous measures (rather than categories), which could then be applied directly to assessing “local procurement” spend—e.g., percent ownership, percent local staff, or percent payroll of supplier to local staff, or percent value add based on turnover less value of imported inputs.

In order to arrive at one single indicator that can capture the current status of local procurement spend, weightings can be applied for each supplier category, based on a stronger preference for categories that represent greater value addition and greater levels of local participation. For example, 100% of the spend on “local manufacturers and service providers” be recognized toward “total local procurement spend,” whereas 0% on “foreign exporters” could be recognized toward “total local procurement spend.” (This does not mean that mines should not purchase from foreign exporters, but simply that such purchases would not be recognized to any degree as local procurement spend.)

This concept of **spend recognition levels** for each category is illustrated as follows:

Diagram 7. Spend Recognition Levels



These spend recognition levels should be agreed upon across all stakeholders within a country. Stakeholders consulted to date have expressed a strong preference that local value addition should be given a higher priority than local participation (hence the higher weightings above). Some suggestions for levels for all categories are provided in Appendix A, based on discussions with stakeholders in West Africa.

4.5 IMPLEMENTATION PRINCIPLES

Drawing on analysis and stakeholder consultation, the following principles for implementing this framework are recommended:

- Finalization and adoption of this framework through a consultative process involving the private sector, civil society, national government, and regional organizations.
- Regular review and update of the framework, as improved processes and information become available and can be easily incorporated.
- Development of regulation capturing the framework for measurement, targeting, and monitoring local procurement through self-assessment and periodic verification by authorities.
- Tasking a central coordinating body (e.g., a national Chamber of Mines) with supporting implementation, for example, developing a common supplier list that includes information required to measure local procurement and categorizes suppliers accordingly (this process could also draw on mines' vendor questionnaires, which would need to be adapted to request the required information).
- Application of this framework to mines' spend on main contractors in addition to

direct spend (including EPCs, mining contractors, camp management) to encourage procurement from local subcontractors.

- Development by mining companies of targets (in collaboration with national regulators) and reporting on these annually to the national regulator.
- Finalization and application of the measurement framework in a practical way that aims to optimize local procurement, while avoiding complicated data capturing and calculations—for example, the calculations would not need to cover 100% of spend, but should cover at least 80% of spend. Also, fuel (which tends to be a large spend item) could first be excluded from calculations to avoid detracting from other spend items (although associated products and services should be included, such as fuel logistics and lubricants).
- Consideration of and alignment with other measurement systems relating to preferential procurement (e.g., public procurement and oil and gas) as far as is practically possible for simplicity of implementation and in order to derive maximum socioeconomic benefits.
- Building capacity, through mines, governments, and civil society working together, for implementation and monitoring of the measurement framework.

5 HOW IS LOCAL PROCUREMENT CURRENTLY SUPPORTED IN WEST AFRICA?

5.1 BY REGIONAL ORGANIZATIONS

Several regional organizations, including the African Union, the Mining Chapter of NEPAD, and the African Development Bank have been involved in coordinating, advocating, or setting standards for mining policy, with the overarching goal of using the exploitation and management of natural resources as a catalyst for development.

Notably, the African Union and UN Economic Commission for Africa led the drafting of an African Mining Vision 2050, adopted by the Conference of Ministers Responsible for Mineral Resources Development (CAMRMRD) in 2008, and the 12th AU Summit of Heads of States and Government in 2009. A key component of this shared strategic vision is a new resource-based industrialization and development strategy for Africa, based on downstream, upstream, and sidestream linkages. It also presents a framework for action indicating what needs to be done at a national level, at a subregional level as organized by the Regional Economic Communities (RECs), and at an Africa-wide level, as summarized in the following table:

Table 13. African Mining Vision’s Framework for Action: Objectives and Actions Related to Procurement/Upstream Linkages

African Mining Vision’s Framework for Action: Objectives and actions related to procurement/upstream linkages			
Medium-term objectives (5 to 20 years)	Related actions		
	Country level	Regional Economic Community level	Africa-wide
Lateral migration/upstream value addition	Build national clusters for technology innovation and adaptation	Establish Knowledge Based Centre of Excellence; scale up harmonization of skills and standards to facilitate factor flows	Implement NEPAD program for the establishment of African Centres of Excellence
Improve the value chain and maximize	Create a conducive environment for development of backward and forward linkages and value	N/A	Initiate resource mobilization, especially financial

African Mining Vision’s Framework for Action: Objectives and actions related to procurement/upstream linkages

diversification of economies	addition, especially semi-processing and cluster development, including intensification of technology sharing and investment of rent/capital generated through resources into other sectors	resources
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To support the realization of upstream development and economic diversification, the Vision encourages the establishment of “strong instruments of collaboration,” including associations, chambers of mines, clusters, incubators, and technology parks.

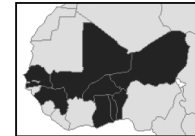
While Africa-wide organizations focus on broad policy, institutional, advocacy, and strategic support, RECs have a more practical involvement in mining regimes and regulations, including support for local procurement.

In West Africa, regional efforts to harmonize mining laws in ECOWAS and WAEMU include provisions for giving preference to suppliers from within member states:

Box 8. Regional West African harmonization of mining policy

WAEMU

The provisions of Article 21 of the WAEMU Additional Protocol II (part of the WAEMU Treaty, and related to sectoral policies) prescribe the harmonization and coordination of national policies and legislation for mining and industrial activities.



WAEMU’s Community Mining Code, adopted in December 2003, states:

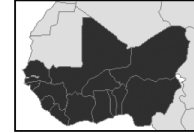
- “Article 14:
 - Member States shall guarantee to the holders of mining titles free choice of suppliers, subcontractors and partners.
 - However, holders of mining titles, their suppliers and subcontractors whenever possible shall use services and materials of Community origin, products manufactured or sold in the Union to the extent that these services and products are available on competitive terms of price, quality, warranty and delivery time”
- Article 16: Employment preference to be given to nationals of the Union when deciding between two equally qualified candidates

According to the WAEMU Treaty, the Mining Code has been adopted as law in the eight WAEMU member countries and supersedes any prior or future national legislation.

ECOWAS

The provisions of Article 31 of the ECOWAS Treaty prescribe the harmonization and coordination of national policies in the natural resources sector of the member states.

The ECOWAS Council of Ministers in May 2009 adopted a regulation relating to the development and organization of the Community's mining sector, along with the ECOWAS Directive on the Harmonisation of Guiding Principles and Policies in the Mining Sector. As part of the implementation of the directive, an ECOWAS Mineral Development Policy was being developed at the date of this report.



The **ECOWAS Directive on the Harmonisation of Guiding Principles and Policies in the Mining Sector** states:

“Article 11: Localisation policy of Mining Operations

1. In pursuance of a localisation policy, a holder of a mining right in a Member State shall submit and comply with the competent authority a detailed programme for recruitment, technology transfer, and training of local personnel.

[...]

4. A Holder of a mining right shall in all phases of its operations give preference in employment to citizens of Member States especially affected communities to the maximum extent possible and consistent with safety, efficiency and economy.

5. A Holder of a mining right shall in conduct of mining operations and in purchase, construction and installation of facilities have a procurement policy which gives preference to:

a. Materials and products of a Member State

b. Service agencies located in a Member State and owned by a citizen (corporate or otherwise) of such Member State and/or public corporation, to the maximum extent possible and consistent with safety, efficiency and economy”

The draft **ECOWAS Mineral Development Policy (EMDP)** consists of nine themes (articles), one of which deals with “local content policy of mineral operations.” Each article has specific commitments by Member States. An Implementation Matrix of the EMDP was also developed.

Furthermore, the ongoing ECOWAS process aiming for unified mining legislation in the region contemplates further legislative frameworks, including a Common Mining Code.

Besides mining legislation, the integration agendas of the regional organizations aim to create larger regional markets that can realize economies of scale and sustain production systems and markets. They are critical to cross-border access to markets and a regional approach to procurement by the mining sector (and particularly important when viability of an industry is only attainable through accessing markets of multiple countries). Furthermore, WAEMU and ECOWAS have several sectoral development programs and programs that aim to contribute to a supportive enabling environment for local business

development and investment, including:

- Infrastructure programs, particularly transport, energy, and telecommunications infrastructure, which have an important impact in terms of cost and delivery time competitiveness, as well as supporting regional supply of bulk infrastructure and services
- Common agricultural policies, which support local sourcing of food products
- SME/private sector development programs, mainly through the so-called Restructuring and Upgrading programs
- Quality programs, which provide capacity building to public and private organizations with the goal to improve the quality of products and compliance with worldwide standards

Relevant support programs are further detailed in Appendix B.

WAEMU and ECOWAS receive technical and financial support in implementing these programs from international organizations and development partners, including EU, UNIDO, UNCTAD, etc.

Recommendations on the role of regional organizations are provided in Section 6.1.

5.2 BY NATIONAL GOVERNMENTS

5.2.1 Support by West African governments

Currently, **mining regulation** to support local procurement in West Africa tends to be in an early stage of development, with local procurement provisions typically requiring mining companies to **give preference to local suppliers where products and services are equivalent to imported products** in terms of cost, quality, health and safety, warranty, and delivery timings. Furthermore, these provisions have often been insufficiently developed, disseminated, monitored, and enforced.

There are, however, some cases where more specific requirements have been included. Senegal, for example, has made use of flexibility in agreeing on mining conventions to include local procurement clauses, specific to the mining investment. For example, the convention for a mining exploration company in Senegal includes the specific requirement to use a designated local laboratory for testing work. The Senegalese mining code also requires that mining subcontractors register a local entity if they provide services to mining companies for over a year (although this does not necessarily contribute to local procurement).

In addition to local procurement provisions, a number of other provisions which may be included in mining codes also contribute to supporting local procurement. These include:

- Localization and training of staff:

- Requirements for hiring of local employees (e.g., Ghana “localization” plans)
- Submission of local staff training programs
- Local community development:
 - Development of local community plans and agreements (e.g., required by Guinea, Sierra Leone, Nigeria, and Senegal), which may also include provisions for procurement from the local community

Mining codes also provide for incentives for mining investment in the form of tax, tariffs, and duties exemptions. Agreements signed with mining companies either refer to a central “mining list” (as is the case in Mali, for example), or result in mining lists applicable to individual mining companies (as in Guinea), which provide a list of products which mining companies may import with certain tax and customs tariffs and duties exemptions.

Box 9. National Mining Codes and local procurement in West Africa

<p>Ghana Minerals and Mining Act (2006):</p> <ul style="list-style-type: none"> • Preference for local products to the maximum extent possible and consistent with safety, efficiency, and economy: <ul style="list-style-type: none"> • Holders of mineral rights should give preference to: materials and products made in Ghana; service agencies located in the country and owned by citizens; companies or partnerships registered under Ghanaian Company Code or Partnership Act • Localization: <ul style="list-style-type: none"> - Requirements to hire a minimum proportion of staff in various employment categories (subject to some exemptions, e.g., small companies, regional offices, etc.), with the Minerals Commission working with mining companies to identify staff positions that can be filled by Ghanaians, local candidates who can be trained to replace foreign staff, training program and timings for local staff to replace foreign staff <p>Senegal Mining Code Law n°2003-36 of November 24, 2003 and Regulations (Decree) n°2004-647 of May 17, 2004:</p> <ul style="list-style-type: none"> • Any foreign subcontractor providing services for more than a year to a mining rights holder must set up a local legal entity pursuant to Senegalese law. • Mining rights holders should endeavor to acquire goods and services from Senegalese companies provided they are available locally at competitive prices.⁶³ The same requirement for local procurement applies to mining suppliers and subcontractors. • A portion of tax revenues from mining revenues is set aside into a fund for local

⁶³ MJB Consulting. (2010) Senegal (Republic of) Mining Report, African Business & Legal Intelligence.

communities.

In addition, conventions agreed upon with mining companies tend to include contractual commitments to make CSR contributions to local communities; these have been made, for example, by MDL and Oromin as part of their mining agreements.

Guinean Mining Code (2011):

- Article 107 Preference of Guinean enterprises:
 - Holders of mining or quarrying titles and all enterprises working for them must give preference to the Guinean enterprises of their choosing for all contracts, provided that such enterprises offer comparable prices, quantities, quality, and delivery times. In all cases, the share of work given to the SMEs, SMIs, and enterprises belonging to or controlled by Guineans shall gradually increase in compliance with minimum thresholds, as follows: 10% during exploration phase; 20% during mine development; and from 15% from years 1 to 5 to 25% in years 6 to 10, and 30% in years 11 to 15.
 - Exploitation permit or concession holders are required to submit and implement a plan to support the creation and/or capacity reinforcement of SMEs/SMIs (or of companies belonging to or controlled by Guineans) to supply goods and services necessary for their business. Holders of mining titles must submit an annual report to the Minister of Mines on their use of SMEs, SMIs, and enterprises belonging to or controlled by Guineans. This report would detail their progress in terms of achieving the minimum thresholds defined by the Mining Code and any actions taken to promote the creation or strengthening of Guinean enterprises.
- Articles 30 and 37 requiring submission of support plan for Guinean owned or controlled companies:
 - A support plan for creation or capacity development of SMEs/SMIs or companies owned or controlled by Guineans is required as part of applications for exploitation permits and mining concessions.
- Articles 169, 172, 173, 174 176, 179, and 180 on VAT and customs duties:
 - During exploration phase, permit holders are exempt from VAT on imported items and customs duties (provided equipment is re-exported or duties are paid on the item on expiry of the permit)
 - During mine construction phase, permit and concession holders are exempt from VAT on imported items for specific items identified on an approved mining list and are exempt from customs duties.
 - • During exploitation phase: exploitation permit holders and mining concession holders are subject to VAT and application of customs duties for on-site processing equipment and materials at 6%, and for extraction equipment at 8%.

Mining code review and regional harmonization processes provide an opportunity to further develop regulation to support local procurement. In Ghana, the Minerals Commission is currently in the process of developing regulations specifically to give

effect to local procurement provisions. A key part of this draft regulation is the requirement for mining companies to submit and report on a local procurement plan. In developing draft regulations, the Minerals Commission has consulted closely with the mining sector. This has allowed the Minerals Commission to take an iterative approach to developing regulations, thereby benefitting from input on procurement practices and strategies. This process should result in regulation that will motivate the mining sector to materially increase local procurement, rather than motivating behavior focused just on compliance with regulations.

In Mali, the revision of the mining code being undertaken at the date of this report is expected to include stronger provisions to support local procurement. These provisions may include requirements for publication of a local development plan and procurement data, detailed processes for dissemination of information on opportunities, including specific format and language requirement for tenders by mining companies, and mechanisms for periodic updating of the “mining list” to take into account products that become locally available.

More widely, national governments have several programs that aim to contribute to a supportive enabling environment for local business development and investment, including:

- Infrastructure programs:
 - In Senegal, the public sector aims to improve infrastructure through provision of industrial land in the vicinity of large mining companies.
- SME/private sector development programs:
 - In Senegal and Côte d’Ivoire, the databases of the Subcontractor and Partnership Exchanges (SPX)—a joint effort by the state and the private sector, with donor support, aiming to increase subcontracting to large companies from small enterprises—contain respectively 450 and 700 SMEs
 - In Senegal, managerial and strategic support through SME development projects and upgrading project

Recommendations on the role of national governments are provided in Section 6.2.

5.2.2 International practice—National governments

Lessons can be drawn from international experience, in particular South Africa and Chile:

Box 10. South Africa mining policy and regulation

The **Mineral and Petroleum Resources Development Act (2002)** required mining and prospector rights holders to apply for conversion of existing mining rights from *old order* to *new order* mining rights within five years (or rights would revert back to the state).

Applicants were required to comply with the terms of the Black Economic Empowerment Act

of 2003 and the Mining Charter (more details below), as follows:

- The **Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry (2005)** provided for:
 - Historically disadvantaged South Africans (HDSA) to be given preferred supplier status in the supply of capital goods, services, and consumables
 - Existing suppliers to be encouraged to partner with HDSA companies when tendering
 - Stakeholders to commit to enhancing HDSA procurement capacity
- The original Mining Charter scorecard (used for the conversion process between 2004 and 2009) asked the following Yes/No questions:⁶⁴
 - Has the mining company given HDSAs preferred supplier status?
 - Has the mining company identified current level of procurement from HDSA companies in terms of capital goods, consumables, and services?
 - Has the mining company indicated a commitment to a progression of procurement from HDSA companies over a 3- to 5-year time frame in terms of capital goods, consumables, and services and to what extent has the commitment been implemented?
- The conversion process (and any new mining rights) also required⁶⁵ a local economic development program, including a procurement progression plan for Historically Disadvantaged South African (HDSA) companies.

There have been several disputes with mining companies over the conversion process—in particular, ambiguity regarding the reallocation of mining rights has resulted in disputes at the Sishen and Lonmin mines. There was also confusion about the measurement criteria, which was only resolved through the amended Mining Charter Scorecard was published in October 2010.

The amended **Mining Charter Scorecard** deals with the weightings and targets for procurement in the mining sector across each BBBEE element (ownership, management, skills development, employment equity, and preferential procurement). Preferential procurement accounts for 20% of the overall score,⁶⁶ broken down as follows:

- Capital goods procurement (5% weighting): procurement spend from BEE entity (see below for calculating procurement spend), with incremental targets from 5% in 2010 to 40% in 2014

⁶⁴ Government Gazette. (2004). Notice 1639 of 2004: Scorecard for the Broad Based Socio-Economic Empowerment Charter for the South African Mining Industry.

⁶⁵ MPRDA, Item 7 (2) (e-k)

⁶⁶ DMR (2010), Scorecard for the Broad-Based Socio-economic Empowerment Charter for the South African Mining Industry, www.dmr.gov.za; DMR (2010), Amendment of the Broad-Based Socio-economic Empowerment Charter for the South African Minerals and Mining Industry.

- Services procurement (5% weighting): procurement spend from BEE entity, with incremental targets from 30% in 2010 to 70% in 2014
- Consumables goods procurement (2% weighting): procurement spend from BEE entity, with incremental targets from 10% in 2010 to 50% in 2014
- International suppliers (3%): annual spend on procurement from multinational suppliers, with a target of 0.5% of procurement value
- Utilization of South African research facilities (5%): measured by percentage of samples in South African facilities, with incremental compliance targets reaching 100% by 2014

Code 500 of the BBBEE Codes of Good Practice deals with measurement and targeting of preferential procurement in three measurement categories, each with its own weighting, and provides targets for each category

- BBBEE procurement spend from **all suppliers** (12 points):
 - Calculated by multiplying Recognition Level of supplier by percentage of total procurement spend (Recognition Levels of spend are applied based on a supplier's BEE status, e.g., spend on a Level 1 supplier is recognized at 135%, spend on a Level 8 supplier is recognized at 10%)
 - Targets 50% in years 0–5 and 70% in years 6–10
- BBBEE procurement spend from **Qualifying Small Enterprises (QSE) or Exempted Micro-Enterprises (EME)** (3 points):
 - Calculated by multiplying Recognition Levels of QSEs and EMEs as a percentage of total procurement spend, where QSEs are businesses with an annual turnover of R5m–R35m, and EMEs an annual turnover of under R5m
 - Targets: 10% (years 0–5) and 15% (years 6–10)
- BBBEE procurement spend from **black-owned and black women-owned enterprises** (5 points):
 - Procurement spend on suppliers that are 50% black-owned (max. 3 points), with a compliance target of 9% (years 0–5) and 12% (years 6–10)
 - • Procurement spend on suppliers that are 30% black women-owned (max. 2 points), with a compliance target of 6% (years 0–5) and 8% (years 6–10)

Box 11. Chile: Mining Policy⁶⁷

There are no commitments to local procurement or supplier development in Chilean law. Chilean mining policies established in the early 1980s set a strong legal framework to encourage

⁶⁷ Culverwell (2001), The Mining Cluster in Antofagasta: Integrating SMEs into the Productive Chain; Arroyo, M., and Rivera, F. J. (2004), Empresa y desarrollo regional sustentable: El caso de la gran minería en la Región de Antofagasta; Pezzini (2010), Strengthening Institutional Capacities for Innovation Policy Design and Implementation in Chile: Assessment and Proposals, OECD and www.corfo.cl.

mining concessions and foreign capital investments. The policy framework protected mining concessions by a Property Rights Guarantee,⁶⁸ outlined mining concessions rights and obligations, including easement (Constitutional Organic Mining Law, 1982 and the Mining Code, 1983), and guaranteed free repatriation of profits and capital, tax stability, and the principle of nondiscrimination against foreign investment (The Foreign Investment Statute, 1974).

Despite no formal commitment to local procurement, there is a strong **culture of public-private collaboration** in supporting supplier development and local procurement. In the public sector, this is led by CORFO, working with individual mining companies or regional associations such as the *Antofagasta Industry Association (AIA)* and the *Corporation for the Development of the Atacama Region (CORPROA)*. In 2008, the National Council Mining Cluster Strategy reinforced this focus by including a “supplier development” group among its five technical groups, which aims to support development of internationally competitive suppliers to supply regional markets.

