



POLICY BRIEF #5

Proposed valuation of local bauxite exports: “Trust but verify.”

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A. SCOPE

This policy brief is the fifth in a series of eight such documents on Guyana’s bauxite sector. Its objectives are to:

- 1) compare the actual and required monitoring of quantities, qualities and prices of bauxite production and exports;
- 2) conduct a basic risk assessment for non-compliance by companies;
- 3) recommend an export valuation system for bauxite.

This document neither speculates nor concludes as to whether quantities, qualities or prices of bauxite production and exports are being mis-reported by companies in Guyana. Instead, it focuses on improvements to the current system of monitoring even if such risk is minimal.

B. INTRODUCTION

Policy context: In a joint 2018 report, the Organisation for Economic Co-operation and Development (OECD) and the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) stated that “Many governments are worried they don’t know the value of their exported minerals and are losing much-

needed revenue as a result.”¹ The report advised that policy-makers should be equipped to make informed, risk-based decisions on how best to monitor the value of mineral exports, irrespective of any judgment on the ethical standards of the companies in their countries.

Policy position #3 within the draft National Mineral Sector Policy Framework and Actions (NMSPFA), prepared for the Ministry of National Resources in December 2018, speaks to the need for “Expanding mining’s contribution to national and sub-national economic development.” Under this policy, and of direct relevance to this brief, is strategic goal #9 (SG 9), which sets out “to increase revenue collection by more effective monitoring of mineral payloads.”

Background: Production royalty and corporate income tax are the two largest revenue instruments in the fiscal regime for local bauxite. This brief focuses only on royalty, as this falls within the mining act and, therefore, the jurisdiction of the GGMC, while corporate tax collection is the responsibility of the Guyana Revenue Authority.

Royalty is usually levied on the price of the mineral, multiplied by its volume, with adjustments made for ore grade or quality. Government revenue from mining, therefore, depends on the accurate measurement of the quantities, qualities and prices of mineral products.

In practical terms, this simple equation becomes complicated as the mineral price, for example, can vary at different points of the mine-to-market chain or may not be correctly set due to tax evasion or imperfect market forces. Lack of publicly-quoted prices, under-reporting and abusive transfer pricing by companies remain prevalent in the international mining industry. As the IGF-OECD further states in their 2018 report: “unless governments are confident that the values declared by companies are accurate, suspicion and doubt will continue to

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¹ OECD - IGF (2018) - Monitoring the value of mineral exports: policy options for governments.

erode trust between government and industry, which in turn affects companies' social licence to operate..”^{2,3}

Notwithstanding, it should be recognized that many companies measure their production and value their mineral exports according to internationally accredited procedures. The IGF-OECD therefore advises that a country's perception of the level of risk of malpractices occurring in its mining sector should determine the extent and nature of government monitoring activities.

The local bauxite industry has not faced any such accusations, though much of the data on its production and exports is collected through self-reporting. Nevertheless, the country should assess the current state of its monitoring system and make improvements in line with international best practices.

C. COMPLIANCE: LEGAL ASPECTS

The mining legislation and the mineral agreement mandate that bauxite producers submit monthly, quarterly and annual reports to the government on their mineral production, exports, and related financial transactions (Annex I). In specific terms, producers are required to provide, for example, grade and quality of bauxite mined, sales and shipments of bauxite mined, raw and processed drill and assay data, and short and long-term contracts.

The main features of the reporting/compliance system for bauxite operators appear adequate in terms of:

- Breadth of coverage of operations (inclusive of information on geology, mining, the environment, health and safety, and financial and business transactions).
- Regularity of reporting (monthly, quarterly and yearly).
- Diversity of data sources (maps, assay results, diagrams, sales contracts, audited accounts, etc).
- Powers of government regulators to make inspections.

In the current national political milieu, with the growing call for more transparency and accountability in the management of the country's natural resources, the government should relook at the provisions on confidentiality of company disclosures, and penalties for non-reporting.

² Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) - Organisation for Economic Co-operation and Development (OECD). 2018 – “MONITORING THE VALUE OF MINERAL EXPORTS: Policy options for governments.”

³ For example, one African country reported that, in 2014, the average value of one company's bauxite exports to its affiliate refinery in Europe was nearly three times lower than the value of its bauxite exports to other trading partners (OECD-IGF, 2018).

D. MONITORING SYSTEM AND ACTIVITIES

Under Guyana's mining law, compliance monitoring of the bauxite operations is the responsibility of the Guyana Geology and Mines Commission. Within the Guyana Geology and Mines Commission, the Mines Division (Mines Technical Section) regulates mainly the large and medium scale mining activities through technical inspection tours. Understandably, the focus is almost exclusively on the mining operations for gold, loam, sand, and stone, given their large number and geographic spread.

For the two bauxite mines in Guyana, a typical monitoring exercise is conducted, at best, once a year and focuses mainly on the mining engineering and processing operations themselves (such as debushing, stripping, ore extraction, tailings management, dewatering, ore drying, and environmental compliance).

