APPENDIX 7

Initial assessment of mining sector demand for Liberia and Burkina Faso

This appendix captures the demand for products and services in the mining sector in Burkina Faso and Liberia, as at June 2014. It relates mainly to Module 3 of the Guide: Identifying Opportunities. Results are based on research conducted by the World Bank and Kaiser Economic Development Partners (Kaiser EDP) during the "West African Mining Local Procurement Implementation" (WALPI) project between 2013 and 2014 in Burkina Faso and Liberia.

I. Methodology

The results of this appendix draw from research conducted with suppliers and mining companies in Liberia and Burkina Faso as part of the World Bank's WALPI project. The results are based on data from 5 mining companies in Liberia (4 iron ore, 1 gold) and 6 mining companies in Burkina Faso (all gold). Since the data was shared in the original format of the mining companies, Kaiser EDP created a standard system of demand categorisation for procurement data, so that data could be aggregated across mining companies. Goods and services were separated into three major categories (Level 1): Plant & Equipment, construction and core services; Consumables; and Non-core products and services. Under each of the major categories were subcategories (Level 2) and some of the subcategories have further subcategories (Level 3). For a complete list of the categories, please see Module 3, Section 3 in *A practical guide to increasing mining local procurement in West Africa.*

Once the standard list of categories, subcategories, and sub-subcategories was defined, each mining company list of categories was mapped to the standard list. As such, procurement expenditures for each mining company were allocated to the standardised demand categories. At the end of the process, categories representing 80 to 90% of mining companies' spend were mapped to the standard categories. The mapping then allowed Kaiser EDP to calculate, for each standard category, the aggregated spend for all the mining companies that had provided data.

In addition, mining companies spend data was divided into the different phases of mining: exploration, mine and infrastructure construction ("project phase"), and operations.

Finally, forecasting was performed for spend by each product / service category. The projected spend for the standard product / service categories was derived for future years by applying to the projected aggregated spend for that year the percentage of each category to the aggregated spend in historical numbers. Kaiser EDP also used publicly available information such as from the Chamber of Mines, government, mining companies' annual reports, information on projects or investment plans, production levels, remaining mine lives, etc. to support its forecasts. However, it must be noted that the forecasts were based on some basic assumptions, which may vary in reality. For the sake of simplicity, Kaiser EDP based its scenarios on mining project / exploration activity occurring or not; they did not consider the underlying causes, e.g. possible shifts in commodity prices or financial markets, and their impact on the mining sector. Projects were only considered when there was visibility or clear plans over next four years; in this regard the forecasts are generally conservative. However, this is balanced by the assumption that the projects will go ahead as planned (i.e. ignoring possible delays / cancellations due to permitting, environmental, or other contingencies).