Various partnerships that involve collaboration across the Chilean government and the private sector have been undertaken. Key examples are:

- **Program to Develop Suppliers for the Industrial Growth of Region II (1995)**
 - An initiative of ten large companies and two regional universities, where financial subsidies were granted to large companies prepared to participate in “supplier development”—this required companies to take responsibility for training and integration of suppliers.
 - Constraints of this program included a focus on supplier linkages to one client, as suppliers could not meet different mining companies’ evaluation systems.
 - Precursor to the the Programa de Desarrollo de Proveedores (see below)
- **AIA and SERCOTEC partnership (1997)**
 - Partnership between AIA and Service for Technical Cooperation (SERCOTEC)—an arm of CORFO—to assist SMEs to meet the evaluation criteria of mining companies, by providing credit, technical consultancy, subcontracting exchange, and management training.
 - Included the *The Program to Evaluate and Qualify Suppliers in the Mining Industry*, which initially saw 15 suppliers complete courses on quality, cost, and/or environmental management and achieved the AIA seal of approval.
- **Programa de Desarrollo de Proveedores (PDP)**
 - National program across all industries to support the integration of SMEs and strengthen their involvement in the supply chain, through subsidizing projects to provide specialized services/advice, training, technical assistance, and technology

⁶⁸ Chilean Constitution. (1980).

transfer.

- Support is made available to companies with sales over 100,000 UF⁶⁹ per annum.
- Anglo American and BHP Billiton have undertaken programs under this model.

- **Enhancing Competitiveness Program (PMC) (2009)**

- Part of a wider program to decentralize economic development support, the Antofagasta PMC aims to support SMEs supplying large mining companies⁷⁰
- Support activities include training, tender preparation, and innovation and research capacity support.
- In 2010, the program supported US\$1.5bn in local procurement and aims to reach US\$3.75bn in 2011.⁷¹

- **Programa de Responsabilidad Social Empresarial Tributaria (RSET)**

- Commitment by large corporations (including Codelco, Anglo American, and BHP Billiton) to support SME suppliers to adopt technologies and practices to increase efficiency (such as electronic billing).

Success factors for development of local supply clusters in Chile include:

- Participatory policymaking encouraging collaboration across government, private sector, and research and innovation agencies at local, regional, and national levels
- Wide diversity of support, including funding to SMEs, support for supplier—large company linkages, etc.
- Stable foreign direct investment (FDI) and mining policies since the 1970s and 1980s respectively, contributing to strong collaboration
- Range of trade associations and institutions which facilitated working relationships and established trust between stakeholders. Relevant institutions include:
 - National mining associations—SONAMI, Consejo Minero
 - Supplier associations—APRIMIN
 - Regional associations—AIA, CORPROA
 - Public institutions—CORFO, CONYINCT, SII, SERNAGOMIN, regional development agencies

⁶⁹ The Unidad de fomento (UF) is a unit of account in Chile used in loan calculations. The exchange rate between the UF and Chilean peso is adjusted based on inflation to keep the value of the UF constant.

⁷⁰ http://www.innovalatino.org/documents/pezzini_innovation_capacities_chile.pdf

⁷¹ <http://www.chilemin.cl/2011/04/proveedores-mineros-en-su-mejor-momento/>

- Evolution of approach and learning from efforts

The oil and gas industry also offers potential learnings for West Africa. Kazakhstan's approach to supporting local procurement by the oil and gas industry employs a number of regulatory tools, including local procurement targets, requiring submission of local procurement plans, and allowing for a price premium for local suppliers when evaluating tenders:

Box 12. Kazakhstan oil and gas local content regulation⁷²

Kazakhstan targets **local procurement of 50%** from Kazakhstan suppliers by 2012.

Policies and legislation in place to support this objective include:

- The Petroleum Law (1995, as amended) provided that where contractors engage subcontractors, these must be largely organizations of the Republic of Kazakhstan
- The concept on further development of local content (2009) provided for:
 - Revision of existing contracts to include **specific local content requirements**
 - Request of long-term procurement plans from major operators (KCO/NCOC, KPO, TCO)
 - E-procurement and tender process transparency to increase accessibility
- The rules for procurement of goods, works and services when carrying out subsurface operations, adopted in June 2007:
 - Require that **Kazakhstan providers' bids be decreased by 20%** for awarding a contract
 - Reserve single-source tenders for defined, limited cases
- The Draft Law on Subsurface and Subsurface Use (2008):
 - Requires subsoil contracts to be based on a model contract
 - Requires contract to include provisions on **percentage of Kazakhstan** personnel, **goods, works, and services** of Kazakhstan origin to be procured
- The Uniform Method of Local Content Calculation for products and services was decreed and revised by the government in 2009 and involves obtaining local content certificates, CT-KZ, for every product and service subject to calculation.

The Action/Implementation Plan for the Concept outlines three stages for delivery on the

⁷² IIED, Oil and Gas Contracts for Sustainable Development in Kazakhstan, Background Note on Context and Key Issues; and Ospanova, S., Local Content Policy: Kazakhstan review, British Embassy to Kazakhstan and IIED.

proposed goals by 2012:

- 2009–2010: defining major prospective categories for goods and services, minimal local content requirements for subsurface users
- 2010–2011: state funding to support domestic producers of goods and services, also support for technology transfer and new skills acquisition
- 2010–onward: state support for access to international markets, focus on training and development of skills base for the industry

Support efforts across government are coordinated through the allocation of competencies and responsibilities as follows: Ministry of Oil and Gas (MOG) is responsible for local content in procurement of subsurface users; Ministry of Finance for state procurement; and MINT for local content data analysis and overall coordination. The Expert Council on local content includes government and policy experts from MOG, MINT, KCA, representatives of industry associations and supplier unions and unions of entrepreneurs and suppliers of goods and services, and operators.

A comprehensive registry of companies providing services in different regions—The Unified Register of Domestic Producers and Foreign Investors—is managed by KazContract (KCA), with MOG and MINT as primary shareholders.

To **support enforcement**, sanctions and fines may be applied for failure to meet local content requirements. 34 contract termination notices were sent out to subsurface users based on non-compliance with local content requirements, with MOG indicating a further 122 notices would be sent out.

5.3 BY MINING COMPANIES

Few **mining companies** in West Africa currently have a clear policy on supporting local procurement. The primary considerations for most mining companies within their procurement strategies are cost competitiveness, delivery at the required level of technical performance, quantity and schedule, and provision of goods and services at acceptable health, safety, and environmental standards. In the medium term, security of supply is a further factor which affects mining companies' sourcing strategies.

Urgent need for a product may also cause companies to source products locally; however, these products are largely manufactured elsewhere and only purchased locally. Similarly, local service providers may be used for smaller or interim contracts while international service providers are mobilizing resources.

Where companies have developed a program for supporting local procurement, this has often been driven by mining companies' CSR programs and directed at local communities and SMEs, rather than the national (or regional) industrial sector. This is often motivated by the need to maintain good relations with local communities to ensure continuity of operations. Where companies measure "local procurement," this is often on the basis of sourcing the product from a locally owned trading company, regardless of

where the product has been manufactured or where significant value add has taken place.

The Ahafo Linkages Programme implemented by Newmont and the IFC is one of the few examples of clear mining policy to support local procurement, albeit at a local level. Established in 2007, the program aimed to increase local procurement in low-value items such as tools, paints, hospitality services, low-level maintenance and construction, and vehicle rental services. The IFC's role in the program involved the rapid assessment of the business environment and program design prior to implementation. The IFC team also acted as program coordinators and played a key role in recruiting implementation partners, identifying groups of SMEs as potential beneficiaries, and the day-to-day management of the program. Newmont's role involved the creation of a dedicated unit within its supply chain management division which customized procedures for local procurement, educated local suppliers on Newmont's standards, and provided technical support. Newmont's communications team also played a role in the internal and external marketing of the program, information dissemination, and managing local expectations.

The program has been largely considered a success, as local procurement has increased since project inception. In 2006, local procurement from 25 SMEs was to the value of US\$1.7m; this increased to US\$4.7m from 125 SMEs in 2008. The program closed in 2010, having trained 53 local enterprises and contributed to local procurement of approximately US\$14m.⁷³ The program also contributed some lessons for supporting local procurement: the importance of strong requirements for entry to a supplier database, as the Ahafo project had 200 SMEs bidding for just five contracts a month; and the need for extra support in tender preparation and bid submission, as SMEs did not have enough time to prepare documentation.

Similarly in Guinea, the IFC has partnered with Global Alumina Corporation to support SMEs to develop capacity to supply to the mines. Support has included enterprise training, support for business plan preparation, and facilitation of links with international businesses.

Furthermore, Newmont has built on the Ahafo local linkages program and developed a broader policy on local content. Supported by the Ghana Chamber of Mines, mining companies have begun to develop programs for supporting greater local procurement, including identifying products with high potential for local production and conducting a gap analysis of local companies to expand production into these areas. Mining companies have also adjusted procurement processes to broaden access for local suppliers, for example, sourcing of local quotations and providing feedback on competitiveness with international suppliers and developing local supplier lists.

⁷³ <http://www.ghana.gov.gh>

Box 13. Newmont Ghana's local procurement policy⁷⁴

Objectives

- Strive to increase local expenditure year after year
- Strive to place more business with companies with a higher level of Ghanaian ownership, including use of local authorized distributors and agents of international companies, where a value-added service is being provided

Areas of support

- Increasing Newmont's awareness of goods manufactured in Ghana through:
 - A supplier open day
 - A formal process of supplier registration
 - Identifying products currently being purchased by other mining companies
- Broaden access to opportunities for potential suppliers:
 - Supplier open days
 - Greater use of open tendering, including for all major longer-term service contracts for mining operations as existing agreements expire
 - Advertise available work and goods requirements via the Internet
 - Publish local spend profile data on a quarterly basis
- Apply preference in assessing tenders, giving preference in the following order (all else being equal):
 - Local-Local Company
 - Ghanaian Owned Company
 - Ghanaian Participation Company
 - Ghanaian Registered Company
 - International Company
- Build capacity of local companies through the development of collaborative partnerships between industry, NGOs, existing foreign and Ghana-registered companies
- Apply the policy across operational and capital spending:
 - Include provisions for policy to be cascaded by contractually obliging vendors to implement this policy
 - Ensure EPCMs implement the policy

⁷⁴ Newmont Ghana. (2010). Local Procurement Policy and Action Plan.

- Newmont also specifies where local procurement may not be feasible, including:
 - Goods and services of a proprietary nature
 - Items covered by Newmont Global Agreements and Alliances determined by need for security of supply for strategic commodities and economies of scale
- Effectively communicate policy and achievements, including through supplier open days, WAMPOC, and online reporting on local spend

Implementation principles

- Develop metrics, monitor and publish performance against strategic goals
- Work together with other mining companies, government, and agencies
- Assess the effectiveness of the policy yearly

In Guinea, Rio Tinto and Vale also aim to apply a more consistent, formal approach at a national level, and both were in the process of developing local procurement plans. These efforts indicate that the policy environment relating to local supply is becoming an increasingly important consideration, as governments are placing more emphasis on maximizing benefits from mining investment and beginning to develop firmer regulations for local procurement.

In Ghana, the Chamber of Mines initiated a collective process of identifying high-opportunity products for local supply. The process has involved collecting, from the gold mining sector, information on spend and pricing for selected purchase items, along with views on the level of difficulty involved in realizing these opportunities. A further step is the assessment of gaps in local supply capacity, and how best these can be addressed. These support efforts were formally set out in an MoU between the Ghana Chamber of Mines, the Ghana Minerals Commission, and the IFC in August 2011.

Furthermore, there are a number of cases where mining companies (and Chambers of Mines) have provided ad hoc support to suppliers, which are driven by some of the preceding considerations (e.g., ensuring security of supply), as well as by leadership supportive of economic development efforts.

Box 14. Examples of support for local procurement in West Africa

Ghana:

- Information sharing through the Chamber of Mines:
 - Mining suppliers forum/open day, second forum planned for October 2011
- Information sharing on opportunities by mining companies:
 - Fuel distribution opportunity
 - Potential investment in cyanide production
 - Openness to receiving suppliers and responsiveness to enquiries

- Requests for quotations sent to local companies for particular products
- Development of approved supplier lists
- Technical input and product testing, e.g.:
 - Grinding balls production at Takoradi and Tema
 - Steel crusher liners produced at Tema
- Financial support (including prefinancing, support for acquiring equipment):
 - Establishment of a staff transport company
 - “Mobilization” payments to local contractors to support delivery on larger contracts
 - Investment in lime processing facility at Takoradi
- Development of upstream activities internally, e.g., plantation for wood supplies

Senegal:

- Information sharing on opportunities:
 - Approaching existing manufacturers and service providers (e.g., plastics, laboratory services, metalwork companies) and providing information on products which require similar production processes/expertise
 - Searching for local suppliers in yellow pages and by word-of-mouth
 - Openness to receiving suppliers and responsiveness to enquiries
 - Requests for quotations sent to local companies
- Technical support:
 - Training in health and safety, or environmental standards
- Financial support:
 - Prefinancing orders
- Preferential treatment:
 - Accepting prices from local suppliers that are slightly higher than prices from overseas vendors
- Indirectly, through employment:
 - Promoting the hiring and training of locals to occupy high-level positions in mining companies (allowing to gain experience and exposure in the sector, and possibly leading to entrepreneurship)

Mali:

- Financial/equipment support to a local haulage and secondary crushing service provider
- Development of approved supplier lists

Burkina Faso:

- Information sharing and facilitating contacts:
 - Transmitting to business association (Chamber of Commerce) list of products that company is ready to procure locally (and seeking supply of)
 - Organizing a trip to Canada for local businessmen to meet mining supply companies

Recommendations on the role of mining companies are provided in Section 6.3.

5.3.1 International practice—mining companies

Internationally, mining companies have pursued a range of programs to support supplier development, including supporting information sharing about opportunities, building supplier capacity, and providing financial support (see examples provided in Section 6.3 for further detail).

To support the efforts of mining companies, a range of organizations such as the IFC and various economic, business, and supply chain development consultants can bring expertise to support linkages, attract investment, and develop capacity of local enterprises. The IFC’s approach to supporting linkages in partnership with extractive industry companies provides some lessons on areas of support and approaches, and indicates the importance of activities such as supplier lists, supplier assessment, and training modules.

Box 15. IFC’s approach to supporting linkages in partnership with extractive industry companies

The IFC supports linkages through compiling supplier information, including contact details, goods and services provided, assessing suppliers in areas such as safety, quality control, equipment, and personnel management, and facilitating access to finance and technical assistance (as in Chad, for example).

The IFC also builds SME skills and capacity through standardized training modules—primarily through the SME Toolkit (developed in conjunction with IBM) and the Business Edge training modules. The IFC’s SME Toolkit contains self-guided training modules, how-to articles, sample business forms, and free software to support SME capacity building. These generic training modules can be shared across competitors to reduce costs and without jeopardizing competitive advantage. The IFC also provided bespoke eProcurement training in Chad, as ExxonMobil required online bidding.

In some cases, the IFC also supports the establishment of Enterprise Centres—such as BP’s Enterprise Centre in Azerbaijan and ExxonMobil’s Enterprise Centre in Chad. These are run in conjunction with local chambers of commerce and provide training for SMEs. When possible, the IFC approach also involves a joint financing mechanism, such as the Supplier Finance Facility of US\$15m where BP and the IFC each hold 40% and a local bank holds 20%.

5.4 BY CIVIL SOCIETY

There appear to be **few civil society groups in West Africa that are engaged in activities relating to mining procurement**. Civil society organizations and coalitions in West Africa are commonly organizations that promote transparency, advocate against corruption, or promote environmental and human rights relating to mining. Therefore these organizations' activities are focused on monitoring the actions of corporations and multinationals, encouraging consultation with affected communities, and educating communities about their rights.

There are some **international civil society organizations** active in West Africa, including the Revenue Watch Institute in Ghana, and local coalitions and local CSO partners of Publish What You Pay in Guinea, Senegal, and Ghana. These international organizations provide capacity-building and financial support to local NGOs across the oil, gas, and mining sectors.

Box 16. Revenue Watch Institute

RWI is a US-based NGO that promotes effective, transparent, and accountable management of oil, gas, and mineral resources in countries with a heavy dependency on these sectors. The RWI is present in over 30 countries, and builds civil society capacity by **providing training and financial support to over 50 partner organizations, as well as establishing regional knowledge hubs**.

Some activities that relate to local procurement by the mining sector include:

- Support for local procurement in Peru, Bolivia, and Ecuador: For example, workshops and research into industries in Ecuador as part of “Promoting Monitoring and Participation in the Oil and Mining Sectors in Ecuador,” run by local NGO Grupo Faro, included a workshop on economic diversification.⁷⁵
- Compiling an overview of regulatory mechanisms available to support local content
- Anglophone Africa Regional Knowledge Hub for the Oil, Gas, and Mining Industries, Accra (2011–14).⁷⁶
 - In partnership with the Ghana Institute of Management and Public Administration, the regional hub will provide training and support to civil society organizations, members of Parliament, senior civil servants, and journalists.

⁷⁵ <http://www.renewatch.org/grants/promoting-monitoring-and-participation-oil-and-mining-sectors-ecuador>

⁷⁶ <http://www.renewatch.org/grants/anglophone-africa-regional-knowledge-hub-oil-gas-and-mining-industries>

- The 2011 summer school included participants from nine African countries, including Ghana, Liberia, and Sierra Leone.
- The Hub plans to offer three additional summer schools, create a database of regional experts, and establish a collection of information resources.

The international civil society “networks” provide technical and financial support to local CSOs in West Africa and support organizational cooperation across civil society groups. For example, the Publish What You Pay Ghana coalition joined with other CSOs, including the Revenue Watch-funded Regional Extractive Industries Knowledge Hub, to form the **National CSO Oil and Gas Platform (Ghana)**, which was successful in encouraging full disclosure and public consultation of a draft proposal for a key petroleum revenue management bill.⁷⁷

With regard to mining, the **National Coalition on Mining (NCOM)**, a coalition of 18 CBOs, communities, individuals, and NGOs, aim to ensure environmental sustainability, protect human rights, and achieve integrated national development in the extractive sector. Their activities included conducting a review of the draft mining bill and encouraging a deeper consultation process with communities—but this resulted in little change to contents of the bill.⁷⁸⁷⁹

Similarly, the Wassa Association of Communities Affected by Mining (WACAM) aims to provide support to communities adversely affected by gold mining in Ghana. It is also a member of the Ghana Extractive Industry Transparency Initiative (EITI) steering committee. WACAM’s activities include representing mining communities in negotiations with mining companies and hosting workshops to teach mining communities about legal rights and Ghanaian mineral laws.

Internationally and in West Africa, mines have also formed direct relationships with local communities.

⁷⁷ http://www.twnafrica.org/index.php?option=com_content&view=article&id=276:statement-of-national-coalition-on-mining-ncom-thursday-january-21st-2010&catid=50:ncom&Itemid=75

⁷⁸ <http://www.abantu-rowa.org/docs/Annual%20Report%202005-2006.pdf>

⁷⁹ http://www.twnafrica.org/index.php?option=com_content&view=article&id=276:statement-of-national-coalition-on-mining-ncom-thursday-january-21st-2010&catid=50:ncom&Itemid=75

Box 17. International examples of partnerships between civil society and mining companies

The Atacama Commitment, Chile⁸⁰

- A signed alliance between Barrick Gold, three Chilean organizations (Teletón, Un Techo para Chile, and América Solidaria), and the UN Global Compact to improve the socioeconomic impact of the Pascua-Lama mine in Chile
- The Atacama Commitment will focus on addressing the problems of housing, education, health, and socioeconomic development in affected communities. It does not have explicit commitments to local procurement, but will operate hand in hand with Barrick's local supplier development program.

Diavik Mine, Canada⁸¹

- Rio Tinto engaged with affected communities and established a community consultation process when the area was first explored in the 1990s.
- The company ensured repeat visits to communities—holding over 300 meetings during the feasibility stage.
- Rio Tinto established partnership instruments across a range of themes, including local business development. The agreements were formalized into explicit commitments, including socioeconomic monitoring, environmental agreements, and participation agreements.

Indigenous Land Use Agreements, Australia

- Under Australian law, mining companies are required to negotiate Indigenous Land Use Agreements with communities affected by mining activities.
- These agreements address land title and cultural heritage issues, but also include wider topics such as enterprise development, employment, and training.⁸²

While the focus of civil society organizations in West Africa is on monitoring and documenting the revenues and activities of mining companies, international, regional, and local organizations are broadening their focus to include local content considerations.

⁸⁰ http://www.barrick.com/Theme/Barrick/files/docs_csr/Beyond%20Borders%20-%20December%202008.pdf

⁸¹ <http://www.aemee.org.au/common/pdf/SME/Session04-EricChristensenRioTinto.pdf>; ICMM (2010), Mining: Partnerships for Development—Mapping in-country partnerships; p. 48.