Field-based monitoring activities, therefore, do not include measurements of ore volumes or sample collection and testing of raw or processed material at any point of these operations.

In addition, companies submit monthly production statements on the tonnages of material mined, processed and shipped. Included also are the dollar values of exports on a monthly, quarterly and year-to-date basis. Of note, with regards the grade and quality of bauxite, only the silica content is requested and reported. The quality of bauxite (and therefore its price) depends, however, on the presence and concentration of other chemical compounds, such as alumina, iron oxides, and titania. This information should be requested through the self-reporting sheets.

These reports are apparently not subject to any verification exercise.

E. RISK ASSESSMENT OF NON-COMPLIANCE

Unlike the gold and diamond mining industry in Guyana, the bauxite industry, since its privatization, has not been the target of sustained or credible accusations of under-reporting or any other such manipulations. Likewise, it has not been the subject of any special or routine government audit as allowed under the legislation.⁴ Does this suggest that the industry is viewed as having a low risk for misrepresentation of export and other data?

While the possibility of undervaluation is real, the response must always be linked to the actual level of risk attached.

--OECD-IGF (2018).

⁴ In February this year, the Minister of Natural Resources did order GGMC to conduct a technical and legal assessment of all of RUSAL's operations, after a labour dispute threatened to shut the operations.

It cannot escape consideration, however, that the lack of suspicion may be due to the attitude within successive central governments that view the industry not primarily as a generator of government revenue but as a mainstay of the local mining communities in Regions 6 and 10. Lack of tax administrative capacity may also explain the high levels of trust the industry enjoys.

Nevertheless, the factors and conditions that can increase risks of malpractice are:

- The presence of integrated producers in the local industry and the potential for transfer pricing due to the less-than-arms-length arrangements among companies under one and the same parent company. Without casting aspersions, bauxite produced by Rusal-owned BCGI is sold directly to alumina refineries in Ireland and Ukraine, owned by Rusal.
- The variable grades and qualities within bauxite deposits, and the significant differences in market prices across the various types. Impurities in the bauxite ore, such as iron and kaolin, can affect prices. The Al/Si ratio is also a critical variable (the higher, the pricier). On the Shanghai Metals Market in late February 2019, for example, bauxite with an Al/Si ratio of $(6.5 \leq \text{Al/Si} < 7.5)$ was selling 35% higher than ore with a ratio of $5.5 \leq \text{Al/Si} < 6.5$.⁵ RASC, with its higher specifications, could be priced five to ten times higher than MAZ.
- The absence of an international reference price for bauxite.⁶
- The formula used to calculate royalty is price-based. The 1.5% royalty on bauxite is based on the FOB value of shipments from Guyana⁷ or on gross revenue.⁸
- Hedging arrangements that can unfairly lock in prices, should they be used.
- The absence of any government representative on company boards in which the government has no equity.

**POSSIBLE WAYS
TO UNDER-VALUE EXPORTS**

- ✓ Under-quoting prices.
- ✓ Mis-specifying reference prices.
- ✓ Deducting excessively for handling and other fees.
- ✓ Under-reporting ore concentration and other qualities.
- ✓ Inflating impurity levels.
- ✓ Understating volumes.

⁵ <https://www.alcircle.com/news/bauxite-price-in-guangxi-drop-by-rmb-30t-prebaked-anode-prices-decline-in-major-markets-43277>

⁶ Following the example of Jamaica, the Guyana Government in 1974 tried to rectify this by pegging the royalty on bauxite on the publicly-quoted market price for aluminium [see Bauxite (Production Levy) Act, 29 of 1974]. This act, however, is dormant today.

⁷ Section 9.2 of Mineral Agreement, 2004 (GoG/Cambior Inc./Omai Bauxite Mining Inc).

⁸ NI43-101 Technical Report – Bankable Feasibility Study Update of the Bonasika Project, Guyana for First Bauxite Corporation”, 2011. Pg 193.

- The potential high financial benefit from undervaluation. Guyana's bauxite exports in 2017 were valued at US\$102M in 2017 but reached as high as US\$150M in 2012. Hypothetically, if these exports were undervalued by 10%, the country would have lost \$US10.2M in 2017 and \$US15M in 2012, which are not insignificant numbers for our small economy.

