# Mineral Pricing Challenges and Valuation Issues

A Case for Sierra Leone







#### Introduction

The valuation of mineral products is an ongoing challenge for many countries. It builds on the need for detailed sector-specific knowledge of the mining operations that are underway within our country.

As a result, it is paramount for the government's revenue mobilization targets to ensure that royalties are assessed and calculated in a fair manner as stipulated by the governing laws.

In order to achieve this, the risks in verifying the physical composition and pricing of mineral product shipments have to be identified and mitigated through clear Standard Operating Procedures (SOPs).





#### Sierra Leone's Mineral Royalty Regime

•Sierra Leone has an ad-valorem royalty regime.

Prevailing rates as per the Mines and Minerals Act are as follows:

• Precious stones: 6.5% (15% for special stones)

Precious metals: 5%

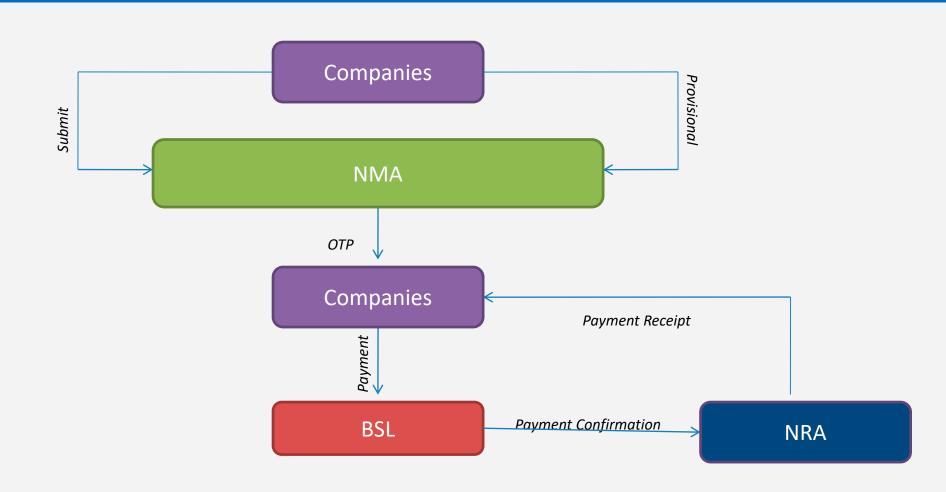
Bulk minerals: 3%

 Mining Lease Agreements (MLAs) can affect the prevailing Royalty rates.





### **Royalty Payment Process**







#### **Pricing Challenges**

Transfer Pricing Issues: On going challenges in the ability of Govt. of Sierra Leone to verify that mineral product transactions conform to the arms length principle.

The availability of reliable price comparison data bases and market intelligence.

Access to information: Challenges in ensuring that our legal and regulatory framework is adequate to ensure EI taxpayers keep appropriate records to track related party transactions and explain how transfer prices were arrived at in those transactions.





#### **Valuation Issues**

Capacity to adequately verify the physical composition of mineral product shipments remains a huge challenge.

The valuation of arms length mineral prices can be extremely complex if they involve unique specialised scientific and technical know how.

For instance, certain minerals may require a large number of valuation criteria with possible quality combinations as a result of the specialised nature of their classification.

Securing the services of competent specialised valuators





Given the highly concentrated state of the diamond mining industry and the relatively opaque nature of rough diamond trading, reliable, easily-assessable indicative rough diamond price information has historically been difficult to source.

The proprietary index methodology primarily incorporates price data from rough diamond transactions in the primary market, e.g. sales via long-term contract, tender and auction by commercial miners. The Index also includes a minor sensitivity to polished diamond prices given that miners utilize the polished market as a factor when determining contract pricing of rough.



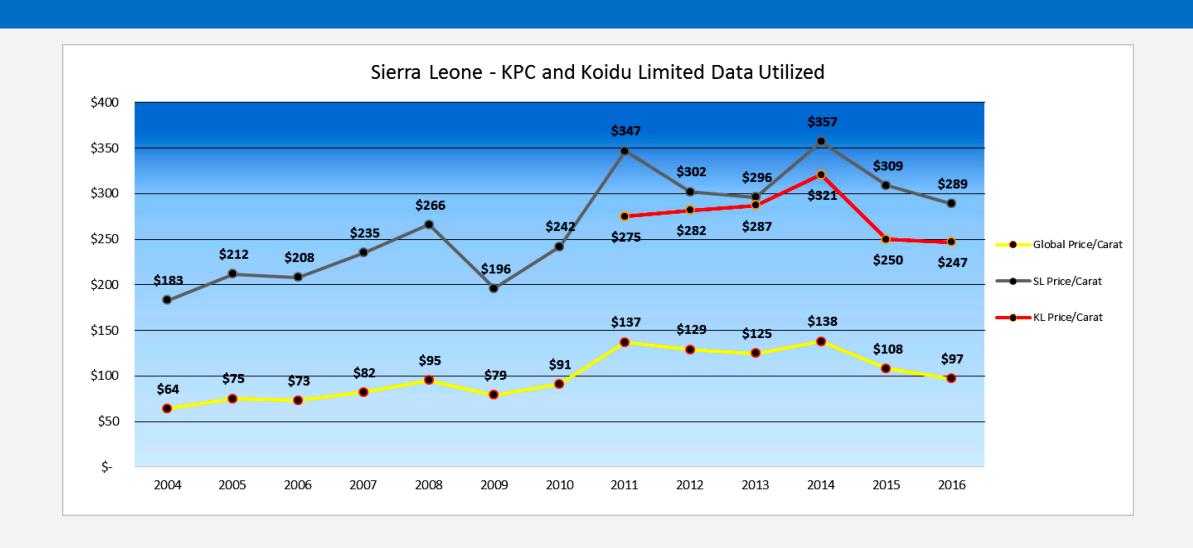


Given the nature of natural diamond production, the variance in quality of stones produced, or the product mix, can impact global rough diamond prices on an average price-per-carat basis. The sources used strives to represent as accurately as possible current price changes reflected in the average rough diamond transaction valued on a per carat basis in U.S. dollars

The Index values does not directly represent the price of a 1-carat rough diamond, but the percentage change in the average value of a rough diamond transaction relative to the initial Index value, at a given point in time.











Due to the hard rock mining method used (kimberlite) unlike alluvial mined diamonds, quality differs which influences diamond prices.

Colour, shape and size also have an influence on rough diamond prices.

Kimberlite diamond values are considerably lower than alluvial diamonds.





## **Summary of risk to Royalty Due**

Risk	Category	Cause
<b>Quantity</b> of minerals exported is understated	Sector-specific	Lack of adequate pre-shipment inspection to ascertain the value of
<b>Quality</b> of minerals exported is understated	Sector-specific	mineral exported
<b>Price</b> of minerals exported is understated	Sector-specific	<ul> <li>Limited Government capability to conduct price assessments</li> <li>Incentive for tax payers to underreport</li> </ul>
Non-payment of all royalties due to shortcomings in Government processing	Generic with certain sector-specific aspects	<ul> <li>Due to complicated debit/credit system certain revenues might not get paid for.</li> <li>Clearly defined process is track payments.</li> <li>Administrative complexities</li> </ul>





#### The way forward

Studies have highlighted many challenges in auditing extractive industries which include technical complexity of the sector and the need for capacity building and retention of specialised staff.

This, therefore presents the need for the introduction of strict SOPs and guidelines that define the role of each institution and/or unit clearly bound in a performance contract.





# **QUESTIONS?**