⁸² <http://www.atns.net.au/agreement.asp?EntityID=5233>

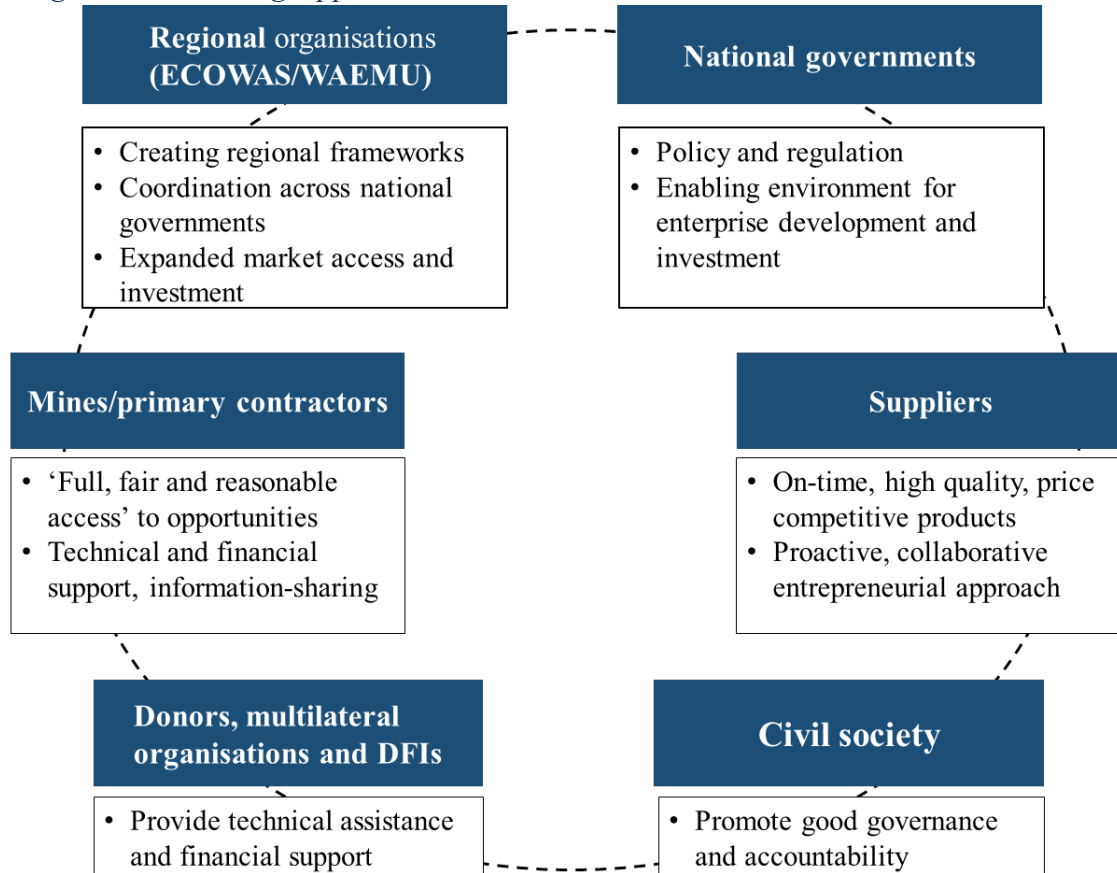
Recommendations on the role of civil society organizations are provided in Section 6.4.

6 GOING FORWARD—HOW CAN EACH STAKEHOLDER HELP REALIZE OPPORTUNITIES?

This section sets out the roles that key stakeholders need to play in order to maximize local procurement by the mining sector.

The diagram below summarizes the primary roles for each stakeholder:

Diagram 8. Realizing Opportunities: Stakeholder Roles



The following sections focus on the roles of regional organizations, national governments, mining companies, and civil society. Within these sections, additional roles are also proposed for the other stakeholders to support these efforts.

6.1 THE ROLE OF REGIONAL ORGANIZATIONS

Regional organizations such as ECOWAS and WAEMU are critical for increasing viability and competitiveness of manufacturing and production activities, in particular where significant operating scale is required and continuous production processes are

employed (for example, chemicals, cement, and some plastics products). To do so, regional organizations need to focus on supporting expanded market access within West Africa for suppliers, encouraging coordination in investment in production facilities and infrastructure, and addressing the significant barriers to regional integration, in particular related to transport. Regional efforts can support consistent implementation of support measures at a national level by continuing to create frameworks and guidelines.

There are a number of key challenges to developing and implementing policy at a regional level, including:

- Potentially uneven benefits from opening markets within the region, where more advanced economies in the region may be more attractive for establishing production and service capacities for serving the region.
- The main policy levers for supporting local procurement are available at a national level (establishment of mining exploitation/exploration agreements); this presents a challenge for regional policy to be implemented, monitored, and enforced at a national level. For example, while ECOWAS member states are developing action plans for implementation under ECOWAS supervision, the ECOWAS Directive is only binding on member states, and does not create direct rights and obligations at the individual and corporate levels.⁸³ Furthermore, where community laws are implemented within member countries, the enforcement of these remains an issue. This is especially the case where there is conflict with national law, for example where national mining legislation applies preferences at a national rather than regional level.

Measures which could be undertaken at the regional level include the following:

1. Facilitate the development of a common framework for defining local and measuring procurement

- It is recommended that the West African regional organizations take the lead in developing a common definition for local procurement, which could then be applied consistently by national governments of the region. WAEMU and ECOWAS have legal tools available below the regulation and directive level (e.g., decisions, opinions, recommendations, etc.) which could be effectively used to facilitate the adoption of a common definition framework.
- This framework could then incorporate the key principles laid out in the later part of Section 3 of this report, including clear common guidelines for thresholds and indicators.

⁸³ Member states are to adopt the measures in order to comply with the Directive by July 2014, and an ad-hoc committee to supervise implementation was established in 2010.

2. Support alignment of provisions and processes related to requirements for mining companies to develop a local procurement plan

- One of the key recommendations from this study, for national governments, relates to requiring mining companies to submit local procurement plans (see Section 6.2). It is recommended that regional organizations seek to facilitate the adoption of common requirements and processes related to those local procurement plans across the region.
- The extent of standardization and alignment of the content, submission frequency, responsible oversight and monitoring entities, penalties and enforcement actions, etc. of local procurement plans is a matter to be agreed upon among the relevant national authorities and with regional organizations, but it is recommended that the regional organizations coordinate to ensure that all member countries have sound, consistent, effective regulations in place related to local procurement plans. In doing so, it will be important for regional organizations to build on the knowledge developed by West African countries that are relatively advanced in this area.

3. Develop a harmonized list of products across the region that may be exempted from customs

- It is recommended that regional organizations build on existing efforts at a regional level (WAEMU) and at national level to develop a harmonized list of products that qualify for exemptions which excludes products that can be produced or manufactured within the West African region as a whole.
- This list could adopt an approach of phasing out customs tariffs and duties for products that are available within the region, even if products are not available at the scale required by the mining sector—this would require a mining list with two tiers of products.
- It is recommended that regional organizations develop a process for removing products from the list, based on submissions from national governments and independent verification.

4. Provide platforms for promoting linkages and investment along the mining supply chain

- It is recommended that regional organizations organize and coordinate joint promotion by national governments of opportunities at mining/mining supply conferences, e.g., hosting a West Africa mining supply day.

Box 18. Latin American mining industry EXPONOR exhibition⁸⁴

The International Exhibition of the Latin American Mining Industry, EXPONOR, is held every two years in Antofagasta, and is organized by the Industrial Association of Antofagasta (AIA).

It aims to support linkages, new business, and the exchange of knowledge between local, national, and international business people. Activities to support this include:

- Business circles: EXPONOR exhibitors meet with executives from mining companies to present their companies and their goods and services during 20-minute face-to-face meetings. In 2009, 19 mining companies participated and 720 business circles were held.
- Technical lectures: Exhibitors may give lectures to present products, services, and technologies to a group of guests. The exhibitor may also host a reception for its guests after the lecture. In 2009, 64 technical lectures were given.

5. Develop a regional list of suppliers

- Develop a regional database of local suppliers, to include information on company contacts, products and services, and capacity. This could be limited initially to manufacturers and service providers (rather than including companies which are exclusively traders), to focus efforts on areas where local procurement can result in meaningful, sustainable economic development. Furthermore, to assist with database administration, registration could be through an online process, although care should be taken to assist local suppliers who do not have access to the Internet. This could be implemented by building on existing efforts, including the Subcontractor and Partnership Exchange. In the medium term, the database could also be used to:
 - Support mines to report on the extent of local procurement, in terms of level of value added locally, ownership and location
 - Build local suppliers' track records and customer references
 - Include certain minimum prescreening criteria accepted and used across mining companies

6. Assist with information sharing and facilitate partnering on upstream activities

- Provide a platform for sharing information on mine development agreements, local procurement plans, and supplier investment and assist in identifying where partnering on investment would be beneficial (including infrastructure investment)

⁸⁴ <http://www.exponor.cl/ingles/queesexponor.html>

7. Continue to facilitate regional trade, focusing on implementation of rules

- Facilitation of regional trade, including:
 - Enforce WAEMU and ECOWAS rules for cross-border transport and trade
 - Require removal of disproportionate/arbitrary penalties for incorrect customs documents
 - Withdrawal of transit fees, unless linked to infrastructure or service delivery
 - Implement hotlines for reporting road harassment (e.g., as established in Senegal)
 - Provide support for addressing bottlenecks caused by road use agreements (e.g., only Senegalese-owned trucking companies can transport goods from Senegal to Mali)

Box 19. Cases where poor regional integration has inhibited local procurement

Greater costs and uncertainties when procuring from within the region compared to importing from outside the region mean that although products and services may be available within the region, these are still imported, e.g.:

- Water testing by a Senegalese mining company used to be conducted in Ghana, but after the long journey, analysis of the water would no longer provide accurate results, and water is now sent to the Netherlands rather than Ghana.
- A Ghanaian OEM distributor serving the Malian market may import spare parts from Europe, rather than supplying them from a central warehouse in Ghana.

6.2 THE ROLE OF NATIONAL GOVERNMENTS

When formulating, applying, monitoring, and enforcing policy and regulatory measures to support local procurement, policymakers and regulators ask a number of questions: “Should targets be set for local procurement?” and “If so, what is reasonable to require mining companies to do? What does WTO say about supporting local procurement? What incentives should be in place to encourage increased local spend and support for local procurement?”

Furthermore, policymakers need to consider the following key challenges:

- Encouraging development of an **integrated industrial base** rather than only trade and services activities
- Determining where to place emphasis in **defining “local” procurement** (*see Section 4 for suggested approaches*)
- **Encouraging international competitiveness and long-term sustainability** of industries while avoiding protectionist measures that may lead to short-term

approaches and uncompetitive production

- Maintaining compliance/alignment with bilateral and multilateral agreements, including WTO Trade Related Investment Measures, potential EU-ECOWAS Economic partnership agreement
- Balancing requirements of mining companies and international subsidiaries of suppliers (including avoiding disadvantaging mid-sized companies) to maintain attractiveness of investment. Furthermore, concessions to attract mining investment should **avoid disincentives to local procurement** provided through import tariff concessions or VAT concessions as part of mining agreements, or harming longer-term prospects for development of local suppliers through insufficient local staff requirements.
- Supporting transparency of procurement, while maintaining confidentiality where required
- **Applying mining regulation** consistently while allowing for flexibility where required, where mining investment agreements are negotiated individually, and applying changes in mining regulation where mining companies already have existing agreements

6.2.1 Local procurement and WTO

The application of local procurement measures in relation to WTO rules is highly debatable. This is particularly the case for developing countries, where there is an increasing trend toward local procurement regulation by government. Given the aims of the WTO, when such measures are implemented, they **should be designed to support the development of an internationally competitive industry**, rather than to provide ongoing protection for uncompetitive industries. The following box provides some background on the WTO's provisions relating to Trade-Related Investment Measures (TRIMS), in particular local procurement.

Box 20. WTO provisions and local procurement

The Agreement on Trade-Related Investment Measures (TRIMs) deals with the elimination of measures applied to foreign investment that may have a trade-distorting or restricting effect, such as local content requirements, trade-balancing requirements, and import and export restrictions. The TRIMs agreement applies only within the scope of the General Agreement on Tariffs and Trade (GATT), and restricts the measures which WTO members may take to support local procurement (all West African countries are members of the WTO except Liberia, which has applied for accession).

The agreement on TRIMs views measures regulating FDI that are contrary to the “national treatment” provisions of GATT as having a trade-restricting or distortionary effect. As such, the TRIMs agreement prohibits the application of such measures and requires that any such measures be eliminated. These national treatment provisions require that:

- No internal taxes, laws, regulations, or requirements affecting the internal sales of goods that afford protection to domestic production should be applied.

- Imported products should be accorded treatment no less favorable than those of domestic origin.

TRIMs also notes that such measures should be eliminated not only where they are “obligatory in nature,” but where their “compliance is necessary in order to obtain an advantage.” The requirement to purchase or use products of domestic origin is provided as an illustrative example of a measure which would be contrary to the TRIMs agreement. It should be noted that the emphasis here is on origin of goods, rather than on nationality of ownership of the producer. The application of the TRIMs agreement to local procurement was tested through the Panel Report on Administration of the Foreign Investment Review Act, which involved consideration of requirements by the Canadian government for foreign investors to meet certain local procurement requirements in order to enter into purchase agreements with the government. On consideration of opposition from the United States, the review panel found that requirements to give preference to either goods of Canadian origin or of Canadian suppliers, where these are “competitively available” or “reasonably available,” were inconsistent with GATT.

The General Agreement on Trade in Services (GATS) applies to trade in services. While the TRIMs agreement does not apply to GATS, GATS does prohibit any measures that create more favorable competitive conditions for domestic service suppliers than for external service providers, for specific services indicated by each member.⁸⁵ The indication of specific sectors for which the member commits to compliance with GATS, as well as the allowance to include specific limitations, means that there is a greater level of flexibility for members under GATS.

The requirement to eliminate TRIMs has met with opposition and frustration from developing countries, as these are seen as one of the few tools for enhancing economic development benefits from foreign investments.⁸⁶ This frustration led to the modification of the agreement on TRIMs by Annexure F on Special and Differential Treatment of the Doha Work Programme Ministerial Document (2005), which does make some concessions to developing countries and least-developed countries (LDCs):

- It provides for a transition for eliminating TRIMs of five years for developing countries and seven years for LDCs, as opposed to two years for a developed country member. The

⁸⁵ For example, Ghana has made commitments to liberalizing trade in services in the following sectors, subject to specific limitations: construction, health, education, tourism and travel-related services, maritime transport financial services, and communication services. Limitations applied include minimum capital outlay for services provided through commercial presence in Ghana, limitations on work permits for provision of services through the presence of natural persons, minimum equity interest held by Ghanaian nationals (for insurance services provided through commercial presence), or requirements for joint ventures (specified telecommunications services provided through commercial presence).

⁸⁶ United Nations Conference on Trade and Development. (2007). Elimination of Trims: The Experience of Selected Developing Countries.

Council for Trade in Goods may also extend this period for LDCs where the member is experiencing difficulties implementing the provision (all West African countries except Nigeria, Mauritania, Ghana, Côte d’Ivoire, and Cape Verde are designated as LDCs by the WTO).

- It allows for the introduction of new measures that deviate from TRIMs obligations, limited to a period of five years, provided that these are eliminated by 2020.

Furthermore, developing country members are allowed to make temporary deviations for reasons of providing economic assistance as covered in Article XVIII of GATT 1994. This article recognizes that members whose economies “can only support low standards of living and are in the early stages of development” may be justified in taking protective measures against imports where these ultimately contribute to the objectives of GATT. A further general exception applicable to all members is where restrictions are necessary to “protect public morals”—while this does not seem to have been applied in a local content context, it has been suggested that measures seeking to redress previous immoral policies could be covered by this provision.

Despite the preceding TRIMs, GATT, and GATS provisions, many countries have in practice resisted eliminating TRIMs; in fact there is an increasing drive toward implementing measures to support local procurement. Australia, for example, has linked access to government grants and tariff exemptions to local content, and South Africa has set local content procurement targets through the Mining Charter. More widely, a number of African countries have implemented empowerment policies, including reserving activities in certain sectors for nationals, empowerment funds, and preferred employment of targeted citizens.⁸⁷

6.2.2 Recommendations for national governments to increase local procurement

Drawing on global practice, stakeholder consultation, and analysis, this section provides recommendations for national governments to increase local procurement in the following areas:

1. Setting the policy framework for supporting local procurement
2. Formulating regulations for supporting local procurement
3. Promoting linkages and investment along the mining supply chain
4. Undertaking wider measures to create a supportive enabling environment

There also needs to be ongoing evaluation of these support efforts, together with monitoring of the level of local procurement (see Section 4 for a discussion on

⁸⁷ Kruger. (2011). Empowerment Policies in SADC and Agreement Design. TRALAC Trade Brief.

defining and measuring local procurement). These areas are discussed in greater detail below.

1. Setting the policy framework for supporting local procurement

An initial step for national governments to support local procurement is to engage with stakeholders at both a national and regional level, to discuss potential benefits and approaches to supporting local procurement. Key areas of engagement would include developing approaches to defining and measuring local procurement (see Section 3 and Appendix A for further detail) in a way that captures the benefits of local procurement in terms of increased value addition and participation of local citizens.

Drawing on stakeholder consultation, national governments can then formulate broad policies in support of local procurement. When formulating policies, it is recommended that national governments consider the following:

- Key support required and roles of the mining sector, national governments, and other support entities
- Identification of key policy levers (e.g., award of exploration and mining permits)
- Implications for regulatory framework (see following discussion for recommended regulations)
- Compatibility of policy objectives with nature and lifespan of mining investment, including commitments to mine development and production, as well as estimated life of mines
- Alignment with other policies linked to local procurement, including oil and gas procurement and public procurement
- Approach to supporting procurement from within the region and collaboration with regional member countries on growing local procurement across the region

2. Formulating regulations for supporting local procurement

Based on the broader policy framework, and again in consultation with stakeholders, national governments can then develop regulations to support implementation and realization of policy objectives. It is suggested that national governments could formulate regulations as follows:

a. Require mines to submit a local procurement plan

- Adopt a framework for measuring local procurement (it is recommended that there be a consistent approach across the region) to be applied in local procurement plans.
- Develop regulations requiring mining companies to submit local procurement plans to ministries of mines relating to the country of investment as well as the region. These would be monitored through initial self-assessment and periodic

verification by the appropriate authority. Suggested reporting could cover:

- Overall statement/vision
- Targets for local procurement across identified indicators (short, medium, and long term)
- Overall strategy to achieve targets
- Key products and services targeted for local procurement and identified opportunities for local procurement and specific measures to support these
- Support to be provided for suppliers, including broadening access to opportunities, technical support, and financial support (see Section 6.3 for further detail)
- Monitoring and evaluation systems for level and nature of local procurement and support efforts
- Current performance against indicators (spend/number of contracts across capital and operational by categories of local procurement)
- Action plan
- Required timings for submission of local procurement plans (Note: It is recommended that these be required as early as possible in the exploration and mine development process, ideally as part of a mining company's application for exploration and extraction permits and concessions.)
- Requirements for regular reporting on local procurement plans (and updates to planning), including regularity, content, etc.
- Implications for mines should they not submit local procurement plans or annual updates—these could include suspension of eligibility for customs tariffs exemptions
- Process for review and approval by the national regulating body
- As part of developing and implementing local procurement plans, mines could also be required to implement a number of minimum support commitments, such as broad advertising of opportunities
- Develop guidelines for preparing local procurement plans (including that this should be through a consultative process)
- Develop a process for feeding into and aligning national regulations with guidance to be developed at a regional level and for sharing local procurement plans with other national governments through regional platforms

Box 21. Global practice: Submission of support plans

Australian Industry Participation National Framework—submission of an Australian Industry Participation Plan⁸⁸

The Australian Policy on Local Content requires that for mining companies to be eligible for tariff relief on goods not deemed to be manufactured in Australia, an Australian Industry Participation Plan (AIPP) must be approved by AUSIndustry. AIPPs must show evidence of consultation with Australian manufacturers to determine existing local capacity (possibly through the Industry Capability Network).

Criteria for approval of an AIPP include details of: employment creation; skills transfer; regional economic development; technology transfer and R&D; adoption of global best practice standards; **integration of domestic suppliers into international supply chains**, and strategic partnering.

Brazil: awarding of exploration and production licenses

The Brazilian agency responsible for licensing exploration and production concessions holds licensing rounds in which all interested companies, including Petrobras, can compete for oil and gas exploration and production concessions in specific exploration blocks. In addition to their minimum work program, bid submissions are evaluated on the basis of **local content**.

Nigeria: Local content plan submission⁸⁹

The Nigerian Oil & Gas Industry Content Development Act requires investors in Nigeria's oil and gas sector to submit a local content plan and R&D plan to the Nigerian Local Content Monitoring Board committing suppliers to achieving minimum levels of local content. The Act also specifies products and services that should only be procured in Nigeria—these include insurance, legal services, and fabrication and welding.

The Act also specifies preferences to be applied when assessing tenders, as follows:

- Where bids are within 1% of each other at the commercial stage by price, the bid containing the highest level of Nigerian content shall be selected, provided the Nigerian content is at least 5% higher than its closest competitor.
- The award shall not be solely based on the principle of the lowest bidder where a Nigerian indigenous company has the capacity to execute; the company shall not be disqualified on the basis that it is not the lowest financial bidder, provided the value does not exceed the lowest bid by 10%.