Factors that reduce risks or increase assurance include:

- Sales are to unrelated, third party buyers.
- The reporting obligations of publicly-listed companies to stock exchanges and customs authorities in their home countries.
- The presence of a government representative on the boards of companies in which the government has equity. This is the case for Bosai Minerals Group (Guyana) Inc and Rusal (BCGI).
- Existence of obligations on company to comply with and report under internationally-recognized standards. For instance, the calculated tonnage and grade of First Bauxite's Bonasika deposits in Guyana were verified by independent assessors as required under Canada's NI 43-101 reporting system.⁹

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⁹ National Instrument (NI) 43-101 is a Canadian mineral resource classification scheme used to disclose information about mineral properties. Foreign and domestic companies listing on stock exchanges overseen by the Canadian Securities Administration (CSA) are required to abide by the NI 43-101 rules and guidelines for displaying information related to mineral properties. NI 43-101 reports have a number of core requirements designed to protect investors. The most basic requirement is a "qualified person" that must vouch for the report. But other requirements include standardized feasibility studies and sample preparation and analysis.

F. RECOMMENDED EXPORT VALUATION SYSTEM (“TRUST BUT VERIFY”)

Of the three parameters for monitoring (quantity, quality, and price), quality and price are the most challenging and require more government scrutiny. Quantity of production and export can be more readily verified through field surveys of mine pits or the number and size of shipments. GGMC has accumulated experience on this front from its regulation of sand and loam pits and stone quarries.

A monitoring and valuation system for production and exports of bauxite can take three forms: (i) direct measurement of mineral value through a government-controlled sample collection, preparation, and lab analysis operation, (ii) monitoring companies’ own mineral export valuation processes, and (iii) a hybrid approach.

In determining which of the three systems is most suitable for the local bauxite industry, the following criteria are applied:

- The significant risk assessment for non-compliance (Section E above).
- The high financial and technical barriers in setting up and operating a government lab and audit facility (requiring buildings, equipment, trained personnel, quality controls, and certification).
- The uncertain monetary gains for the country from stricter monitoring of production and exports.
- Absence of third party capacity in the country to conduct mineral testing in all its stages (from sample collection to sample analysis).

The recommended system for production and export evaluation should be based on option (ii): monitoring companies’ own mineral export valuation processes. The recommended system should have the following features:

- 1) The reporting obligations for bauxite companies, as outlined in Section 3 of the 2004 contract between GoG/Cambior Inc/Omai Bauxite Inc., should be standard and fully enforced.¹⁰ (see Annex I).
- 2) Company labs must be internationally accredited or accord to recognized global standards. Alternatively, companies can use an accredited private firm to conduct their mineral testing.
- 3) Governments should regularly review companies’ export valuation systems and controls, including sampling processes, as well as physically monitoring and testing measuring equipment. These tests should be carried out at unpredictable intervals.
- 4) Bauxite companies must be required to fully comply with EITI requirements.

¹⁰ This contract now governs the Linden operations of Bosai Minerals.

- 5) Should the government use the services of an independent third-party assessor, options for payments for these services should include one in which the bauxite company pays or shares cost with government.
- 6) Penalties for mis-reporting by companies should be clearly set out.
- 7) Institutional arrangement could include a dedicated unit composed of staff from GGMC and GRA.

As this system focuses on production and export valuation, it is not intended to overlap or supplant the present monitoring efforts of GGMC of bauxite operations. The Mines Technical Section of the GGMC should retain its focus on the mining engineering and environmental aspects of these operations.

3. THE COMPANY, REPORTING OBLIGATIONS AND CONFIDENTIALITY

- 3.1 The Parties hereby acknowledge that the Company has been duly incorporated under the Companies Act 1991 of Guyana, a true copy of its Articles being annexed hereto as Schedule "B".
- 3.2 The Company shall give access to the Commission to all data, maps and other information and submit to the Commission such data, maps and other information as shall be requested by the Commission with respect to the Project in a timely manner. In particular, the Company shall comply with the following undertakings of this clause 3.2.
- 3.2.1 During the term of this Agreement, the Company shall, within 90 days after the expiry of each calendar year, file an annual report on a confidential basis with the Commission and with the Government (c/o the Minister under the Mining Act) which shall contain such information as is generally required to be set forth in annual reports relating to projects similar in nature to the Project in the North America mining industry. In particular the report shall contain information on the following matters:
- (a) complete and accurate production statistics, including information on the grade and quality of bauxite mined, and copies of maps, profiles, diagrams and geological reports;
 - (b) marketing information, including copies of short and long term contracts, and information on customers, marketing conditions, developments in world market prices and refining conditions;
 - (c) complete and systematic records showing fully and fairly all costs and revenues including income statements, tax payments, duty payments, foreign exchange transactions and budget plans;
 - (d) importing information, including the quantity, source and price paid for items imported with reference to used and new items;
 - (e) information regarding the disposal of equipment including re-exports;
 - (f) employment information, including a breakdown of the Guyanization of the Project labor force according to the various categories of employees;
 - (g) information on construction activities if any;
 - (h) information on the purchase of supplies and services from local and foreign sources, including historical information from the Effective Date together with the information described in clause 6.2;
 - (i) information regarding environmental management;
 - (j) information and statistics regarding occupational health and safety and work-related accidents and injuries; and
 - (k) such other information with respect to the Project as the Government or the Commission may reasonably require.