II. Results

A. Initial spend analysis

▶ **Liberia**
Total procurement spend of $1.55 billion was reported across 5 mines for the period 2010-2013. However, it is approximately US$2 billion with all activities included. In terms of spend based on phase of mine development, Projects accounted for the most spend during 2010 – 2013 at US$1.13 billion, followed by Operations at US$360 million and Exploration at US$60 million. The graph below shows spend by year for the entire sector:
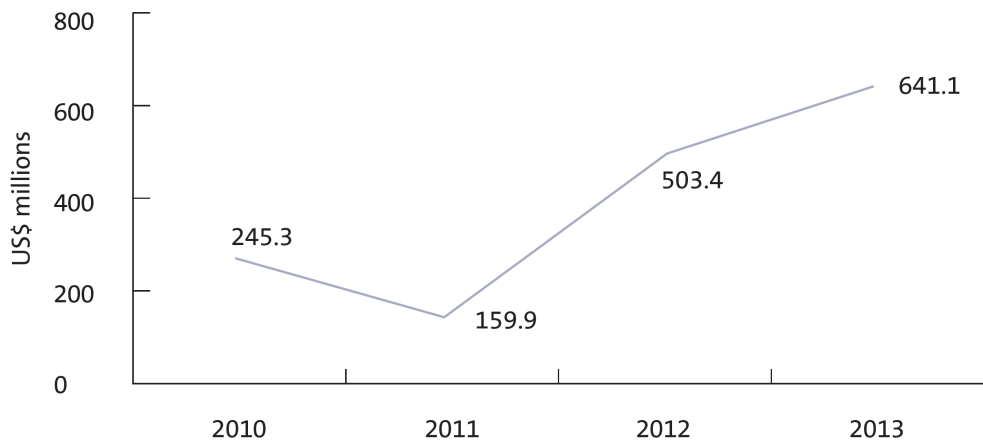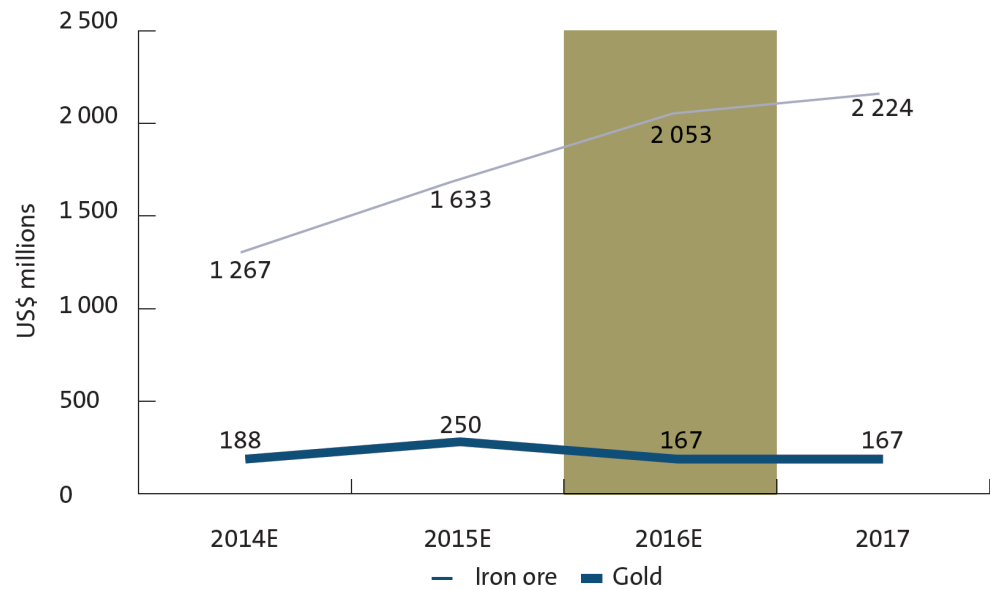

▶ **Burkina Faso**
Total procurement spend of US$980 million was reported across 6 mines for the period of 2010 – 2012. In terms of spend based on phase of mine development, Operations accounted for the most spend during 2010 – 2012 at US$1,543 million, followed by Projects at US$394 million, and Exploration at US$70 million. The graph below shows spend by year for the entire sector:
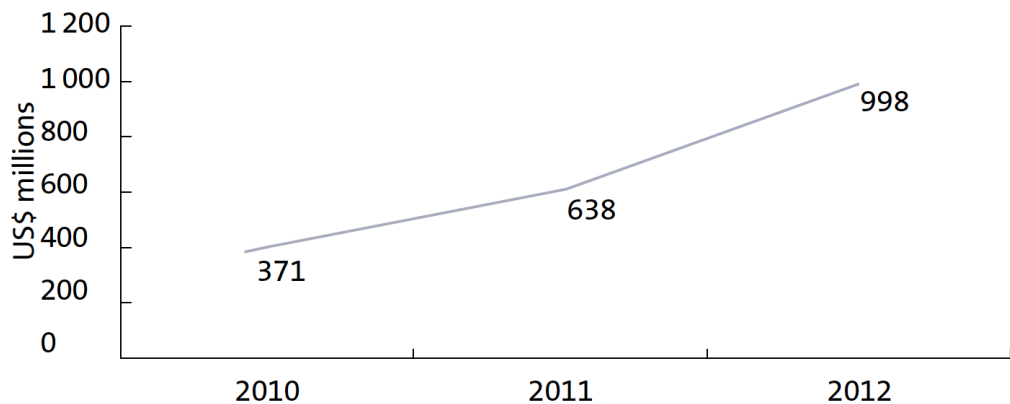
B. Forecast over the 2013-2016 period:

▶ Liberia

The forecast for operating spend on iron ore is expected to increase to over $US 2.2 billion by 2017. However, the forecast for gold is expected to level off by 2017 to $US 167 million.
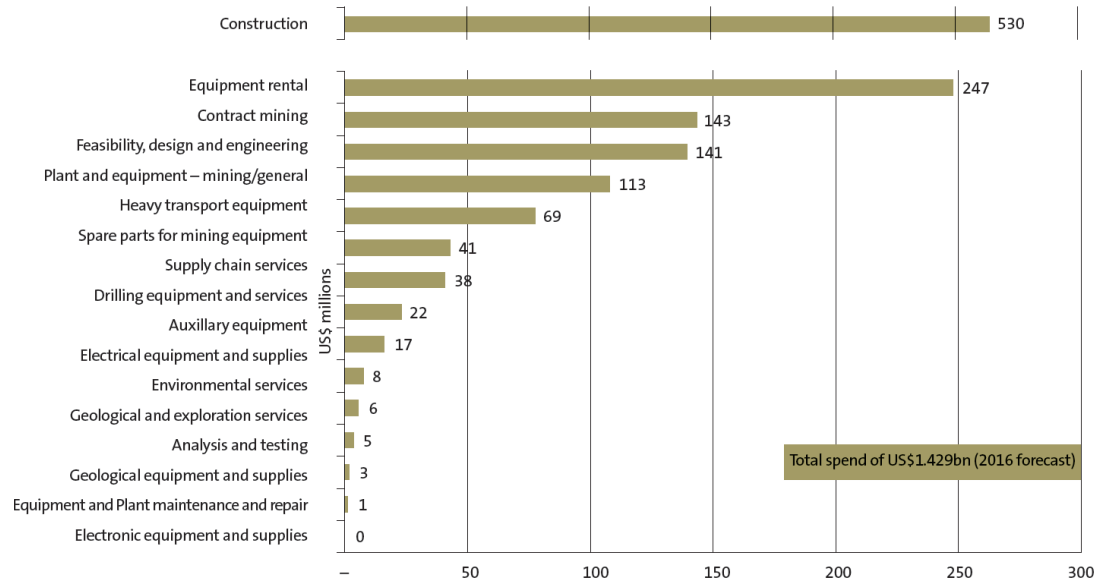
► Burkina Faso

In Burkina Faso, two scenarios were run to forecast spend. **Scenario 1** is the base case and **Scenario 2** is the low case. In Scenario 1, operating spend is based on planned production of mines (both existing and expected new mines) and historical spend factor; project is spend based on development plans of mines and associated projected expenditures; exploration spend is assumed flat. In Scenario 2, operating spend is based on planned production of existing mines only; there is no project spend and no exploration spend.

Both scenarios forecast an increase in spend in Burkina Faso between 2013-2016. However, the base scenario forecasts $US 1,448 million by 2016 and the low case scenario forecasts $US 664 million by 2016
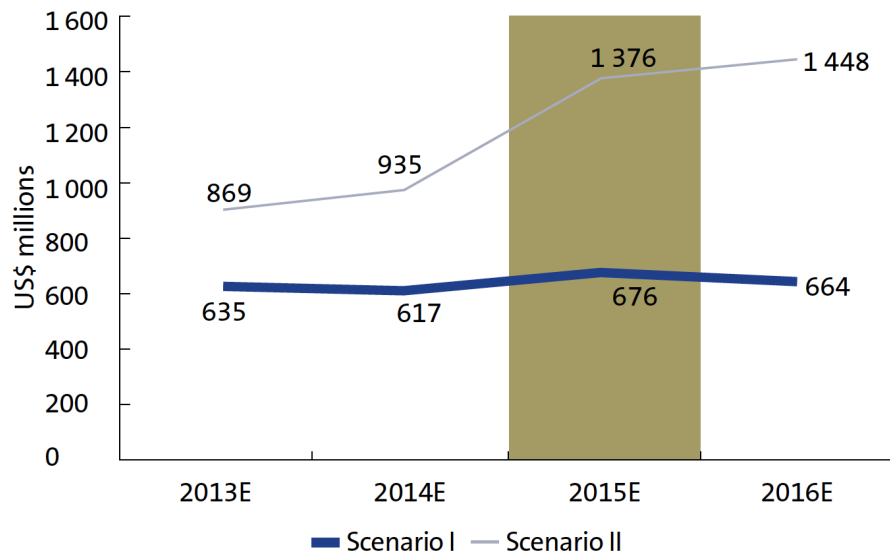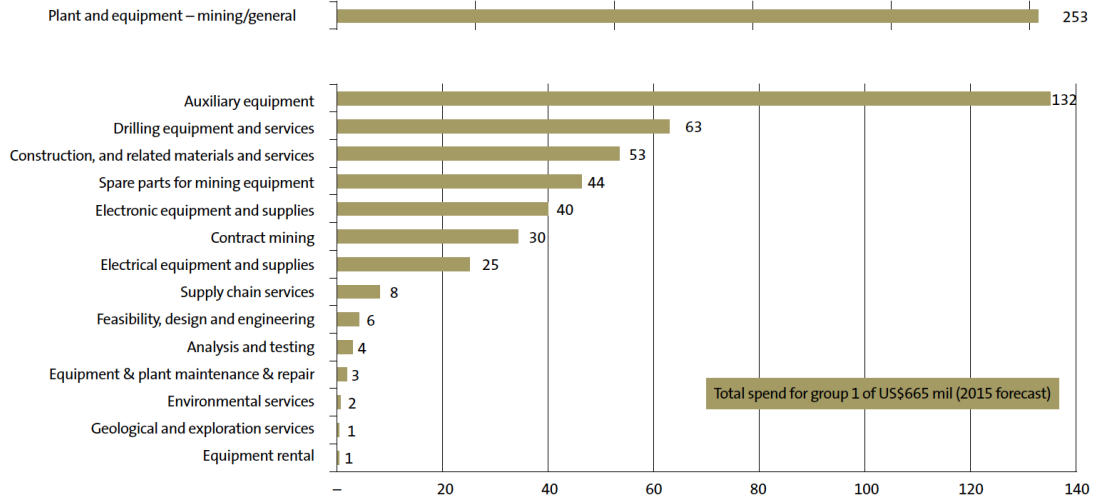
C. Forecast spend by category : Plant & Equipment, Construction and Core Services