The Petroleum Inspectorate is empowered to revoke licenses should companies fail to meet local content commitment.

⁸⁸ Warner. (2011). Do Local Content Regulations Drive National Competitiveness or Create a Pathway to Protectionism? Local Content Solutions Briefing #5; p.8

⁸⁹ Okusami, D. (2010). An Overview of the Nigerian Local Content Act. Presentation given at the Africa Energy Week Conference, Cape Town, South Africa, 29t September 2010.

b. Reduce concessions on import tariffs and duties

- Develop 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) and set timings and guidelines for applying a regional rather than national mining list (this would ideally mean applying a list developed at a regional level through WAEMU/ECOWAS processes, but could also involve removing items from a national list that are available regionally).
- Develop regulation that provides for development of a tiered mining list and application of the list to 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).
- Implement 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 communicate to regional organizations. 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).
- Develop regulation to extend customs exemptions based on a regional mining list to local suppliers that predominantly supply the mining sector, so that mining suppliers do not have to rely on mining supply 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, mining).

c. Allocate revenues from mining to support local supplier development

- In consultation with relevant stakeholders, consider allocating a portion of mining sector revenues to a suppliers' development fund. This could be based on a sliding scale linked to commodity prices or linked to value of procurement by mining companies considered not to be local.
- Funding could be made available for:
 - Equity and debt funding for suppliers
 - Feasibility studies and related analysis
 - Subsidies on technical support, training, and standards and certification for local suppliers
- Develop policy and regulation to support implementation, covering the following areas related to the management of the fund:

- Sources of funding—these could be: i) an allocation of existing funding streams (e.g., royalties or import tariffs, or ii) an additional contribution by mining companies (this could be linked to procurement expenditure on “foreign” suppliers)
- Principles to guide the operation of the fund, including sustainability of funding, targeted beneficiaries and intended impact, additionally of funding, eligibility (e.g., capital investment, feasibility studies, subsidies for skills, etc.), format of funding (e.g., matching grant, loan funding, equity funding, etc.)
- Process for and roleplayers involved in managing the fund (e.g., private sector financial service providers)

Box 22. Nigerian Content Suppliers Fund

The fund was set up as part of the Nigerian Oil and Gas Industry Content Development Act in 2010, and requires oil and gas companies to pay 1% of total contract sum awarded in the upstream sector into the Nigerian Content Development Fund.⁹⁰

- Nigerian Content Suppliers Fund is being set up with global and local financial institutions participating
- The fund provides local companies with financing to enable expansion and growth necessary to compete for work in the industry
- The fund is tailored specifically to the needs of Nigerian oil and gas service providers
- More than 50 local companies with contracts in hand have applied for the fund in an ongoing process

3. Promoting linkages and investment along the mining supply chain

- Support and participate in joint regional promotion of opportunities at mining/mining supply conferences, e.g., a West Africa mining supply day. This can be done in collaboration with foreign economic representatives/bilateral chambers of commerce and export support organizations in countries with mining supply industries to support investment promotion and links with local suppliers.
- Ensure sufficient skilled staff work permits are available for mining suppliers investing in the region (although countries may require longer-term commitments to meeting minimum local staff requirements).

⁹⁰ KPMG. (2010). Nigerian Oil and Gas Industry Content Development Act.

4. Undertaking wider measures to create a supportive enabling environment

In addition to the preceding measures, when implementing their broader roles of promoting and facilitating investment in mining, it is recommended that public sector entities consider the implications of mining concessions on local procurement. These include implications for:

- Activities and required timings to be carried out by mines, which present opportunities for local procurement. These include:
 - Exploration expenditure for exploration licenses
 - Environmental mitigation and rehabilitation measures and required expenditure
- The life of mines—where favorable tax concessions are awarded in the short term, this may reduce the lifespan of mining activity, thereby reducing the time frame within which mining can be used to catalyze development of an industrial and services supply base.

Commitment of mines to invest in broader infrastructure development—this investment also represents an important opportunity for local supplier development. It is recommended that requirements for local procurement be extended to infrastructure development commitments. For example, investment in rail, port, and power infrastructure linked to iron ore, bauxite, and manganese investment presents opportunities for local suppliers across a range of areas, including construction, civil works, fabrication, supply chain services, engineering and design, etc.

More widely, the public sector can support local procurement through ensuring a supportive enabling environment. This includes, among other things, infrastructure and services provision, support for standards and certification to an international standard, and facilitating regional trade:

- Infrastructure and services provision, for example:
 - Provision of serviced industrial land for mining supply companies or clusters
 - Development of dedicated electricity supply to investors in large-scale, power-intensive mining supply industries
- Facilitation of regional trade, including:
 - Removal of disproportionate/arbitrary penalties for incorrect customs documents
 - Withdrawal of transit fees, unless linked to infrastructure or service delivery
 - Provide support for upgrading trucking industry
- Reform of application of taxes, tariffs, and duties, where taxes are applied which are inconsistent with audited financial statements
- Support investment and technical support from the West African Diaspora

- Place and enforce bans on illegal export of scrap—this is a particular challenge for the grinding media industry, where local availability of steel is undermined by illegal exporting of scrap (e.g., in Ghana)
- Provide support for standards and technical support, including accreditation of certification bodies
- Incentivize “citizen development” through commitments to local education and training in mining industry as part of mining agreements. For example, Trinidad and Tobago write citizen development clauses into oil and gas contracts by: i) setting a number of scholarships for the company to fund; and ii) stipulating a dollar value to be contributed toward a wider training fund.⁹¹
- Provide continued support for development of “base” industries—steel, petrochemicals, textiles, agriculture, and agri-processing

Governments can also be an important “**second buyer**” in certain industries, in particular design and engineering and construction across various infrastructure sectors, including transport, electricity, and water. This would promote enterprise growth and sustainability. However, local service providers indicated that they avoid government contracts because of a lack of confidence in the fairness and transparency of the tender process, as well as poor payment record by governments.

6.3 THE ROLE OF MINING COMPANIES

Mining companies can build on existing support efforts by broadening and formalizing their assistance for local procurement. This could be at a company level, as well as through a collective approach coordinated by a Chamber of Mines, or, in countries where there is no Chamber of Mines, a coordinating body established for this purpose.

Drawing on this approach, along with other examples of global practice, this section provides recommendations for mining companies to increase local procurement, in the following three areas:

1. Identifying and broadening access to opportunities
2. Providing technical support to suppliers
3. Providing financial support to suppliers

There also needs to be ongoing evaluation of these support efforts, together with monitoring of the level of local procurement (see Section 3 for a discussion on defining and measuring local procurement).

⁹¹ Stakeholder interview—Mr. Anthony Paul, Permanent Local Content Committee (Trinidad & Tobago)

These three areas are discussed next.

1. Identifying and broadening access to opportunities

Access to opportunities is a key challenge for suppliers, particularly as there is often limited interaction between the mining companies and local business communities. Mining companies and their primary contractors tend to source goods and services from companies with which they have established relationships, often from their home countries (e.g., South African mining companies often procure services from primary contractors with which they have worked previously on projects in South Africa). Mines also face challenges when broadening access to opportunities, including limited awareness of local suppliers' capabilities. Some of the challenges to accessing opportunities are:

Table 14. Challenges to Accessing Opportunities for Mining Companies

Suppliers	Mining companies
Limited knowledge of mine needs among local business communities	Limited knowledge of suppliers' expertise and capacity
Limited access to information on opportunities: <ul style="list-style-type: none"> • Poor access to communication infrastructure and technologies, including access to email (although mobile phone use and penetration is high) • Language difficulties (in particular for local communities, or between English and French) 	Both mines and primary contractors (e.g., EPCs) tend to have established relationships with existing international suppliers and subcontractors
Where contracts are tendered by regional/global corporate offices, local suppliers are further removed from information and access to the opportunity Where primary contractors source services from subcontractors, local suppliers may also be further removed from the opportunity Limited ability to respond to opportunities, including: <ul style="list-style-type: none"> • Difficulties in forming relationships with primary contractors where these may be based in other regions • Short response times 	Established systems of sourcing: <ul style="list-style-type: none"> • Established means of communication with suppliers, mostly by email and phone • Global systems used for procurement, e.g., e-procurement Administrative difficulties of broad, competitive tender processes, in particular for nonspecialized goods and services, e.g., handling a large number of enquiries related to stationery or office equipment supply Centralized procurement or procurement decisions made at regional/global head offices, in particular for main cost items and

Suppliers	Mining companies
<ul style="list-style-type: none"> • Difficulty accessing hard copy documents that may be made available at corporate headquarters rather than mine sites <p>In some cases, suppliers may also have limited interest in supplying to the mining sector, e.g., in Senegal, established local companies for which mining is a small part of their market may not be interested in adjusting products to supply to mines</p>	<p>bulk commodity items</p> <p>Certain inputs required to be supplied by well-known international firms, e.g., feasibility studies, some ore analysis (in particular during exploration)</p>

It is recommended that broadening access to opportunities for suppliers deal both with providing information on mines' *ongoing* needs, to help both local and international suppliers to identify potential opportunities for establishing and/or expanding their capacity within West Africa, and with providing broad access to *specific* opportunities, e.g., RFQs.

This could aim to provide full, fair, and reasonable access to opportunities (as shown in the Australian example that follows) while being sure not to raise unrealistic expectations among local suppliers.

Box 23. Full, fair and reasonable access—Australian Industry Participation National Framework⁹²

The Australian Policy on Local Content aims to eliminate any disadvantages for domestic suppliers, by ensuring “full, fair and reasonable” access to opportunities for capable Australian suppliers.

The core definitions are:

- **Full:** domestic industry has the same opportunities as other global partners to **participate in all aspects** of an investment project (e.g., design, engineering, project management, professional services, IT architecture)
- **Fair:** domestic industry has the same opportunities as global suppliers to compete on projects on an **equal and transparent basis**
- **Reasonable:** tenders are **free from nonmarket burdens** that could rule out domestic industry, and they are **fairly structured** so that domestic industries can participate.

Recent plans to promote local content include removal of 5% tariff reductions on imported materials for projects worth AUS\$2bn or more, unless companies provide equal opportunities

⁹² Warner. (2011). Do Local Content Regulations Drive National Competitiveness or Create a Pathway to Protectionism? Local Content Solutions Briefing #5, p. 8.

for Australian manufacturers. Also, mining companies will be required to list opportunities on a public website.⁹³

a. Identifying opportunities for local supply

Identifying opportunities where local suppliers can participate is not a straightforward task and is dependent on a wide variety of factors. Global approaches tend to use a combination of assessing mine demand, assessing local supplier capacity, and identifying ways that capacity can be improved or required inputs can be adjusted to support local supply:

Box 24. Identification of opportunities: approaches from global practice

Brazil's PROMINP program: identification of opportunities⁹⁴

- In identifying opportunities for local supply to Santos Basin oil and gas developments, PROMINP considered:
 - Total projected investment over 20 years
 - Existing and projected local supplier capacity
- Opportunities were identified in the following categories, according to capacity of local suppliers:
 1. Local suppliers are already capable
 2. Local suppliers could be capable if supported by international contractors and manufacturers
 3. No current competitive local capability, and a need to attract foreign direct investment
- For the third category, work was “bundled” together, and repeatable designs were used where possible, to reduce risks and lower costs of investment by international manufacturers.

Product standardization was used successfully for encouraging investment in developing local capacity through supporting realization of economies of scale. Standardized products help to give both international companies and local companies more certainty around market demand in the medium term (in particular where contracts are “bundled”), as well as reducing costs (e.g., reduced product design and development costs, potentially reduced equipment costs, etc.).

ExxonMobil's Local Content Plan In Papua New Guinea

Implementation of ExxonMobil's Local Content Plan started with identifying opportunities at

⁹³ Mining Weekly. (2011). Gillard Pushes Miners to Use More Local Content in Projects.

⁹⁴ Warner, Michael. (2010, June). Role of Procurement Strategy in Effective Local Content Management.

the project phase (not at the production phase) so that the two- to three-year lag before production commences can allow local suppliers to gather the relevant technical skills. Business opportunities were identified and ranked using a three-tier system where:

- Level I: represents basic services and labor requirements
- Level II: represents intermediate services and contractor requirements
- Level III: is reserved for highly critical, complex, specialized service/construction activities

Anglo Ferrous (Brazil)—Local Business Survey⁹⁵

In order to receive public approval for a new development, Anglo Ferrous completed a socioeconomic assessment and business development plan for the region—Minas Gerais. Anglo Ferrous profiled the companies located in affected communities and assessed their capabilities. The following information was gathered for a random sample of 365 companies (industrial, commercial, and services):

- Company profile
- Management and human resources
- Production
- Clients and market
- Supplier relations
- Finance and cost
- Company growth

The data collected was used to develop a business action plan in collaboration with local community leaders. The plan promotes economic development through the supply of products and services to Anglo Ferrous Brazil, and has been successful in attracting raw material and equipment suppliers to the region.

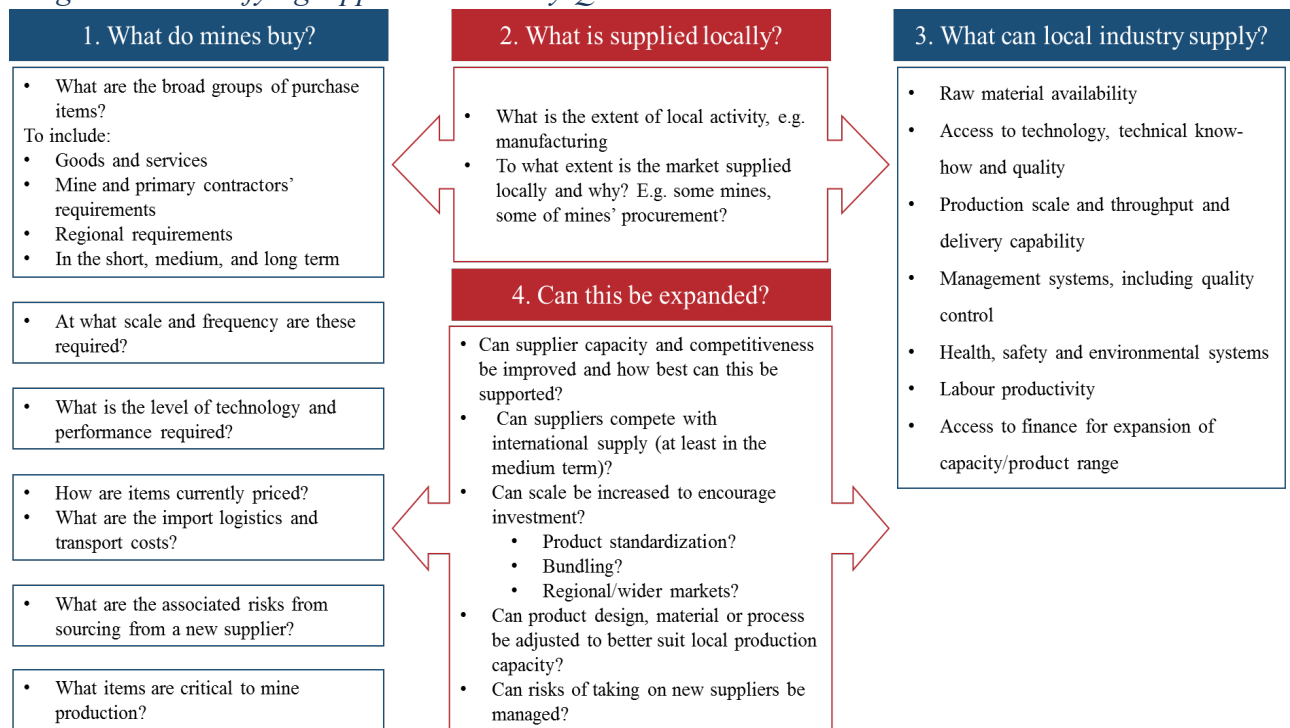
Other approaches to identifying opportunities include hiring **dedicated staff or establishing dedicated departments**, such as Diavik Diamond Mines in Canada, which hired a venture development manager especially to identify potential local business partners. Similarly, in South Africa's Anglo Zimele Fund, investment opportunities are identified by the fund's business development officers. Local stakeholders (e.g., chambers of commerce, industry associations, local government) are also involved in assessing the capacity of local SMEs and engaging with the procurement and operations units of the mining company to identify opportunities. In Chad, ExxonMobil's procurement and operations team discussed future opportunities with the Chad Chamber

⁹⁵ CSRM. (2010). Procuring from SMEs in Local Communities: A Good Practice Guide for the Australian Mining, Oil and Gas Sectors, p. 22.

of Commerce for a period three to five years. Another approach would be to integrate identification of opportunities into social and economic impact assessments. By defining local content at the project stage, it allows local capacity building to be undertaken so targets can be met once approvals and permits are granted⁹⁶ (although care should be taken to ensure that the focus remains national and regional, rather than just on opportunities for communities surrounding the mine).

Drawing on the benchmarking, as well as the process currently underway in Ghana, the following diagram shows some of the key questions that need to be answered in order for any country to make an assessment of where opportunities may exist. It should also give a sense of level of support required for technology, management and supervision, financing, time frames for the opportunity, and considerations for tender or RFQ structuring.

Diagram 9. Identifying Opportunities: Key Questions to Consider



Approaches to identifying opportunities should take into account the following:

- **Primary contractors and key suppliers' procurement as well as mines' procurement**, for example:

⁹⁶ Stakeholder interview: Dr. Ana Marie Esteves, Community Insights Pty Ltd.

- Operational procurement: mining contractors (e.g., key items procured include spare parts, repair and maintenance services, fuel, uniforms and PPE, explosives, drilling services, ground support in the case of underground mines) and mine camp management (e.g., key items procured include food and beverages, cleaning supplies, maintenance and repair services)
- Mine feasibility and development: Design and engineering companies and EPCs, with subcontracts including studies, civil works, construction, fabrication, installation, commissioning, etc.
- Other key suppliers include laboratory analysis (e.g., inputs required include crucibles supply)
- **Procurement across the region**
- **Procurement by wider markets**, for example:
 - Oil and gas, where common/related products and services include logistics and transport, camp management, civil works and construction, uniforms, PPE, metals fabrication, repairs and maintenance, feasibility and environmental studies, design and engineering
 - Infrastructure development, maintenance and repairs, including electricity, telecommunications, transport, water, where common/related products and services include civil works, design and engineering, construction and installation of equipment, maintenance and repairs
- **Time frames of mine input needs**, including:
 - Life of mine
 - Ongoing operational needs, including any changes expected due to changes to mining and processes
 - Capital projects, including mine development and expansions, including forecast timings

b. Gathering and sharing information on identified opportunities and mine needs

- Contribute to a regional database of local suppliers (see above), to include information on company contacts, products and services, and capacity.
- Gather information on ongoing operational needs and capital projects.
- Perform high-level assessment of potential opportunities for local suppliers—see Section 5 for further detail (or at a minimum indicate products that are unlikely to provide opportunities for local suppliers, e.g., OEM products, and products which are already procured locally from large, established suppliers, e.g., cement in Ghana).

- Share information through:
 - Supplier days, which could include presentations on mine procurement and supplier exhibitions
 - Online, e.g., through the Ghana Chamber of Mines website
 - Hosting West Africa mining supply days linked to global mining conferences to promote investment by suppliers

c. Broadening access to tenders and RFQs

- Broaden requests for quotations/tenders to the local supplier database (for relevant product categories), which could be through a combination of online requests and emails/mobile texts, e.g., including online searching functionality and email/mobile text alerts to relevant suppliers.

Box 25. Development of supplier databases: practices in Chile, Southern Africa, and Chad

The Industrial Association of Antofagasta (AIA) and the mining companies in the region developed a supplier registry system, the Goods and Services Supplier Company Classification System (SICEP). It provides an up-to-date database of suppliers/contractors and includes information on their compliance with legislation, and environmental, social, and safety aspects. It has been used by Xstrata, BHP Billiton, and Barrick.

In South Africa, Tanzania, and Malawi, SBP, a South African NGO, compiled supplier databases as part of its Private Sector Initiative (PSI) model. These databases are then shared between groups of large firms working in the same geographical region. This example of cross-industry development is important as it allowed SME diversification and did not mean a reliance on one sector of the economy.

Elsewhere, it is local stakeholders (e.g., chambers of commerce, industry associations) or multinational donors (e.g., IFC) that compile the databases, such as in Chad where information for over 1,000 vendors was collected to form a supplier database for ExxonMobil.

- Provide access and training to communication platforms and help companies to prepare responses, e.g., through dedicated staff to support local procurement/joint procurement support offices.
- Allow sufficient time for supplier responses.
- Provide feedback on tender/quotation outcomes, including shortcomings and level of competitiveness.
- Broaden access to supplying primary contractors and other mining service providers:
 - For capital projects, provide access to local supplier database as part of requests for tenders, so that potential primary contractors can form

relationships with local suppliers for project contracts.

- For primary contractors' operational expenditure, require that they broaden access to procurement to the supplier database.

Box 26. Broadening access to opportunities: approaches from Chad and Australia

eProcurement by ExxonMobil (Chad)

To provide access to opportunities via its eProcurement system by local SMEs, ExxonMobil, together with the IFC, provided a range of support as follows:

- The IFC set up an Enterprise Centre in Chad to provide support to SMEs, including capacity building, access to finance, and e-procurement training.
- Based on an initial supplier assessment, Exxon recommended suppliers for training at the IFC-managed training facility. The training was carried out by the Chad Chamber of Commerce. The active role of the Chad Chamber of Commerce, which included assessment of the supply base, supplier training, and advertising opportunities, financed by IFC, was seen as a key success factor. It helped to avoid any perceived bias and contributed to sustainability of local enterprise support.
- The eProcurement training was conducted by staff at the Enterprise Centre over two to three weeks.
- SMEs were initially charged US\$50 for eProcurement training, but the fee was removed when unsuccessful SMEs became dissatisfied.
- Poor facilities and Internet connection at the Enterprise Centre was addressed by ExxonMobil by providing hardware. It now has a dedicated section for its training center for eProcurement.
- Potential suppliers to Exxon could only bid in areas in which they were qualified, ensuring an efficient bidding process.
- Feedback was provided to SMEs who did not win contracts, specifying technical and commercial reasons for their failure, and the Enterprise Centre then offered further training and one-on-one coaching for SMEs to build their capacity and become more competitive.
 - The Enterprise Centre offered training in six business-related modules and charged 2,000 CFA (approx. US\$4.50) for each training module.
 - The Centre also provided mentoring services to provide direct and focused input into SMEs' specific areas of weakness. The Centre charged 4,000 CFA (approx. US\$9) for six hours of mentoring and 25,000 CFA (US\$56) for three months of mentoring (two hours per week).
- In Chad, subcontractors such as Catering International Services (CIS), Kellogg Brown Root (KBR), Schlumberger, and Tchad Cameroun Logistique (TCL) were all **contractually obliged** to participate in the program and use the eProcurement system. Involving primary contractors was a key lesson which ExxonMobil has applied to local supplier development in its new liquid natural gas project in Papua New Guinea, where there are local supplier development stipulations in their primary contractor agreements at the project stage.

See Appendix E for further detail.

Rio Tinto Argyle Diamond Mine (Australia)⁹⁷

The Argyle Diamond Mine has a Mine Participation Agreement with Traditional Owners and a management policy that deals with Business Development and Contracting, with a stated aim of increasing business opportunities linked to the mine’s operations—particularly among the local Aboriginal community businesses. As part of this, Argyle must notify a Business Development Taskforce, comprising “traditional” owners and company representatives, if tenders are to be put out. For larger tender amounts (over \$250,000) bidders must also demonstrate how they will involve traditional owner businesses in the project, how they will employ/train local owners, and the benefits they will provide to traditional owners.

d. Incentivizing and supporting participation of local suppliers in tenders

- Develop generic prequalification criteria that are accepted by a number of mining companies to ensure consistency in SME qualification for tender participation⁹⁸
- Develop tender information documents and terms of reference to support inclusion of local procurement:
 - Identify and include in specification requirements areas of participation by local suppliers or specify a minimum local presence required. These could also be separated from the main contract, and then tendered jointly by the primary supplier and the mining company to local suppliers.
 - Include minimum proportion of staff days to be spent within the region.
 - There may also be a case for unbundling where this could make opportunities more accessible for SMEs with limited delivery capacity.
- Include level of local procurement (of the supplier) as an evaluation criterion for tender awards; this could include, for example:
 - Subcontracts to local suppliers
 - Services provided by staff based in the region full time
 - Level of permanent presence in the region
- Include requirements for primary contractors to assist in mitigating risks of bringing in local subcontractors, including:

⁹⁷ http://www.riotinto.com/ourapproach/17194_features_19021.asp: and CSRSM (2010), p. 29.

⁹⁸ Stakeholder interview: David Brereton, Centre for Social Responsibility in Mining.

- Training for local suppliers
- Liquidated damages
- Increased supervision and management by primary contractor
- Services provided by staff based in the region full time
- “Decision gates” where suppliers meet delivery milestones before work on subsequent project steps is awarded
- Open-book approaches allowing primary contractors to cover additional costs related to contracting local suppliers (e.g.. management and supervisory costs)
- Set goals for subcontractors, and monitor and enforce, e.g., with penalties based on level of local procurement achieved versus targets and independent monitoring, as used in encouraging procurement from BBEE and SMMEs in the construction of Dube TradePort in South Africa (see Appendix E for further details).
- Incentivize subcontractors to meet KPIs on local procurement through shared costs
 - For example, if the KPIs are met the costs of procurement are shared 50-50 between the subcontractor and mining company.
 - If KPIs are exceeded, 80% of costs are paid by the mining company.
 - If KPIs are not met, 80% of the costs are met by the subcontractor.

Box 27. Developing common requirements for supplier certification: Atacama mining cluster in Chile

The Atacama mining cluster (established in 2004, with support from 11 mining companies and the Atacama Region Development Corporation (CORPROA)) supports local procurement through its Mining Company Collaboration Committee (CCME), which is made up of mining staff responsible for procurement and contract administration. Through this initiative, mines have committed to harmonizing supplier requirements and designing a common supplier certification system.

Broadening access to opportunities—organizing the effort and stakeholder roles

- Developing a database of suppliers as well as gathering information on mining needs should be a **collective process** involving mining companies sharing information on suppliers, as well as primary contractors and other companies in the mining supply chain. This could be supported by a **development agency or association**, such as is the case in Chile where regional associations aim to link regional suppliers into mining supply chains. At a national level, this could be further supported by a chamber of mines, as is the case in Ghana, or, where there is no national chamber of mines, this could be facilitated by a forum established by mines for the purpose of supporting local procurement, e.g., a “procurement forum.” However, collecting information on mine needs at a **regional level** would be

preferable (although broken down at a country or mine site level) to encourage investment, and may also be easier for mining companies operating in more than one West African country and where some procurement may be done on a regional basis (e.g., AngloGold Ashanti, Randgold).

- Other **large purchasers**, Chambers of Commerce, local business associations, and business networks should be approached to participate in developing a supplier database.
- **Suppliers** need to contribute by:
 - Developing skills to access information about procurement shared via new communication technologies
 - Providing complete and accurate information as far as possible to supplier databases
 - Engaging in proactive marketing to mining companies
- This effort could also link into **public sector** efforts, including:
 - Support for SMEs through development of databases, including the Subcontracting and Partnership Exchange (BNSTP): Bourse Nationale de Sous-Traitance et Partenariat.
- Other **support entities** can play an important role, including:
 - Validation of supplier information and capacity (e.g., IFC, UNIDO)
 - Promotion of opportunities: agencies of ministries of mines, bilateral chambers of commerce/foreign economic representatives

2. Provide technical support to suppliers

Technical and managerial capacity is a challenge for local suppliers, which often may not be able to meet mining companies’ required standards of product quality and performance, warranty, and health, safety, and environmental practices. Some of the challenges to accessing opportunities are:

Table 15. Challenges to Accessing Opportunities for Suppliers

Suppliers	Mining companies
Lack of sufficient technical capabilities to meet standards required by mines	Risk of losses when critical items fail
Variability of product and service quality and poor quality control	Damage to reputation and negative public image from HSE incidents and accidents
Difficulties sourcing high-quality raw materials, where most raw materials and components need to be sourced internationally due to gaps in	Repeat procurement from existing suppliers—procurement from new suppliers may require approval from user departments,

Suppliers	Mining companies
<p>industrial capacity</p> <p>Limited available technical skills</p> <p>Often local products are perceived as inferior</p> <p>Low health, safety, and environmental standards and limited awareness of importance of health, safety, and environmental (HSE) practices to mines</p> <p>Additional costs to support HSE practices (e.g., equipment maintenance, training, PPE) may be deprioritized</p> <p>Low literacy rates and different languages make training difficult in some areas</p> <p>Poor management skills and organizational capacity, in particular small, owner-managed companies that may rely on one person for a range of functions</p> <p>Lack of formality, which is required by mines' procurement systems, e.g., company registration</p> <p>Poor links with international companies, and sometimes bad experiences dealing with international companies</p>	<p>which are familiar with existing suppliers</p> <p>For capital projects (and even some operations where mines have short lifespans), shorter-term nature of projects means that local suppliers may be less likely to develop sufficient capacity to supply within the schedule</p>

a. Provide technical support during contract delivery

- For indirect supply (via a primary contractor), develop tender information documents and terms of reference to include requirements for primary contractors to provide technical and management support to local suppliers. This could include:
 - Training in health, safety, and environmental practices
 - Targeted technical training
 - Mentoring for local supplier managers
 - Joint management and supervision by primary contractors and subcontractors, including joint quality control, monitoring of health, safety, and environmental practices
- For direct supply to the mines, provide support for improvement of product quality and performance by:

- Providing feedback on product/service performance
- Capturing suggestions for improvement from user departments on product/service performance and quality

b. Provide support for product testing and development

- Engage in joint product development/testing for selected products, including:
 - Support for tests and inspection of raw material quality (e.g., quality of scrap steel, limestone, etc.)
 - Sharing information on sources of high-quality raw materials or components
 - Testing products where potential negative impact on production is small and providing feedback to suppliers
- Engage in joint cost reduction programs to identify how raw materials or production can be modified to reduce costs for mining companies.
- Encourage partnerships between local suppliers and international suppliers, including:
 - Sharing information on available technology and facilitating links with local suppliers to existing international suppliers where required
 - Facilitating local supplier attendance at international mining and mining inputs shows (with support from governments); could be combined with investment promotion efforts outlined previously)

c. Support HSE certification

- Provide support for development of selected suppliers' HSE practices, including:
 - Inclusion of contractors in HSE training programs and briefings
 - Making available health, safety, and environmental staff for consultations
 - Where possible, develop joint training and awareness raising programs
- Allow lower HSE standards for local suppliers as long as there is a clear plan for raising standards to acceptable levels.
 - Use interim targets to assess ongoing improvements (explicitly linked to maintaining the product/service contract).

Box 28. Certification: Escondida

Escondida and ISO 14001 training⁹⁹

The Escondida mining company in Chile, along with the Chilean development agency CORFO, supported the certification processes of five SME suppliers for the environmental and social standard ISO 14001.

CORFO's program—PROFO—enabled SMEs to receive governmental financing to embark on a certification program. These funds were disbursed by CORFO-authorized regional operators SERCOTEC (a public organization) and CDP (a private organization) up to US\$68,000.

From 2000 to 2001, seven of Escondida's suppliers undertook the initial phase (PREPROFO), managed by SERCOTEC. This was 80% funded by CORFO, with the SMEs providing the remainder.

The PROFO project was undertaken in 2002 with CORFO providing 70% of the funding with the remainder provided by SMEs. Escondida made its **environmental consultants available to the SMEs** and offered **training workshops**. To avoid delays in the process, Escondida incentivized the SMEs to complete the accreditation by the end of 2002 by paying costs of the certification process not covered by CORFO in the third and final phase. CORFO funded 60% of the certification process.

Technical support for suppliers—organizing the effort and stakeholder roles

- Technical support for product and service delivery could be managed through a **technical support steering committee** that includes mining company officials (including mine user departments), primary contractors, and subcontractors, or support could be provided by individual mining companies/contractors themselves.
- **Small business support agencies** can be involved to provide technical and managerial support to SMEs; for instance, in Australia, Enterprise Connect and Indigenous Business Australia are government agencies which support local suppliers in mining (support measures include free business reviews, assistance with accessing grants, and assistance with prequalification questionnaires). Furthermore, support can be provided through a franchising arrangement—see Appendix E for a case study on a franchising model used in South Africa to support access by SMEs to public procurement opportunities.
- **Ministries of trade and industry**, with support from multilaterals, could provide support for supplier certification, including international accreditation of standards certification organizations, training programs, and subsidized costs. Governments can also collaborate with multilaterals (e.g., UNIDO), who can also provide technical support to local suppliers by running benchmarking programs to benchmark production quality and efficiency compared to international suppliers.
- **Private equity firms** (see financial support section below) typically provide

⁹⁹ Blanco. (2003). Escondida Mining Company in Chile: How Large Companies Can Contribute to Environmental Improvements in SME Suppliers and Contractors—the Case of ISO 14001.

technical/managerial support along with growth capital, including support for improving environmental, social, and governance standards.

3. Provide financial support to suppliers

Access to finance is a key challenge for many local suppliers, with many companies either taking on debt at high interest levels to finance expansion (for example, SMMEs reported 24% to 35% interest rates in Ghana) or deferring investment until savings are sufficient. This severely limits suppliers’ abilities to expand and makes them highly uncompetitive in comparison to international suppliers who are enjoying a significantly lower cost of financing.

Specific challenges facing suppliers and mining companies in relation to access to finance include:

Table 16. Access to Finance Challenges

Suppliers	Mining companies
High interest rates, e.g., 24% to 35%, makes local companies uncompetitive	Mines’ cost reduction practices place pressure on any programs to finance suppliers (despite the potential for a longer-term cost saving in some cases).
Low levels of collateral (combined with high levels of collateral requirements)	High risk associated with prefinancing—some attempts have resulted in nondelivery and significant cost to the mines.
Insufficient record-keeping and overall low levels of formality of businesses	Offering financing or preferred financial terms to one supplier (where a strong relationship warrants it) may cause pressure to provide for all suppliers.
No or limited credit record	
Financial institutions tend to focus on retail finance, and tend to have limited information about SMMEs	

Mining companies can (and do already in a number of cases) play an important role in addressing financing constraints experienced by local suppliers, including reducing perceived and actual risk for financiers, as well as by providing finance directly to suppliers. Mining companies can support financing for suppliers in the following ways:

a. Provide up-front capital and expedite payment of invoices

- For products, financing raw materials, where appropriate:
 - Where raw materials are not readily available locally, source these through separate contracts to reduce input cost requirements for small local suppliers.
 - Prefinance or prepurchase raw materials, in particular where inputs are

subject to price fluctuations, allowing mining companies to reduce costs and suppliers to avoid having to procure inputs at high costs.

- For service contracts, include a meaningful partial up-front payment/mobilization fee (e.g. 30%).
- Once delivery has been received and approved, payment processes could be started immediately:
 - Mining companies can also require primary contractors to pay subcontractors and other local suppliers immediately.
 - The payment process could take no more than five to seven working days from receipt of product or completion of service.

b. Support access to growth capital finance

- Engage with banks to support financing supplier capacity development:
 - Share information on suppliers with banks to reduce perceived risk
 - Develop processes to support financial capacity for delivering on purchase orders or contracts, e.g.,
 - Approval of business plans related to tender opportunities and prequalification for loans on award of specific contracts, up to a certain contract value
 - Consider the establishment of a working capital fund for suppliers, for which mines could approve and monitor withdrawals jointly with banks, and make repayments directly to banks on delivery by suppliers
- Finance development of local activity within supply chains, including:
 - Development of capacity in-house, with a view to spinning off activity once developed (e.g., lime production in Ghana)
- Make targeted direct equity investments in “core” suppliers to fund capital expansion (likely to be minority stakes)
- Finance development of local suppliers through contributions to private equity funds or coinvestment alongside private equity funds (combination of debt and equity financing)
 - e.g., Fidelity (focus on Ghana, Liberia, and Sierra Leone), I&P (focusing on Francophone countries), Manocap (focusing on Sierra Leone), Malimbe Capital’s planned SME Fund for Mali and Burkina Faso

Box 29. Anglo Zimele Development and Empowerment Initiative

The Anglo Zimele Development and Empowerment Initiative comprises three funds managed by Anglo Zimele Management Services. These funds aim to empower BEE entrepreneurs in

South Africa and are focused around three areas; i) finance for local junior mining companies; ii) enterprise development, and iii) supply chain development.

Technical support

- Supply Chain Development Fund—in successful entrepreneur applications for investment financing, Anglo Zimele’s staff provides support to the businesses through managerial, marketing, operational, and financial assistance. Technical mentors are also assigned (individuals or companies) for the transfer of specific knowledge or skills.

Financial support

- Financing for local junior mining companies provided through *Anglo Khula Mining Fund*—a joint initiative between Anglo American and the publicly funded Khula Enterprise Finance.
- The Supply Chain Development Fund provides loans and equity financing upon approval of the investment proposal from potential SMEs. The equity stake of the fund is typically between 10% and 49% and requires an up-front financial contribution from the entrepreneur.

Impact

- Anglo Zimele currently invests in 39 SMEs with over 3,000 employees.

Lessons from Anglo Zimele

Success factors highlighted by the Anglo Zimele model include:

- **Flexibility**—debt-equity ratios are flexible and can be designed on a case-by-case basis; flexible financing mechanisms (unsecured loans) can also be used when appropriate.
- **Equity stake by fund**—by taking a stake in the SME, the fund takes more interest in the day-to-day operations of the company, and there is a co-sharing of risks.

Box 30. The Diavik Diamond Mine—Rio Tinto (Canada)

The Diavik Diamond mine is in a remote area in Northern Canada, where indigenous communities such as the Tlicho tend to have limited education and limited mining experience. Mining operations started in a highly politicized environment, with Tlicho land claims under negotiations. Rio Tinto actively sought partnerships with the government and communities to support local procurement.

Support included working with the Government of Canada, the Department for Indian Affairs and Northern Development (DIAND) in the form of the DIAND Govt of Canada Funding Partnership for Business Development, which offered equity injections for start-ups or acquisitions, funding to improve debt/equity ratings, and funding for ongoing business aftercare.

Providing financial support to suppliers—organizing the effort and stakeholder roles

- **Mines** clearly need to take a lead role in improved payment terms and prefinancing orders as well as in any direct equity investments.

- A **collaborative effort between commercial banks, private equity firms, development finance institutions** is required for an effective program of equity financing or a working capital fund for suppliers.
- **Suppliers** need to commit to maintaining proper financial records and formalizing all aspects of their businesses.
- **Other support entities** can play a role, including:
 - IFC leasing program
 - Development finance institutions, e.g., African Development Bank

6.4 THE ROLE OF CIVIL SOCIETY

Civil society can build on its existing efforts to support transparency and fairness in the mining sector to encourage increased local procurement.

Key roles for civil society organizations include:

- Monitoring and evaluation of mining company implementation of commitments to supporting local procurement and spend on local procurement (this could build on existing activities around contract monitoring, e.g., of production sharing agreements in the oil and gas sector)
- Advocacy for greater focus on local procurement and related support, e.g., increased training opportunities for affected communities and local population
- Information sharing, capacity building, and awareness building for government and regional organization officials, mining companies, education and training institutions, and local civil society (e.g., building on the Regional Extractive Industries Knowledge Hub)
- Facilitation of stakeholder dialogue by bringing together relevant stakeholders to exchange knowledge and collaborate on approaches to supporting local procurement

In playing this role, civil society organizations should aim to take a broad-based approach, which can generate more influence in terms of advocacy and promotion of local interests (for example, civil society coalitions involved in the National CSO Oil and Gas Platform in Ghana). Civil society organizations can also work to establish formal dialogue mechanisms with mining companies at a local level, such as the Atacama Commitment in Chile, to support collaboration and the building of trust and social capital through clear communication channels.

7 CONCLUSION ON SUPPORTING LOCAL PROCUREMENT IN WEST AFRICA

By setting out recommendations on the roles of regional organizations, national governments, and mining companies, this report aims to inform efforts of all stakeholders to support increased local procurement by the mining sector in West Africa. In particular, it aims to provide guidance to policymakers for establishing a policy and regulatory framework that motivates, guides, and monitors local procurement.

Developing a clear definition of “local procurement,” along with a framework for its measurement, is critical for formulating and implementing support that maximizes economic benefits. Currently, national governments and mining companies target local procurement mainly on the basis of national registration, ownership, or control; however, the extent of value addition and participation of citizens through management and employment are also key factors that contribute to the development of a sustainable supply base and broad economic benefits. Based on stakeholder discussion and research, this report sets out a framework for measuring local procurement that aims to encourage a shift from local involvement in trading of goods toward greater value add through manufacturing and service provision from a local base, as well as broader participation of local citizens. Furthermore, to support the realization of opportunities at a regional scale, national governments are encouraged to move toward a regional perspective for defining and measuring “local procurement.”

The large scale of mining sector activities and planned investment in West Africa (including associated infrastructure investment) provides a wide range of opportunities for potential suppliers. Opportunities range across services, equipment, consumables, replacement parts, and non-core goods required by the mining sector from resource assessment and exploration through mine development, mining, and mine closure. When assessed at a regional level, markets for mining inputs become more attractive for supply from a regional base, in particular where there is ongoing demand for products. Based on research and stakeholder input, this report identifies some of the opportunities for supplying the mining sector, including, for example, activated carbon, grinding media, and selected PPE. In doing so, it aims to provide a starting point for stakeholders from across national governments, regional organizations, the mining sector, and suppliers (both international and local) in the ongoing process of identifying opportunities and developing and implementing specific support steps required for realizing these opportunities.

In order to support realization of these opportunities, national governments and regional organizations need to establish a policy and regulatory environment that provides the levers and tools to stimulate, guide, and monitor local procurement and support efforts. Specifically, these include requiring mining companies to submit a local procurement

plan setting out current and targeted levels of local procurement, identified opportunities, and support efforts both to realize specific opportunities and to build capacity among the supply community more broadly; reducing concessions on imports that reduce competitiveness of local suppliers; and allocating funding toward funding and technical assistance for local suppliers. At a regional level, regional organizations have an important role to play in facilitating common approaches across countries as well as supporting procurement at a regional level—for example, by developing a regional list of suppliers and harmonized mining list for applying customs exemptions. Mining companies, too, have a crucial role to play in supporting access to opportunities and leveraging their significant technical and financial capacity to support the development of local suppliers.