▶ Liberia (2016)

Category	Value (US$ millions)
Construction	530
Equipment rental	247
Contract mining	143
Feasibility, design and engineering	141
Plant and equipment – mining/general	113
Heavy transport equipment	69
Spare parts for mining equipment	41
Supply chain services	38
Drilling equipment and services	22
Auxillary equipment	17
Electrical equipment and supplies	8
Environmental services	6
Geological and exploration services	5
Analysis and testing	3
Geological equipment and supplies	1
Equipment and Plant maintenance and repair	0
Electronic equipment and supplies	

Total spend of US$1.429bn (2016 forecast)

▶ Burkina Faso (2015, Base Scenario used)

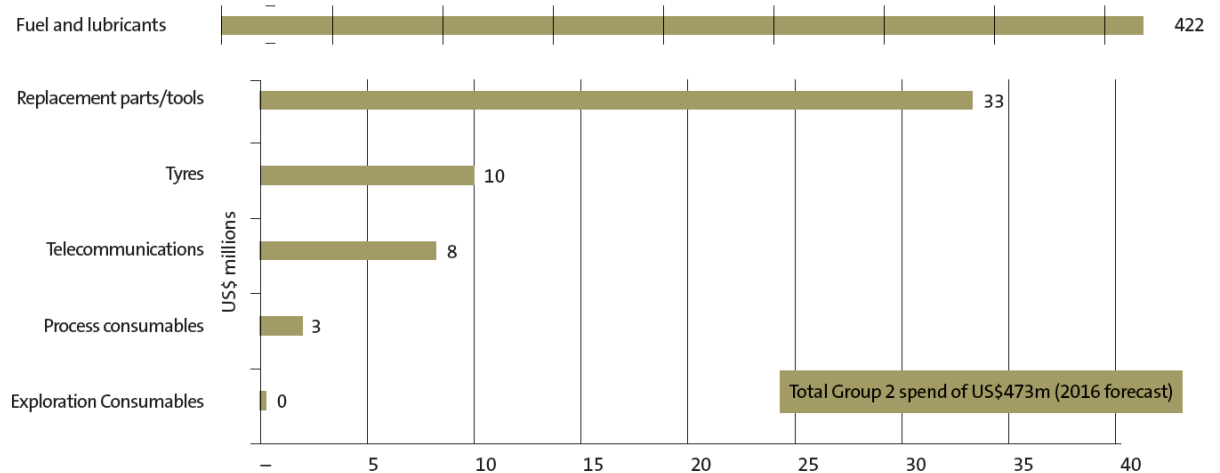**AGGREGATED DEMAND FOR BURKINA FASO, FORECAST FOR 2015 ($ MIL):**
PLANT AND EQUIPMENT, CONSTRUCTION AND CORE SERVICES

Category	Value ($ mil)
Plant and equipment – mining/general	253
Auxiliary equipment	132
Drilling equipment and services	63
Construction, and related materials and services	53
Spare parts for mining equipment	44
Electronic equipment and supplies	40
Contract mining	30
Electrical equipment and supplies	25
Supply chain services	8
Feasibility, design and engineering	6
Analysis and testing	4
Equipment & plant maintenance & repair	3
Environmental services	2
Geological and exploration services	1
Equipment rental	1

Total spend for group 1 of US$665 mil (2015 forecast)

D. Forecast spend by category: Consumables

▶ **Liberia (2016)**

**Fuel and lubricants** are expected to be the largest spend items by 2016 at $US 422 million, accounting for over 89% of Group 2 spend, as demonstrated by the graph below:

▶ **Burkina Faso (2015, Base Scenario used)**

As for Burkina Faso, **Fuel and Lubricants** are forecast as the largest spend items by 2015 at $US 439 million, or 64.8% of total Group 2 spend, as demonstrated by the graph below:
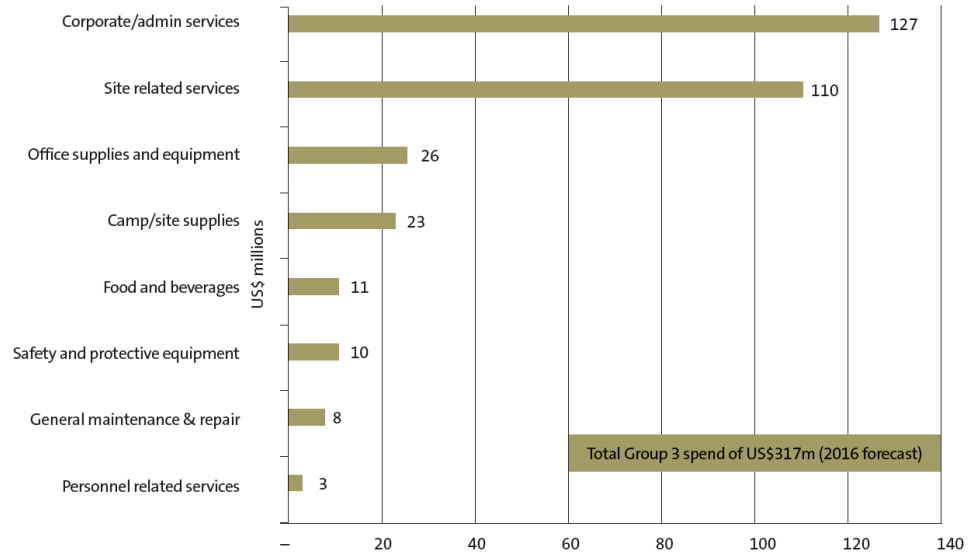
AGGREGATED DEMAND FOR BURKINA FASO, FORECAST FOR 2015 ($ MIL): CONSUMABLES
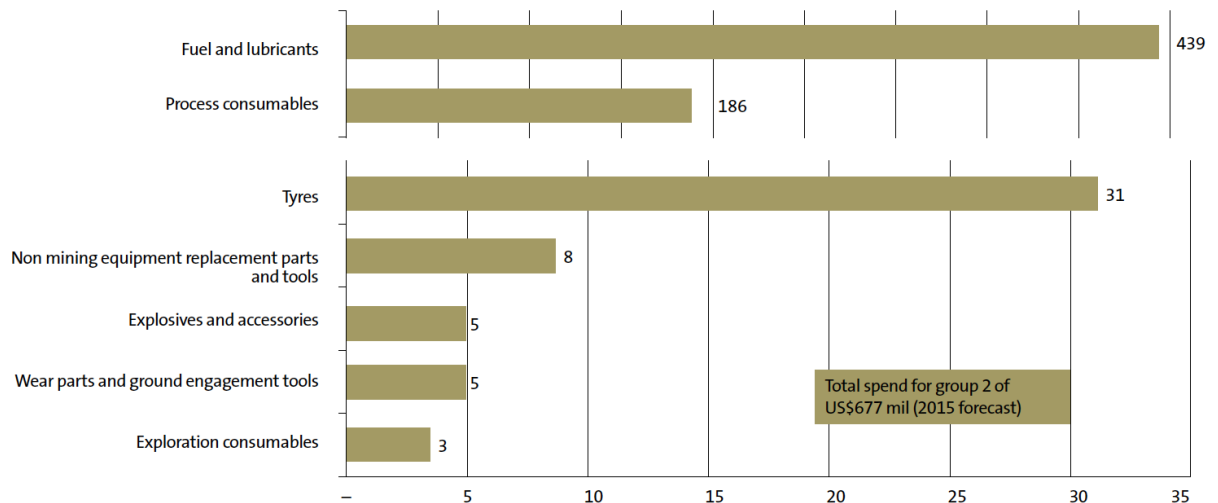
E. Forecast spend by category: Non-core products and services

▶ **Liberia (2016)**

Corporate/admin services and **site related services** are expected to make up the majority of Group 3 spend in 2016 at $US 127 million and $US 110 million, respectively.

▶ **Burkina Faso (2015, Base Scenario used)**

Burkina Faso's forecast Group 3 spend is a fraction of that of Liberia at only $34 million USD. Within this group, **Safety and protective equipment** and **Food and beverages** are expected to make up the majority of spend at $11 million USD and $10 million USD, respectively.