At the stakeholder workshops in Guinea and Ghana, all stakeholders supported the drive to increase local procurement and recognized the need for a collaborative approach to drive local procurement. Going forward, continued discussion among stakeholders, drawing on and building from the issues and recommendations set out in this report, will enable successful implementation of policy and support measures. Also, stronger organizations and mechanisms for collaboration will support these efforts—for example, strengthening mining procurement forums, regional platforms for collaboration (both between mines and between national governments), and multi-stakeholder initiatives that involve wider stakeholders such as civil society organizations, finance institutions, and donors and multilaterals.

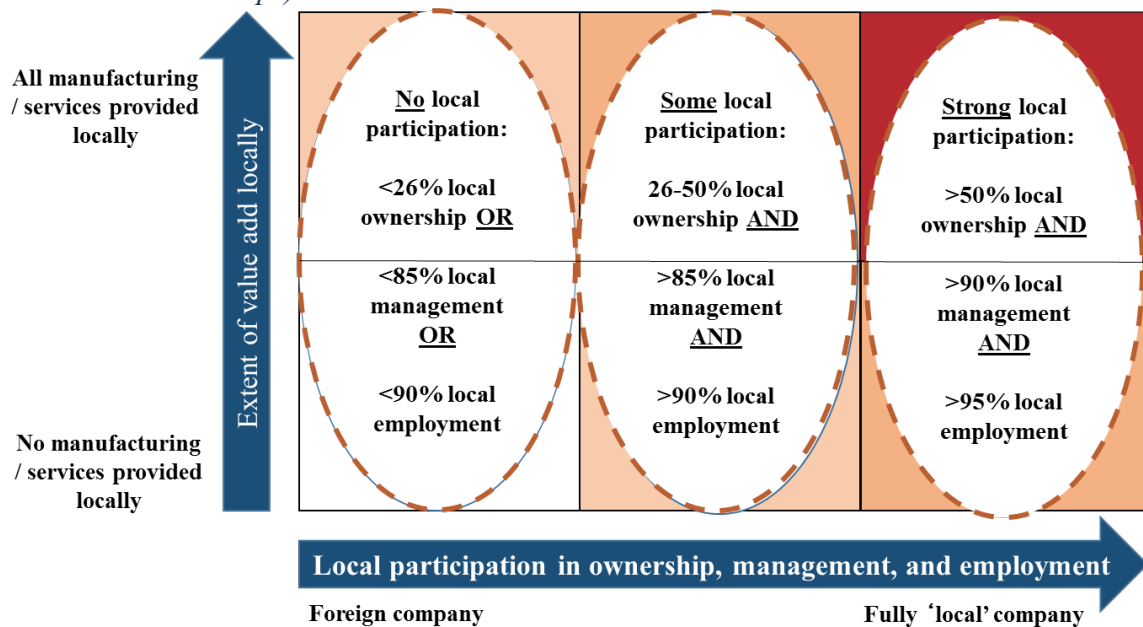
APPENDIX A: STAKEHOLDER INPUT ON LOCAL PROCUREMENT THRESHOLDS AND SPEND RECOGNITION LEVELS

As part of individual stakeholder consultations and workshops held in West Africa during the course of this project, **thresholds for local participation and spend recognition levels for capturing total procurement spend** were discussed. This appendix provides the initial conclusions of those discussions.

1. Suggested thresholds for local participation

As discussed in Section 3.3, thresholds for ownership, management, and employment need to be decided by the stakeholders in individual countries in order to define the levels of local participation. Initial conclusions from the workshops were as follows:

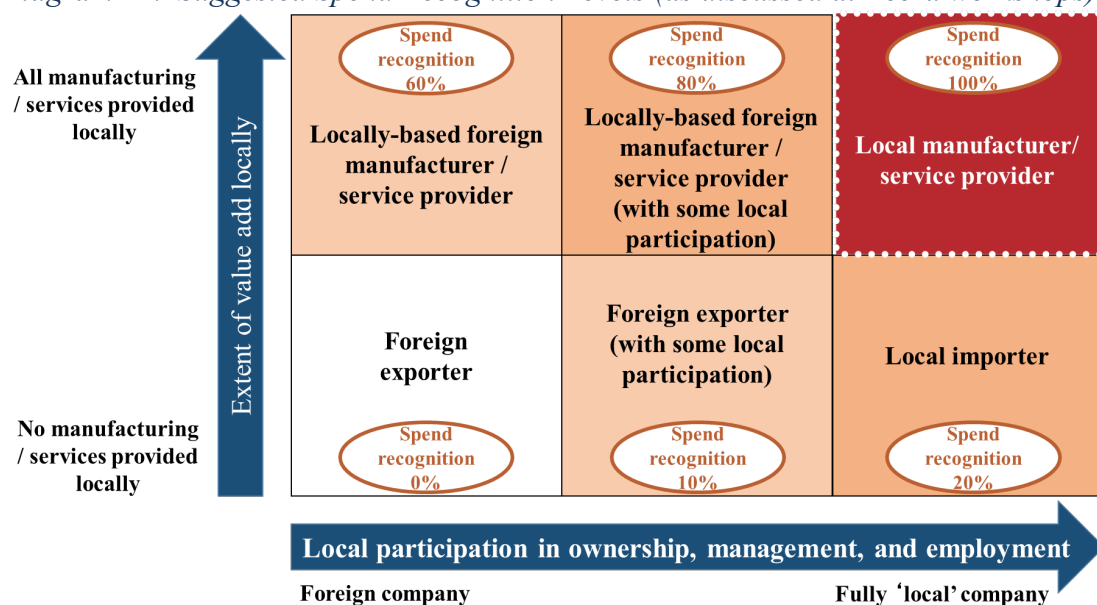
Diagram 10. Suggested Thresholds for Local Participation (as discussed at Accra workshops)



2. Suggested spend recognition levels

As discussed in Section 3.4, in order to arrive at a total local procurement spend, weightings for each category need to be decided. These weightings are effectively “spend recognition levels,” indicating what proportion of spend in each category can be “counted” toward local procurement. Initial conclusions from the workshops are as follows:

Diagram 11. Suggested Spend Recognition Levels (as discussed at Accra workshops)



The following table provides an example of how the different weightings could be applied in order to calculate total local procurement spend:

Table 17. Suggested Weighting for Calculating Total Local Procurement Spend (as discussed at Accra workshops)

Supplier category	Operational procurement spend by supplier type	Weighting	Local procurement spend
Foreign exporter	\$40m	0%	\$0m
Foreign exporter (with some local participation)	\$10m	10%	\$1m
Local importer	\$20m	20%	\$4m
Locally based foreign manufacturer/service provider	\$15m	60%	\$9m

Locally based foreign manufacturer/service provider (with some local participation)	\$10m	80%	\$8m
Local manufacturer/service provider	\$5m	100%	\$5m
Total	\$100m	N/A	\$27m

APPENDIX B: SUGGESTED FORMAT FOR A LOCAL PROCUREMENT PLAN

This appendix outlines key considerations for mining companies and wider stakeholders for approaching the development, implementation, and monitoring of the local procurement plan and sets out a high-level format for a local procurement plan, including areas for updating the plan and reporting on progress.

A clear local procurement plan will provide a tool for mining companies to identify objectives, set targets, identify opportunities and support requirements, and plan and organize efforts to support the realization of increased local procurement. A common approach to developing a local procurement plan among mining companies will not only support collaboration across mining companies, but will also provide regulators and wider stakeholders with a tool to support collaboration on support efforts, and to oversee and monitor progress. It is recommended that development of local procurement plans be the responsibility of mining companies' procurement departments, in consultation with senior management, end-user departments, capital project teams, CSI and HSE departments, and with wider stakeholders (including mines' primary contractors).

1. Executive summary

- Overview of the local procurement plan, including objectives, broad targets, identified opportunities, support components, and implementation and monitoring timelines

2. Overall vision and strategic objectives

- Overall statement on vision for local procurement aligned with wider business principles relating to corporate citizenship, sustainability, and commercial objectives
- Strategic objectives for increasing local procurement

Box 31. Key considerations for development and updating of a local procurement plan

Regular reporting on progress against local procurement plans (and updates to planning), based on an agreed-upon system of measuring local procurement (it is recommended that external reporting be on an annual basis, and on a quarterly basis for internal purposes)

- Public availability of summaries/extracts of local procurement plans and progress reports
- Linking of development and implementation of plans into related activities where this would lead to improved efficiencies (e.g., social impact assessments)
- Close collaboration with the broader mining sector in formulating, implementing, and monitoring local procurement plans; this could be coordinated through a coordinating body such as a chamber of mines. For example, certain sections could be developed collectively

to make the process more efficient (e.g., identification of opportunities).

- Close collaboration with wider stakeholders, including government departments and agencies, local business associations and networks, business development service providers, donors and multilaterals, financial institutions, technical support providers, and civil society organizations—this collaboration could also be facilitated through a coordinating body such as a chamber of mines.

3. Introduction and background

- Scope of procurement plan in terms of operations covered by plan (this could span across a number of countries)
- Nature of mining-related activity, including:
 - Brief overview of current activities across mineral resource assessment and exploration, mine and related infrastructure development, mining, processing, and outbound transport, to include:
 - Commodities
 - Nature of mining, processing, and transport
 - Life of mine and any potential extensions, given resources and reserves
 - Overview of planned capital projects, including planned timings
- Past efforts to support local procurement and any successes

4. Current performance, key objectives, and targets for local procurement

- Framework adopted for measuring and monitoring local procurement (see Section 3)
- Key identified indicators for local procurement in the short, medium, and long term
- Overview of current spend, categorized by product and service and extent of local procurement
- Identified opportunities, including:
 - Identified products and services
 - Potential benefits to the mining company, including costs, lead time, customization, security of supply, etc.
 - Potential increased local procurement spend and development impacts
 - Identification of local, national, and international suppliers for realizing opportunities
- Prioritization and assessment of opportunities, including:

- Prioritized opportunities, based on attractiveness of opportunity and potential development impacts
- Key challenges faced regarding achieving opportunities, including risks
- Potential timings related to achieving opportunities: short-, medium-, and long-term

Regular reporting/updating:

- Performance against indicators (spend/number of contracts across capital and operational expenditure by categories of local procurement)
- Lessons and success factors related to performance
- Revisions to identified opportunities

5. Strategy to achieve targets

- Overall support measures to enhance local procurement, including:
 - Increased access to opportunities
 - Technical assistance
 - Financial support
- Specific measures to support realization of prioritized product and service opportunities
- Identifying role and requirements of main contractors and suppliers relating to local procurement targets

Regular reporting/updating:

- Changes to approach based on progress achieved, support provided, and lessons learned, as well as changes on external business environment

6. Implications for implementation, monitoring, and reporting

- Required changes to current processes, including procurement processes and systems (including supplier accreditation, development of tender/RFQ documents, unbundling vs. bundling considerations, timing, and advertisement procedures)
- Key implementation partners, e.g., chamber of mines, local business associations and networks, business development service providers, donors and multilaterals, financial institutions, technical support providers, civil society organizations
- Organizational structures to support implementation and monitoring:
 - Organizational arrangements for implementation (e.g., task teams,

champions)

- Organizational arrangements for monitoring and reporting (e.g., internal oversight and review, an external service provider and/or civil society organization for monitoring)
- Communication and reporting processes
- Resource allocation for implementation, including details on:
 - Personnel (e.g., a dedicated local procurement officer, time allocations for other staff such as product end users to provide technical support)
 - Budget allocations (e.g., external costs for training, certification)

Regular reporting/updating:

- Learnings from the above (related to gaps, effectiveness, etc.) and required changes
- Implications of any revisions to identified opportunities

7. Action plan

- Specific identified actions, including:
 - Roles, responsibilities, and actions for components of support, for both the mining company and key implementation partners
 - Implementation targets and timings

Regular reporting/updating:

- Progress on implementation
- Key implementation outcomes
- Lessons learned

APPENDIX C: STAKEHOLDERS CONSULTED

Mining companies	
1. Alcoa-Guinee	<ul style="list-style-type: none"> • Ms Nene Ousmane Sow, Responsable du Developpement Durable et des relations avec les Communautés
2. AngloGold Ashanti	<ul style="list-style-type: none"> • Mr. Giri Venkatesan, Financial Controller • Mr. Terry Mulpeter, Siguiri Mine Manager
3. Bassari Resources	<ul style="list-style-type: none"> • Mr. Alex McKenzie, Senegal Manager • Mr. Mamadou Tall, Director of Procurement and Stocks
4. Bellzone	<ul style="list-style-type: none"> • Mr. Frederic Materne, Project Manager
5. Crew Gold, Societe Miniere de Dinguiraye	<ul style="list-style-type: none"> • Mr. Wayne Nicoletti, Directeur General
6. Global Alumina Corporation	<ul style="list-style-type: none"> • Mr. Youlla • Mr. Amare Sampare
7. Golden Star	<ul style="list-style-type: none"> • Mr. Garry Hugo, Supply Manager
8. Goldfields Ghana Ltd.	<ul style="list-style-type: none"> • Mr. Wizi Aborchie, Supplies Manager—Gold Fields Ghana Ltd and Chairman—Sub-Committee of Supplies Manager • Mr. Bill Smith, Regional Supply Chain Manager West Africa
9. Industries Chimiques du Sénégal (ICS)	<ul style="list-style-type: none"> • Mr. Omar Ndiaye, Procurement
10. Keegan Resources	<ul style="list-style-type: none"> • Mr. Ben Adoo
11. Kinross	<ul style="list-style-type: none"> • Mr. KB Wilson, Supply Chain Manager
12. Mineral Deposits Limited/Sabodala Mining Group	<ul style="list-style-type: none"> • Mr. Bruno Delanoue, CEO, Sabodala Mining Group, and Deputy CEO, MDL Mineral Sands Group • Mrs. Rokhaya Diallo Sarr, Logistics Officer, MDL Mineral Sands Group, and Logistics Officer, Sabodala

Mining Group	
13. Newmont	<ul style="list-style-type: none"> • Mr. Simon Blamires • Mr. Emmanuel Teye-Adjei
14. Oromin Joint Venture Group Ltd	<ul style="list-style-type: none"> • Mr. Bounene Diouf, Admin and Finance Manager • Mr. Pape Ngounia Ba, Logistics Manager Director
15. Rio Tinto/Simfer	<ul style="list-style-type: none"> • Mr. Jerry Rim, Procurement Manager • Mr. Mark Slade, Manager Economic Development
16. Rusal	<ul style="list-style-type: none"> • Mr. Musya Kurmaev, Commercial Director
17. Vale	<ul style="list-style-type: none"> • Mr. Bruno Hitier, Senior Manager of Iron Ore Marketing
Suppliers	
18. BCM Ghana	<ul style="list-style-type: none"> • Mr. Augustine Adu-Adjei, Supply Chain Manager
19. Bolloré Africa Logistics Sénégal	<ul style="list-style-type: none"> • Mr. Xavier Lariau, Mining & Projects
20. Caesar Furnaces	<ul style="list-style-type: none"> • Mr. Caesar Kofi, Owner
21. Ciments de Guinee	<ul style="list-style-type: none"> • Mr. Pierre Jean Louver, Directeur Administratif et Financier
22. Citland	<ul style="list-style-type: none"> • Mr. Russell Fagan, General Manager
23. CMA Constructions Métalliques Africaines	<ul style="list-style-type: none"> • Mr. Mamadou Diouf, CEO • Mr. Aloise Waly Diouf, Mauritania Representation Director • Mr. Souleye Diop, Quality Manager
24. CODAC (PPE company)	<ul style="list-style-type: none"> • Mr. Joseph Sarr, Deputy Director
25. Electrofax Engineering Service	<ul style="list-style-type: none"> • Mr. T. Asare-Baffour, Managing Director
26. GETMA Guinee	<ul style="list-style-type: none"> • Mr. Dii Conde, Sales Director
27. Golder Associates, Ghana	<ul style="list-style-type: none"> • Mr. Chris Fell, Regional Manager—West Africa

	• Mr. Rob Hounsome
28. Harlequin International	• Ms. Leyanis Dube-Gati
29. Holman Petroleum	• Mr. William Tewiah, Managing Director
30. Independent mining consultant	• Mr. Jean Kaisin
31. Interplast	• Mr. Sivnesh Kumar, General Manager
32. Liebherr-Mining Ghana Ltd.	• Mr. Dale Clayton
33. Mincon, Senegal	• Mr. Martin van Gemert, Managing Director
34. Moolmans	• Mr. Alex Booth, Procurement Manager
35. Naachiaa Group of Companies	• Mr. Owusu Agyeman, Managing Director
36. North Safety Products	• Mr. John Whitfield, Africa Operations Manager
37. OTR Tyres	• Mr. Mark Goode, Managing Director
38. Port Autonome de Conakry	• Mr. Mohamed Ben Sylla, Directeur Financier • Mr. Alpha Kaba, Administrateur Civil Economique
39. Riepcoc	• Mr. Charles T. Darko, Executive Chairman
40. Sandvik Mining and Construction—West Africa	• Mr. Isaac Tomegah, Financial Manager
41. Sapat Ceramics	• Mr. Emmanuel Opei, Managing Director
42. Saudequip CAT—Société Auxiliaire d'Equipements	• Mr. Philippe Menanteau, Director
43. SCI Thier Creation SARL (uniform company)	• Mr. Thierno Sokhna, Director
44. Transafricaine de Travaux et Services	• Mr. Amadou Donna Drabo, Managing Director

45. Transco	<ul style="list-style-type: none"> • Ms. Tania Zeidan Muller, Responsable Commercial, Responsable Adjoint Transit
46. United Mining Supply	<ul style="list-style-type: none"> • Mr. Fadi Y. Wazni, General Manager (also SDV Logistics Guinee)
47. Western Castings	<ul style="list-style-type: none"> • Mr. Amitava Roy
Government and other support entities	
48. BICIS, Member of BNP Paribas Group	<ul style="list-style-type: none"> • Mr. Mouhamadou Ndiaye, Director of Studies and External Relations
49. ECOWAS	<ul style="list-style-type: none"> • Mr. Lawson-Hechelli, Director of Industry and Mines at the ECOWAS Commission
50. BICIGUI	<ul style="list-style-type: none"> • Manga Fode Toure, Administrateur Director General
51. Ghana Chamber of Mines	<ul style="list-style-type: none"> • Rev Dr Joyce Aryee, Chief Executive Officer
52. Ghana Minerals Commission	<ul style="list-style-type: none"> • Mr. Ben Aryee, Chief Executive Officer • Mr. J.Y. Aboagye, Director—Policy, Planning, Monitoring & Evaluation Division
53. Ghana Ministry of Energy	<ul style="list-style-type: none"> • Ms Afua Amissa
54. Ghana Private Enterprise Foundation	<ul style="list-style-type: none"> • Dr. Osei Boeh-Ocansey—Director General • Mr. Moses Agyeman, Senior Economist
55. Guinea Ministry of Mines and Geology: Mineral Promotion and Development Centre	<ul style="list-style-type: none"> • Mr. Elhadj Ibrahima Kalil Soumah, General Director • Mr. Moussa Moise Camara, Ingenieur, chef de section Gestion des dossiers d'Investissement
56. Guinea Ministere de l'Economie et des Finances: Direction Nationale des Douanes	<ul style="list-style-type: none"> • Colonel Datomou Kpamou, Inspecteur Prinacipal des Douanes et premier Directeur General Adjoint
57. International Finance Corporation	<ul style="list-style-type: none"> • Ms. Gosia Nowakowska-Miller • Ms. Stephanie Sines

58. Revenue Watch Institute	<ul style="list-style-type: none"> • Mr. Andrew Bauer
59. Suame Magazine Industrial Development Organisation	<ul style="list-style-type: none"> • Mr. Nyaaba-Aweeba Azongo, Lead Consultant • Mr. Emmanuel Ocran, Engineering Unit Manager • Various other representatives, including: President, spare parts association, mechanical association, women's coordinator, fuel association, welfare
60. Senegal Direction of Industry	<ul style="list-style-type: none"> • Mr. Ibrahima Basse, Director of Industry • Dr. Ibrahima Sonko, Responsible for Environmental Matters
61. Senegal Direction of Geology and Mining	<ul style="list-style-type: none"> • Dr. Moussa Sylla, Director of Geology and Mining • Mr. Babacar Diouf, Advisor • Mr. Alioune Sarr, Division of Follow-up and Facilitation of Mining Projects
62. Subcontracting and Partnership Exchange (BNSTP): Bourse Nationale de Sous-Traitance et Partenariat)	<ul style="list-style-type: none"> • Mr. Amadou Sylla, General Director • Mr. Mamadou Sow, Head of Subcontracting Department
63. Senegal Agency for the Promotion of Investments and Projects (APIX— Agence Pour la Promotion des Investissements et des Grands Travaux)	<ul style="list-style-type: none"> • Mr. Houma Mbaye Dia, Sector Promotion Lead
64. WAEMU	<ul style="list-style-type: none"> • Mr. Abdulaye Kone, Mining Coordinator
International practice	
65. ABB	<ul style="list-style-type: none"> • Ilia Baeza
66. Asociacion Nacional de Empresarios de Colombia	<ul style="list-style-type: none"> • Mr. Eduardo Chaparro Avila, Director
67. Atlas Copco	<ul style="list-style-type: none"> • Nelson Trejo, Supply Chain Manager
68. Centre for Social	<ul style="list-style-type: none"> • Prof. David Brereton, Director

Responsibility in Mining (CSRM), University of Queensland	• Cristian Parra, Research Fellow
69. CoChilCo	• Mr Rodrigo Urquiza, Advocate
70. Community Insights	• Dr. Ana Maria Estevez, Director
71. ExxonMobil	• Mr. Jean-Christophe Petit, Former Procurement Manager for ExxonMobil/Esso (Chad)
72. Komatsu	• Gustavo Vargas
73. Liebherr Chile	• Arnoldo Juleff, Sales Manager
74. Local Content Solutions	• Dr. Michael Warner, Director
75. National Mining Cluster Council (Chile)	• Jose Manuel Herrera, Former Executive Secretary
76. Permanent Local Content Committee (Trinidad & Tobago)	• Mr. Anthony Paul, Vice Chairman

APPENDIX D: RELEVANT REGIONAL SUPPORT PROGRAMS

Entity	Program description
WAEMU	<p>Overall</p> <ul style="list-style-type: none"> • Customs union: harmonized customs, dismantled custom duties on intra-community trade, and common external tariffs • Monetary union • Harmonized national legislation concerning taxation of businesses, banks and financial institutions, telecommunications, maritime transport, competition policy • Common sectoral policies and programs
	<p>Community Mining Policy</p> <ul style="list-style-type: none"> • Community Mining Code <ul style="list-style-type: none"> - Adopted in December 2003 - Procurement preference to be given to goods and services of community origin (i.e., originating from a member state of the Union) whenever available on competitive terms of price, quality, warranty, and delivery time (Article 14) - Employment preference to be given to nationals of the Union when deciding between two equally qualified candidates (Article 16) • Regional system of geological and mining information: SIG-UEMOA • Activities to promote mining development (for example, organization of WAEMU Mining Day at the World Mining Forum, PROMIN “Mining Promotion Days,” etc.)
	<p>Common Industrial Policy</p> <ul style="list-style-type: none"> • Adopted in December 1999, incorporating four chapters: diversification, densification, rationalization of the industrial fabric, and competitiveness of the Union’s enterprises • Restructuring and Upgrading Programme: <ul style="list-style-type: none"> - Implemented by UNIDO, focus on agro-industry - Targets support of 1,000 enterprises including upgrades in nonphysical investment (management, training, software, etc.) and physical investment (plant, equipment, etc.), with approved enterprises to

Entity	Program description
	<p>receive up to: €200,000 for nonphysical investment, and €75,000 for physical investment</p> <ul style="list-style-type: none"> - Currently in pilot phase • Programme for Promotion and Financing of SMEs: program of actions defined in partnership with CDE,¹⁰⁰ with CDE being considered as delivery agency. Plans include development of a database of all industrial enterprises.
	<p>Common Industrial Policy (continued)</p> <ul style="list-style-type: none"> • Agenda for the Competitiveness of the Cotton /Textile sector <ul style="list-style-type: none"> - Goals to achieve by 2010: local transformation of 25% of cotton produced (vs. 5% in 2003) and creation of 50,000 industrial jobs - Results have been short of expectations, and the action plan is being reviewed and updated - Four main countries included: Burkina Faso, Mali, Benin, and Chad - AfDB provides financial support; WAEMU coordinates the project - • International partners include the ITC and EU
WAEMU	<p>Regional Economic Program (REP)</p> <ul style="list-style-type: none"> • REP adopted in May 2004, implemented through five-year rolling plan updated annually • First program covers 2006–2010, includes 63 “regional integrating and catalytic investments projects” with a total cost of €4,500m, grouped into five areas: <ul style="list-style-type: none"> - Consolidating governance and economic integration - Developing economic infrastructure - Building integrated production capacities - Developing human resources - Establishing a partnership around resource mobilization and PER implementation

¹⁰⁰ Centre for the Development of Enterprise, an ACP/EU joint institution funded under EDF, tasked to ensure the development of professional private sector ACP enterprises.

Entity	Program description
	<ul style="list-style-type: none"> • 25% to be implemented by WAEMU Commission and 75% by member states • Infrastructure program represents 78% of the total investment program and includes roads, rail, air transportation, power (electric network interconnection), and broadband infrastructure • Financing contributed/pledged from EU (€1.3bn), AfDB (€180m), France (€170m), WAEMU/BOAD/BCEAO (€100m)
	<p>Union Agricultural Policy</p> <ul style="list-style-type: none"> • Three-year operational program for 2009–2011 period • Priority sectors identified (rice, maize, cotton, cattle-meat, poultry) and cooperative frameworks established for proposing measures to promote these sectors at community level <ul style="list-style-type: none"> - Study to define a “sector management model” for each of the five sectors, completed in 2009, and a further ongoing study (as at the end of 2009) to formulate a detailed action plan for each sector • WAEMU Office du Niger Project: regional project to develop agricultural land in Office du Niger (Mali), to be made available to private investors from the Union
	<p>Union Agricultural Policy (continued)</p> <ul style="list-style-type: none"> • Regional Agricultural Development Fund (FRDA) to finance projects on a regional scale <ul style="list-style-type: none"> - FAO is helping define Fund’s operational setup - Resources mobilized so far: CFA 12.3bn - Some projects eligible for financing have already been identified - Target beneficiaries: states, local governments, agriculture trade groups, SMEs/SMIs and micro-enterprises, MFIs, WAEMU Commission and regional organizations (for institutional support) - Instruments: subsidies, concessional and regular loans, loan guarantees • Program to develop maritime and inland fishing, and for common management of fishery resources
WAEMU	<p>Programme for the Harmonisation of Accreditation, Certification, Standardisation and Metrology</p> <ul style="list-style-type: none"> • Funded by European Commission under the EDF and implemented by

Entity	Program description
	<p data-bbox="488 275 581 302">UNIDO</p> <ul style="list-style-type: none"> <li data-bbox="488 327 1300 390">- First phase of program funded for €14m (entirely in WAEMU) in 2001–2005 <li data-bbox="488 415 1349 541">- Second phase extended to ECOWAS plus Mauritania, in 2008, targeting specifically agribusiness, and funded for €14.5m (€6.5m for WAEMU and €8m for rest of West Africa: non-WAEMU ECOWAS countries plus Mauritania) <ul style="list-style-type: none"> <li data-bbox="448 562 1349 590">• Priority products, companies, and laboratories to target have been identified <li data-bbox="448 615 1333 705">• Activities include: institutional development, harmonization of legislation, support for enterprises, laboratories, certification bodies, and inspection agencies <li data-bbox="448 730 1373 873">• Focus is primarily on increasing exports (remove “technical barriers to trade” and help meet “sanitary and phyto-sanitary requirements”) <ul style="list-style-type: none"> <li data-bbox="488 810 1373 873">- Impact on local procurement to mining to the extent quality of products is a limiting factor
	<p data-bbox="448 915 743 942">Common Energy Policy</p> <ul style="list-style-type: none"> <li data-bbox="448 968 992 995">• Adopted December 2001, with objectives to: <ul style="list-style-type: none"> <li data-bbox="488 1020 1081 1047">- Secure energy access, including for rural areas <li data-bbox="488 1073 1230 1125">- Optimize the management of energy resources through grid interconnection and common investments <li data-bbox="488 1150 1325 1203">- Promote renewable energies, energy efficiency, and protection of the environment <li data-bbox="448 1228 959 1255">• Regional Initiative for Sustainable Energy <ul style="list-style-type: none"> <li data-bbox="488 1281 813 1308">- Adopted in March 2009 <li data-bbox="488 1333 1365 1386">- Aims to increase electricity supply, particularly through renewable energies, and an effective financing mechanism for energy investments <li data-bbox="488 1411 1325 1577">- Financing mechanism involves two funds: an Energy Development Fund (expected to be endowed with CFA 500bn (€761m), of which half to come from internal WAEMU resources) to provide concessional financing, and a private investment fund to mobilize (regional and foreign) private investment <li data-bbox="488 1602 1365 1654">- Also focuses on restructuring of existing electricity utilities to improve their performance
WAEMU	Common Energy Policy (continued)

Entity	Program description
	<ul style="list-style-type: none"> • Free trade area, with plan to create a customs union • Also, plan for monetary integration • Several projects to facilitate the movement of goods, services, and persons: <ul style="list-style-type: none"> - Common certificate of origin - Development of the road network and the telecommunications infrastructure - Abolition of the visa requirement for travel between the countries of the subregion - Common sectoral policies and programs
	<p data-bbox="448 716 870 743">ECOWAS Mining Harmonisation</p> <ul style="list-style-type: none"> • Directive on “the Harmonisation of Guiding Principles and Policies in the Mining Sector” adopted in May 2009 <ul style="list-style-type: none"> - Directive precedes the implementation of a Common Mining Code and a Common Mining Policy, which will eventually lead to the harmonization of mining regimes and legislations across the member states • Article 11 of ECOWAS directive on localization: <ul style="list-style-type: none"> - Mining company must file with the competent authority a program for recruitment, technology transfer, and training of local personnel - Mining company must give preference in employment to community citizens (i.e., citizens of member states) to the “maximum extent possible and consistent with safety, efficiency and economy” - Mining company must have a procurement policy that gives preference to materials, products, and services from a member state to the maximum extent possible and consistent with safety, efficiency, and economy

¹⁰¹ ECOWAS is the regional economic community (REC) responsible for realizing the objectives of the African Union in West Africa, and has been designated the executing agency for the NEPAD plan of action in West Africa.

¹⁰² Other intergovernmental organizations set up to foster stronger economic ties and cooperation among West African countries are Mano River Union (Sierra Leone, Liberia, Guinea) and CEN-SAD (which includes 11 ECOWAS countries along with 10 non–West African countries).

Entity	Program description
ECOWAS	<p data-bbox="448 275 1052 302">Common agricultural policy ECOWAP/CAADP</p> <ul style="list-style-type: none"> <li data-bbox="448 327 1365 541">• ECOWAP adopted in January 2005, and incorporates NEPAD’s agricultural component, the Comprehensive Africa Agriculture Development Program (CAADP) <ul style="list-style-type: none"> <li data-bbox="488 443 1317 541">- Principle of food sovereignty affirmed, involving a strong regional integration and an appropriate level of protection at the borders, varying according to specific issues facing each value chain
	<p data-bbox="448 583 1203 611">Common agricultural policy ECOWAP/CAADP (continued)</p> <ul style="list-style-type: none"> <li data-bbox="448 632 1365 999">• Implementation through policy reforms in the areas of external and internal trade, taxation, investment codes, regulatory frameworks, etc., as well as investment programs: <ul style="list-style-type: none"> <li data-bbox="488 747 1365 846">- ECOWAS coordinated the programming of activities in the agricultural sector and coordinated international aid (National Agricultural Investment Programs) in each member country <li data-bbox="488 867 1365 999">- Defined the institutional setup and coordination mechanisms for financing, including the creation of a Regional Technical Agency for Agriculture and Food and the establishment of a Regional Fund for Agriculture and Food. <li data-bbox="448 1020 1365 1167">• Initial priority given to the rice, maize, and cassava value chains, as well as the livestock-meat and related products value chain <ul style="list-style-type: none"> <li data-bbox="488 1104 1365 1167">- Millet/sorghum, fruits and vegetables, roots and tubers, and fishery to become focus in a second round
	<p data-bbox="448 1209 914 1236">ECOWAS Regional Energy Program</p> <ul style="list-style-type: none"> <li data-bbox="448 1257 1365 1482">• ECOWAS has developed regional coordinated actions at all stages of the energy chain, focusing on: <ul style="list-style-type: none"> <li data-bbox="488 1341 1260 1398">- Developing the use of regional resources for the expansion of electricity production and exchange <li data-bbox="488 1419 1300 1482">- Developing cross-border interconnections within the context of a regional integrated energy market <li data-bbox="448 1503 1325 1566">• Specific areas include institutional reform, technical standards, financing mechanisms, and cross-border tariff issues <li data-bbox="448 1587 1365 1755">• West Africa Power Pool (WAPP) <ul style="list-style-type: none"> <li data-bbox="488 1640 1365 1696">- WAPP created in 1999, and ECOWAS Energy Protocol calling for the removal of cross-border barriers to trade in energy adopted in 2003 <li data-bbox="488 1717 1300 1755">- Vision of integrating the national power system operations into a

Entity	Program description
ECOWAS	<p>unified regional electricity market</p> <ul style="list-style-type: none"> - Specific goals include increasing inter-connection capacities, generating additional electricity capacities, increasing cross-border trade in energy, and promoting FDI in the sector - Estimated investment of US\$16bn over a 20-year period - By 2011, most countries in the region are expected to be interconnected; substantial progress in building the regional institutional and regulatory framework <ul style="list-style-type: none"> • West Africa Gas Pipeline <ul style="list-style-type: none"> - 600 km pipeline at a total cost of ~US\$615m to transport natural gas from Nigeria to Benin, Togo, and Ghana - Project agreements signed in mid to late 90s, and pipeline put in operation in 2008 - Owned and operated by a private-public consortium - • Expected to have a meaningful impact on industrial growth (estimated to generate an additional US\$800m of industrial investment in the region)
	<p>Department of Private Sector of ECOWAS</p> <ul style="list-style-type: none"> • Responsible for ECOWAS’s objectives relating to promotion of cross-border investments, joint venture businesses, and small and medium enterprises, in order to contribute to the achievement of a competitive, dynamic, and diversified regional economy • Mandate includes: <ul style="list-style-type: none"> - Improving the investment climate in the region - Enhancing the competitiveness of the private sector through promoting good corporate governance, supporting the provision of business development services, establishment of guarantee institutions, and promoting entrepreneurship - Supporting regional private sector institution - Promoting the development of a viable regional capital market - Facilitating the establishment of multinational joint ventures and community enterprises - Encouraging West African entrepreneurs to develop and maintain links with diaspora groups, relevant continental and international bodies, South-South bodies, institutions, etc.

Entity	Program description
	<ul style="list-style-type: none"> • Developed a framework for private sector promotion in ECOWAS, which includes an action plan for agribusiness, textiles, telecommunications and ICT, SMEs and women entrepreneurs, transport and logistics, and tourism • Organizes business events such as the annual ECOWAS Business Forum, the ECOWAS-China economic and trade forum, workshops, etc. • Tasked with developing regional investment rules and a Community Investment Code • Also involved in the process of adoption of regional competition rules
	<p data-bbox="448 625 821 653">West Africa Quality Program</p> <ul style="list-style-type: none"> • See details under WAEMU quality program <ul style="list-style-type: none"> - Originally for WAEMU, the program has, in a second phase, been extended to all of ECOWAS countries, plus Mauritania • AU provides leadership and strategies, in extensive collaboration with the United Nations Economic Commission for Africa (UNECA), around the exploitation and management of natural resources as a catalyst for development • First African Union Conference of Ministers Responsible for Mineral Resources Development (CAMRMRD) held in 2008, in close collaboration with UNECA, the African Mining Partnership (AMP) and the AfDB
African Union	<ul style="list-style-type: none"> • African Mining Partnership (AMP) <ul style="list-style-type: none"> - Established in 2004 by 16 African ministers responsible for mining in their respective countries, as a voluntary platform to implement the mining chapter of NEPAD - Aimed at championing the NEPAD mines and minerals initiatives, and optimizing the value of mining for the benefit of member states - Six key areas identified, including artisanal and small-scale mining, human resource development, and indigenous participation in mining ventures - • AU decided in 2009 to merge the AMP (which had been seeking affiliation with AU) with the Conference of African Ministers Responsible for Mineral Resource Development (CAMRMRD)
	<p data-bbox="448 1566 971 1598">West Africa Quality Program (continued)</p>
African Union	<ul style="list-style-type: none"> • AU's "Africa Mining Vision 2050" <ul style="list-style-type: none"> - AU led, with UNECA, a task force of experts of AUC, AfDB, UNCTAD, and UNIDO to draft the Africa Mining Vision 2050

Entity	Program description
	<ul style="list-style-type: none"> - Adopted by the first CAMRMRD, and the 12th AU Summit of Heads of States and Government in 2009 - Key component is a new resource-based industrialization and development strategy for Africa, based on downstream, upstream, and sidestream linkages - The Vision constitutes the basis for developing new development-oriented mineral regimes by African member states and their regional economic communities • International Study Group to Review Africa’s Mining Regimes (ISG) <ul style="list-style-type: none"> - Started in 2007 under the leadership (and financial support) of UNECA - Goal of exploring the extent to which Africa’s mineral regimes can be made to contribute to sustainable development - First phase involved producing a comprehensive body of knowledge, and a draft Framework Report on Mining Regimes - • Second phase (implementation phase, expected to run until 2012), under leadership of AUC, involves developing toolkits, policy templates and guidelines, briefing notes, and other instruments for use in revising mineral regimes in Africa
Multilateral development partners (United Nations Economic Commission for Africa, European Union, World Bank, etc.)	<p data-bbox="448 1035 545 1062">Overall</p> <ul style="list-style-type: none"> • Support AU and regional organizations with policy analysis and advocacy, technical and financial assistance, communication and knowledge sharing, etc., e.g., UNECA organized jointly with AfDB the 2007 Big Table on “Managing Africa’s Natural Resources for Growth and Poverty Reduction,” precursor to many initiatives in the sector, including EITI and the International Study Group to Review Africa’s Mining Regimes (ISG) • Research, policy analysis, technical assistance, etc., to governments and RECs with focus on ensuring that policies and international actions are mutually supportive in bringing about sustainable development <ul style="list-style-type: none"> - Relevant activities/programs include: commodity diversification and development, international investment and technology arrangements, investment policy reviews, investment guides • Supporting African countries’ development efforts, including NEPAD
	<p data-bbox="448 1608 1268 1635">Extractive Industries Transparency Initiative Plus Plus (EITI ++)</p> <ul style="list-style-type: none"> • EITI was launched in 2002 to improve governance in resource-rich countries <ul style="list-style-type: none"> - Standard for transparency through publication by companies of all mining payments to government and by government of all revenues

Entity	Program description
	received from mining companies, to a wide audience, and reconciliation of the two by an independent auditor
Multilateral development partners (United Nations Economic Commission for Africa, European Union, World Bank, etc.)	<p data-bbox="448 384 1268 443">Extractive Industries Transparency Initiative Plus Plus (EITI ++) (continued)</p> <ul style="list-style-type: none"> <li data-bbox="448 468 670 495">• EITI ++ program <ul style="list-style-type: none"> <li data-bbox="488 516 748 543">- Launched in 2008 <li data-bbox="488 564 1373 659">- Not limited to revenues; covers the entire breadth of the resource chain, including extraction, processing, managing revenues, and promoting sustainable and efficient utilization of resource wealth <li data-bbox="448 680 1373 814">• Offers governments of resource-wealthy countries technical assistance (at their request) for capacity building across the “entire resource value chain,” from contracting to oversight to collecting and spending what international mining corporations pay
United Nations Conference on Trade And Development	<ul style="list-style-type: none"> <li data-bbox="448 856 1227 915">• Promotes industrial development for poverty reduction, inclusive globalization, and environmental sustainability <li data-bbox="448 936 1357 995">• Services ranging from industrial policy advice to entrepreneurship and SME development <li data-bbox="448 1016 1373 1113">• Technical assistance in the areas of competitiveness, trade policies, industrial modernization and upgrading, compliance with trade standards, testing methods and metrology <li data-bbox="448 1134 1097 1161">• Has a dedicated “Cluster and Business Linkages Unit”
Regional business networks	<ul style="list-style-type: none"> <li data-bbox="448 1209 1357 1268">• Example: REAO Reseau de l’Entreprise en Afrique de l’Ouest (West Africa Business Network)

APPENDIX E: SELECTED BENCHMARKS

E.1 Local Business Opportunities—ExxonMobil and IFC (Chad)

The supplier development component of ExxonMobil’s National Content Strategy, the *Local Business Opportunities* program (LBO), was implemented in response to poor performance from local suppliers in competitive tendering and contract management after the building of the 1,070 km pipeline from Doba, Chad, to the offshore oil facilities on the Cameroonian coast. It was implemented by the IFC, ExxonMobil, and the Chamber of Commerce of Chad. The Local Supplier Development Program defined “local” broadly as national companies, and activity was focused around the capital N’Djamena.

Box 32. Local business opportunities—ExxonMobil and IFC (Chad)

Key objectives

- A key objective was to support Chadian SMEs’ access to the ExxonMobil eProcurement system, eRFx—as from 2005 all procurement for Chad (approximately \$300m per annum) was to be conducted through e-procurement.
- The motivations for the supplier development program included gaining a “social licence” to operate in Chad. The participation of local SMEs in construction phases was very low, which was not well received by local businesses and the chamber of commerce. Therefore, there was a desire by ExxonMobil to change this perception. Further motivations included:
 - A desire to establish a competitive advantage in Chad relative to other investors
 - A reduction in long-term costs. Estimates suggested increasing local suppliers could lower total system cost by 10–15% in the long run.
 - The main motivation for eProcurement was to ensure transparency and consistency in the bidding process. It reduces the volume of procurement-related work and avoids human contact during the process (and reduces potential for corruption).
- National regulation or local content policies do not exist in Chad, and therefore played no role in the establishment of the local supplier project.

Support for access to opportunities

- The IFC set up an Enterprise Centre in Chad to provide support to a wider range of SMEs, including capacity building, access to finance, and e-procurement training
- Based on an initial supplier assessment, Exxon recommended suppliers for training at the IFC-managed training facility. The training was carried out by the Chad Chamber of Commerce.
- The eProcurement training was conducted by staff at the Enterprise Centre over two to three weeks.
- SMEs were initially charged US\$50 for eProcurement training, but the fee was removed when SMEs who had paid the fee but did not win the contract became unhappy.

- Poor facilities and Internet connection at the Enterprise Centre was addressed by ExxonMobil by providing computers and other hardware. It now has a dedicated section of its training center for eProcurement.
- Potential suppliers to Exxon could only bid in areas in which they were qualified, ensuring an efficient bidding process.
- Feedback was provided to losing SMEs, specifying technical and commercial reasons for their failure, and the Enterprise Centre then offered further training and one-on-one coaching for SMEs to build their capacity and become more competitive.
 - The Enterprise Centre offered training in six business-related modules and charged 2,000 CFA (approx. US\$4.50) for each training module.
 - The Centre also provided mentoring services to provide direct and focused input into SMEs' specific areas of weakness. The Centre charged 4,000 CFA (approx. US\$9) for six hours of mentoring and 25,000 CFA (US\$56) for three months' mentoring (two hours per week).
- In Chad, subcontractors such as Catering International Services (CIS), Kellogg Brown Root (KBR), Schlumberger, and Tchad Cameroun Logistique (TCL) were all **contractually obliged** to participate in the program and use the eProcurement system.

Financial support

- Financing for SMEs was a key constraint in local supplier development with local banks reluctant to provide finance, as SMEs had poor repayment rates.
- ExxonMobil set up "Bidding Bonds," where bids were made with confirmation by the bank that the business plan was sound. Then, if the contract was won, the contract stipulated that the supplier must stay with the bank named on the tender documents. This decreased bank risk and addressed the problem of suppliers changing banks too regularly.
- In the terms of the contracts, financial support was also offered—with local businesses given up to 15% of contract price preference in the initial stage on cost. There was no compromise on quality and safety.¹⁰³

Impact

- Between September 2006 and October 2007, 131 Chadian SMEs had bid for contracts worth almost US\$32m—99 of these were assisted through the Enterprise Centre.
- Contracts have been awarded in nonhazardous waste recycling and civil works, and there are ongoing bidding processes in work clothes supply, light vehicle maintenance, spare parts, personnel transportation, and office equipment maintenance.
- One company was awarded high-value drilling contracts. This company was then also able to win contracts with the national government in Chad for water well drilling in N'Djamena and

¹⁰³ Developing a Transparent System for Local Contracting, p. 22

electricity installation.

Lessons

- The **active role of the Chad Chamber of Commerce**, financed by IFC, was a key success factor:
 - The CoC carried out the assessment of the supply base, conducted the supplier training, and advertised opportunities.
 - The key role of the CoC avoids any perceived bias, provides sustainability, and also provides a potential forum for collaboration among oil/mining companies (which US antitrust laws prohibit).
- ExxonMobil has used the experiences of local supplier development in Chad in their new liquid natural gas project in Papua New Guinea. One of the lessons learned from the Chad project is the need to bring local **supplier development stipulations into their primary contractor agreements** at the project stage.
- **Access to finance** was crucial for supplier development.

E.2 EPC Preferential Procurement and Enterprise Development in South Africa—Construction of the Dube Tradeport

As part of construction of the R6.4bn new international airport and trade zone north of Durban in South Africa, the Dube TradePort set out to enhance the socioeconomic impact of the facility for KwaZulu-Natal. This included leveraging the procurement spend of the main contractor, as well as providing wider support, to contribute to SMME development. The Dube TradePort developed a framework of preferential procurement and enterprise development for the engineering, procurement, and construction joint venture, Ilembe, to implement as part of its contract. This is described in the following box:

Box 33. EPC preferential procurement and enterprise development—Dube TradePort

Support provided

- The contract with the EPC set out targets for support to SMMEs as follows:
 - Targets for preferential procurement: proportion of value to be purchased or subcontracted from BBBEE and SMMEs, as well as micro, women-owned, and local enterprises.
 - Targets for enterprise development spend, as a proportion of total project value
- The contract provides guidance for how progress against these targets should be measured and sets out penalties (these are based on a proportion of a total possible penalty related to actual spend vs. interim spend targets)
- The contract provisions were based on components of submitted bids, including plans for realizing targets for preferential procurement and enterprise development and specific

subcontractors

- Once Ilembe was appointed as the contractor, the approach to preferential procurement and enterprise development was negotiated
- For preferential procurement, support included:
 - A database of prospective vendors set up by Ilembe for different categories of procurement (over 3,000 vendors applied to be registered on the supplier database, of which 700 were fully registered)
 - Ilembe broke up contracts into smaller pieces to allow for smaller companies to tackle these
 - Ilembe also pushed down obligations for BBBEE and SMME procurement to subcontractors
- For supplier development, tailored support for enterprise development was provided based on a needs assessment (conducted by an external service provider), including:
 - Financial support (in grant form) for purchase of a productive asset and/or cash flow (including obligations not to sell the asset and maintain its value)
 - Mentoring
 - Early payments
- Dube TradePort lobbied the consortium members to continue working with the selected subcontractors and provided support to subcontractors for diversifying their client base, e.g., accompanying vendors to pitch meetings

Monitoring and evaluation process, and impact

- Monitoring and evaluation activities were jointly managed by Ilembe and the Dube TradePort, and included the following:
 - Monthly progress reports on preferential procurement targets were submitted to a BBBEE committee—this committee would also review proposals for enterprise development spend
 - High-level interviews and site visits were conducted by Dube TradePort as a further measure
- Key measures used for monitoring and evaluation were:
 - Percentage of total measured procurement for purchases and subcontracted works and from SMMEs and microenterprises
 - Percent usage of vendor database
- Partial information is available on impact:

- As of April 2008, 20 SMME vendors from the database had been used.
- As of February 2009, an estimated R¹⁰⁴ 653.8m had been spent on SMMEs, including R111.5m on microenterprises.
- By November 2009, it was estimated that about 73% of procurement was spent on targeted groups, and that 4,800 jobs within SMMEs and BBBEE enterprises had been supported by the construction project.¹⁰⁵

Key challenges faced through the construction project included:

- Development and growth of SMMEs as part of enhancing socioeconomic impact was a secondary objective.
- Limitations to types of contracts and timing of contracts that could be awarded to SMMEs:
 - Ilembe tended to avoid allocating contracts with higher technical and skills requirements for preferential procurement—mostly basic contracts were awarded, limiting growth opportunities for enterprises.
 - Many of the first contracts to be awarded were large, highly technical contracts (e.g., air bridges, cargo and baggage handling equipment), which could not be broken down and supplied by SMMEs—therefore progress on BBBEE and SMME spend was slower than initially anticipated.
- There were difficulties finding a balance between providing sufficient support so that the enterprise had access to opportunities, and providing so much support that the enterprise becomes complacent.
- Monitoring and evaluation:
 - Individual enterprises could contribute to a number of preferential procurement categories (SMME and micro), although minimums were set for each.
 - Dube TradePort was not involved in the contracts between Ilembe and the subcontractors, and could not verify subcontracted values.
 - Reliance on reporting by Ilembe, through a jointly appointed evaluation team
 - Difficulty monitoring the nature and impact of mentoring support

E.3 Amanz’abantu Franchising Model in South Africa—Linking Sanitation Service

¹⁰⁴ R: South African Rand

¹⁰⁵ Global Insight. (2009). Dube Tradeport Evaluation System, A Socio-Economic Impact Approach.

Providers to Public Procurement Opportunities

The Butterworth schools sanitation maintenance project was piloted for three years in the Butterworth district in the Eastern Cape, with development costs funded by Irish Aid, and costs of the maintenance being undertaken funded by the Department of Education and/or schools from their annual budgets. The project was initiated by the CSIR, which concluded that a franchising model could be applied to the operation and maintenance of water services infrastructure. It seemed to the CSIR that this would be a good way to bring to the operation and maintenance of this infrastructure the necessary degree of quality and reliability that is not currently present.

The Department of Education agreed that the pilot would be the approximately 400 schools in the Butterworth district, and the CSIR identified Amanz'abantu (an East London-based company specializing in the construction of water infrastructure) as an implementation partner. Early in 2009 a memorandum of understanding between the five parties—Irish Aid, Department of Education, Water Research Commission (WRC), Amanz'abantu, and CSIR—was signed, committing the parties to proceed with the pilot.

Amanz'abantu advertised the opportunity and raised awareness through a meeting and subsequent interactions with people interested in becoming franchisees. Franchise contracts were then developed to include basic maintenance of facilities as well as educating learners on water and sanitation best practices. The franchisees generally employ four to five local people. Amanz'abantu provides a training and mentoring program for franchisors,¹⁰⁶ which includes management skills such as legal knowledge and accounting skills.¹⁰⁷ The structure of the franchising model, and co-branding, incentivizes the franchisor to transfer skills to the franchisees and to monitor the quality of the service that they provide.

The model for franchising in the case of the Butterworth schools project is discussed in further detail in the following box:

Box 34. Example of Franchising: The Butterworth School Project

Support provided

- Financial support for the Butterworth school sanitation project (Irish Aid): €200,000 (R2m¹⁰⁸) in 2008/2009, €140,000 (R1.4m¹⁰⁹) in each of 2009/2010 and 2010/2011

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

¹⁰⁸ Using monthly average exchange rate for April 2010, €1: R9.86, from www.oanda.com

¹⁰⁹ Using monthly average exchange rate for April 2010, €1:R9.86, from www.oanda.com

- Technical support to Amanz'abantu (provided by the CSIR), including research and developing the franchising model suited for rural sanitation projects
- Skills training for franchisees on technical areas, HSE, and business skills (e.g., legal and accounting)

Monitoring and evaluation process, and impact

- Ongoing monitoring of franchisees by Amanz'abantu
- Initially started with nine possible franchisees, currently left with four
- Turnover for each franchisee is around R500,000/year¹¹⁰
- Each franchisee has hired four to five local staff, mainly women

Success factors

- Suitable for various small-scale infrastructure operation and maintenance, for example, building maintenance
- Effective skills transfer and long-term mentorship by providing a private sector response for some of the biggest constraints to SMME procurement—namely lack of enterprise capacity and the provision of inferior quality goods or services
- Allows entrepreneurs to set up sustainable businesses, rather than providing short-term maintenance/infrastructure jobs
- The franchising model offers a means of ensuring that standards are met. This can be done by “licensing” franchisors, who in turn will ensure that franchisees work within the approved procedures.

Key challenges and drawbacks faced included:

- Unclear whether the model can be sustainable (which the pilot aimed to assess) and applicable on a larger scale
- SMMEs may be unwilling to join a franchise, as some entrepreneurs prefer more autonomy (although they will benefit from the additional support)
- Limited funding and poor payment processes from schools for maintenance and sanitation projects

¹¹⁰ Pile, J. (2010). The Unreality Check. Financial Mail (1 April 2010).

APPENDIX F: MINING POTENTIAL IN GHANA, GUINEA, AND SENEGAL

Gold

Mining and processing activity

- Goldfields:
 - Tarkwa open pit, CIL plant and two heap leach pads: 720,700 oz (FY 2010), 1m ton/month, life extends to 2022
 - Damang 300–400kmt/month mine and CIP plant: 207,400 oz (FY 2010), life extends to 2019
- AngloGold Ashanti:
 - Obuasi surface and underground: (processing temporarily suspended pending water management planning): 381,000 oz (2009)
 - Iduapriem (processing temporarily suspended pending tailings facility establishment): 190,000 oz (2009)
- Newmont: Ahafo open pit and CIL plant: 500,000 oz/yr
- Golden Star:
 - Bogoso/Prestea open pit mine and CIL sulphide ore processing plant (Prestea underground on care and maintenance): 410,000 oz (2009)
 - Wassa mine and CIL plant
- Kinross (previously Red Back): Chirano: 183,000 oz/yr
- Central African Gold: Bibiani
- Artisanal/small-scale miners: 141,100–282,200 oz/yr
 - Estimated between 500,000 and 1m people work in small-scale sector, 5–10% of labor force

Ghana production:

- 2.9m oz/yr of gold (2008)
- 1.5m oz (first half 2010)

Exploration and development—advanced projects

- Adamus Resources:
 - Nzema: 1.1m oz fully permitted greenfield
 - Perseus Mining
 - Ayanfuri: planned 220,000 oz/yr in first four years, reserves of 2.13m oz
 - Newmont
 - Akyem—potential of 550,000 oz/yr output with an increase of 3,000 people
-

-
- Brownfield at Ahafo
 - PMI:
 - Obotan
 - Kubi: potential 60,000 oz/yr
 - Keegan Resources (Ghana) Limited, Ashanti Region (advanced exploration stage)
 - Sunergy, Inc.
 - Production of 100,000 oz within first year

Other companies involved in exploration include Moydow Mines International Inc., Volta Resources Inc., Xtra-Gold Resources Corp, Cluff Gold

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- | | |
|---|--|
| Guinea | • AngloGold Ashanti Siguiri Open pit operation: +300,000 oz/yr |
| • Production: | • Crew Gold Corp. (85%) Lero-Karta Mine: 3,500Mt annual capacity |
| • 638,000 oz (2009) | • Semafo Inc. (85%) Kiniero Mine: 1,700Mt annual capacity |
| • Exports: 32.01% of total exports (2008) | |

Mining and processing¹¹¹

- Sabodala Mining Group:
 - Sabodala open pit gold mine and CIL plant: 160,000 oz of gold by the end of 2009 (opened in 2009), production to average 165,800 oz/yr, 10-year life span
 - Senegal production:**
 - CIL plant designed with 2t throughput capacity
 - 21,160 oz (2008)
 - 10m oz of resources discovered, total reserves estimated at 15.8m tons
 - 500 Senegalese nationals employed
 - Bassari Resources
 - Douta alluvial project: first gold pour of 2.44 kg in 2010¹¹²
 - Estimated to contain some 25,600 oz of gold
-

¹¹¹Bermúdez-Lugo, O. (2010). 2008 Minerals Yearbook.

¹¹² Engineering News. (2010). Bassari Achieves First Gold at Senegal Project.

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- Spending ~US\$1m per month on exploration

Mineral exploration

- Mainly in Sabodala gold district
- Axmin Inc.
- Iamgold Corp.
- Oromin Explorations Ltd.
- Mineral Deposits Ltd.: Gora prospect (near Sabodala)
- Randgold Resources Ltd.:
 - Massawa concession: feasibility study expected to be completed in 2011; 3.5m oz of inferred and indicated resources, 1.9m oz of proven and probable reserves in 2010. Proposed Massawa process plant design consists of crushing, milling, gravity recovery of free gold, flash flotation, full flotation, and pressure oxidation of flotation concentrate followed by dedicated leaching/adsorption of flotation concentrate, CIL treatment of gravity/flotation tailings, elution and gold smelting and tailings disposal

Bauxite and alumina

Guinea

- 14.7m tons production of bauxite in 2009
- 30% of world's bauxite reserves
- Bauxite accounts for 20% of Guinea's GDP and 90% of exports¹¹³

- Compagnie des Bauxites de Guinée (CBG)—includes 51% Halco Inc.
 - Kamsar and Sangared: 14m tons annual capacity
 - Capacity could be trebled by 2019
- Compagnie des Bauxites de Kindia (CBK)
 - Debele Mine, Kindia: 3m tons annual capacity
- Frigia Alumina Refinery
 - Capacity 640,000 tons/yr of alumina, three-year project to increase capacity to 1m tons/yr
 - Capacity 1.9m tons/yr bauxite

Advanced projects

- Guinea Alumina Corporation (GAC) alumina refinery project
- Anglo Aluminium, Mamou-Dalaba Bauxite project

¹¹³ <http://www.mbendi.com/indy/ming/af/gu/p0005.htm>

-
- Koba total resources of 501m tons
 - • Koumbia, total resources of 129.8m tons
-

Mining

- Ghana Bauxite Co. Ltd. (Rio Tinto Alcan, Ghana govt.)
 - Awaso: 613,000 tons, US\$11m revenue, reserves of 100m tons
 - Open pit mining, with ore only washed for export

Ghana production:

- 301,500 tons (first half of 2010)

Beneficiation:

- Valco aluminum smelter located at Tema: shut down in 2007 (200,000 tons/yr capacity); plans to restart the plant in 2011
- Future plans to construct a 2m ton/yr alumina refinery
- Bosai Minerals Group—planned investment of RMB3.5bn to set up an alumina plant, capacity of 1m tons by 2013 to supply China, and plans to acquire existing electrolytic aluminum plant of annual production of 200,000 tons¹¹⁴

Iron ore

¹¹⁴ <http://news.alibaba.com/article/list/1/bosai.html>

Advanced projects

- Guinea**
- Newmont Mining & BHP Billiton JV Societe des Mines de Fer de Guinea
 - 1.3bn tons of iron ore
 - Prefeasibility in 2011
 - Vale (through stake in BSG Resources)
 - Output will begin in 2012
 - 10m tons of iron ore initially, 50m tons by 2015
 - Rio Tinto & Chalco JV SIMFER Simandou iron-ore project¹¹⁵
 - US\$650m spent on exploration and evaluation, further US\$170m allocated (including upgrading road infrastructure)
 - Yearly production of 70m tons
 - Largest integrated iron ore mine and infrastructure development in Africa, to include 650km dedicated industrial railroad¹¹⁶
 - Bellzone Kalia iron-ore project

Manganese

- Ghana**
- Mining**
- Production: 564,000 tons first half of 2010
 - Ghana Manganese Company Ltd. (Ghana International Manganese Co., 90%, and government)
 - Nsuta-Wassaw open pit mine: 1m tons
 - • US\$64m revenue (2008)
-

¹¹⁵ Engineering News. (2010). Rio Tinto Approves \$170m for Guinea Iron-Ore Project.

¹¹⁶ E&MJ: Engineering and Mining Journal: Rio Tinto Approves Additional Funding for Simandou.

Heavy mineral sands

Mine development

- Senegal**
- Mineral Deposits Ltd. Grande Côte Mineral Sands Project
 - Current estimated capital cost of US\$406m;¹¹⁷ operating expenses of US\$75m
 - Inferred mineral resources were estimated to be 1.33 billion metric tons at an average grade of 2% heavy minerals
 - Expected production of 85,000 t/yr of zircon and 650,000 t/yr of ilmenite
 - Expected life of mine: at least 25 years
 - Capital investment includes dredge and floating concentrator mining 55m t/yr, 28 MW power station, and connections to existing road, rail, and port infrastructure
 - Market entry expected in 2013
-

Phosphate rock¹¹⁸ and phosphoric acid

Senegal production: Mining

- Phosphate rock: 50,000 tons (2008)
 - Compagnie Sénégalaise des Phosphates de Taïba: 600,000 t forecasted production
 - Société Senegalaise des Phosphates de Thiès (SSPT)
 - Production greatly reduced since the buyout by Tolsa in 1998
 - Phosphoric acid: 180,000 tons (2008)
 - Société d'Etudes et de Réalisation des Phosphates de Matam: production of 30,000 tons (2009)
-

Senegal production: Beneficiation

- Phosphate rock: 50,000 tons (2008)
 - Industries Chimiques du Sénégal Group (Indian Farmers Fertilizer Cooperative Ltd., 85%, and government 15%)
 - About US\$85m annual procurement (excluding sulphur) for mining at Taïba and processing
 - Phosphoric acid: 180,000 tons
-

¹¹⁷<http://www.marketwire.com/press-release/Mineral-Deposits-Limited-De-Merger-Proposal-TSX-MDM-1308110.htm>

¹¹⁸ Mining Journal. (2009). Mining Journal Special Publication—Senegal.

(2008)	<p>Exploration</p> <ul style="list-style-type: none"> • Roxwell: Niakhene • Australian Boomerang Resources: Coki, Gossas
Diamonds	
<p>Ghana production: 643,000 carats (2008)</p>	<ul style="list-style-type: none"> • Ghana Consolidated Diamonds—placer mine at Akwatia • Artisanal gold production estimated at 500,000 to 900,000 carats at Birim valley
Attapulgit	
<p>Senegal: annual production of 183,532 tons</p>	<ul style="list-style-type: none"> • Petrochimât <ul style="list-style-type: none"> - Nianning • Société Senegalaise de Phosphates de Thies SA <ul style="list-style-type: none"> - Lam Lam, Sebikhotane, Mbodiene, Warrang, Fouloum • Senegal Mines <ul style="list-style-type: none"> - Annual capacity: 100,000 t/yr

