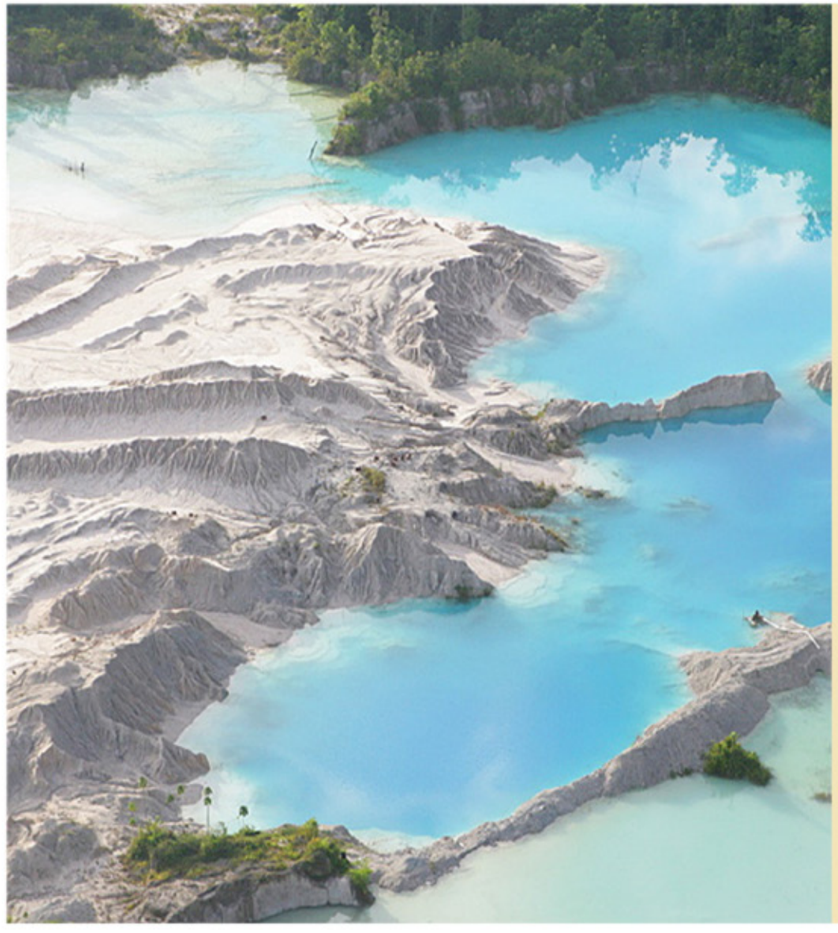
GUYANA GEOLOGY & MINES COMMISSION

MINISTRY OF NATURAL RESOURCES
Explore • Develop • Sustain

The Mining Sector in GUYANA 2025

THE GUYANA GEOLOGY AND MINES COMMISSION



OUR THEME

"To promote; facilitate, monitor and regulate for sustainable utilization of Guyana's minerals' resources (including petroleum)".

CORE VALUES

Integrity, Excellence, Accountability, Effectiveness, Teamwork & Fairness

OUR VISION

"To fortify our position as the repository for all incidental and geoscientific data pertaining to Guyana's mineral resources (including petroleum), mining and development experiences: to utilize all enablers, disseminate same as "best in class" service to the public, targeting the mining (and petroleum) sector (s); relevant stakeholders and legitimate investors: while giving high regard to employees' welfare and their development."

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> As the recognized repository of all information on Guyana's mineral resources with increased electronic access to all information, to deliver a high level of quality service to miners, investors, relevant stakeholders and the general public, while giving high regard to employees welfare and development.

GUYANA GEOLOGY AND MINES COMMISISON

The Guyana Geology and Mines Commission (GGMC) was created in 1979 from the Department of Geological Surveys and Mines which itself was the successor to the Geological Survey of British Guiana. Currently GGMC is divided into the following Divisions:

- Geological Services
- Environment
- Mines
- Land Management
- Petroleum

Major Goals and Responsibilities

Goals

The four main Goals of GGMC are as follow:

1. Support the exploration, documentation and extraction of our mineral resources but at the same time protect the rights, provide equal and fair access for all entities and ensure that the charges (fees, royalties, etc.) are fair.

2. Promote safety programs through training, monitoring and enforcement to advance safety in the operation of the various mining systems.

3. Promote environmental protection by assuring that all mineral production, storage/ disposable of tailings and storage/delivery of products are conducted in such a way to minimize harmful effects on the environment and to preserve our mineral resources.

Responsibilities

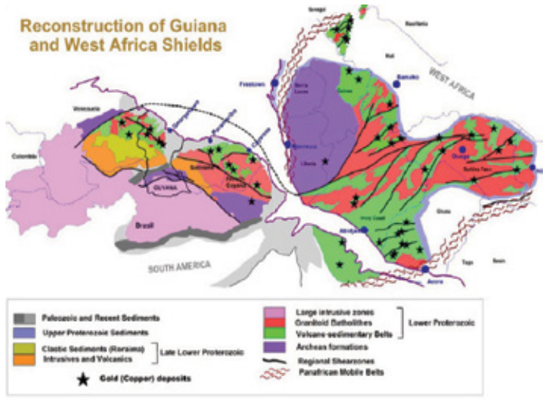
What do we do?

- Promotion of mineral and petroleum development;
- Provision of technical assistance and advice in mining, mineral processing, mineral utilization and marketing of mineral resources;
- Mineral and petroleum exploration;
- Research in exploration, mining, and utilization of minerals and mineral products;
- Enforcement of the conditions of Mining Licences, Mining Permits, Mining Concessions, Prospecting Licences (for Large Scale Operations), Prospecting Permits (for Medium and Small Scale operations), Quarry Licences and Petroleum Licences conditions;
- Collection of Rentals, fees, charges, levies etc. Payable under the 1979 Mining Act and the 1986 Petroleum Act, respectively.

Regional Geology of Guyana

Guyana lies within the Amazonian Craton, which forms the northern part of the South American Continent (Brazil, Bolivia, French Guiana, Guyana, Suriname and Venezuela). The Amazonian Craton is subdivided into two geographic shields, the Guiana Shield in the north (in which Guyana is situated) and the Central Brazil (Guapore) Shield in the south. The Amazon Craton shows striking similarities to the West African Shield.

Both connected and formed part of a larger continent, prior to the opening of the Atlantic during the Mesozoic period. The Guiana Shield is composed mainly of the Maroni-Itacaiunas Province which is a large continuous province present in French Guiana, Suriname, Guyana, North Brazil and Venezuela. The province contains rocks representing an early Proterozoic crust with a strong south-east structural fabric. The province is sub divided into two terrains, a Granulitic and gneissic terrain and a granite-greenstone terrain (2.25-1.9 Ga), which covers a large proportion of Guyana.



Local Geology of Guyana

Guyana is geologically sub- divided into three provinces, these are:

1. The Northern Province
2. The Southern Province and, between them,
3. The Takutu Graben

1 Northern Province

The Northern Province is subdivided into three Main geological units:

1. The Greenstone Belts
2. The Roraima Group
3. The recent Tertiary/Quaternary deposits

The Greenstone Belt:

The Greenstone Belts of North Guyana are collectively named the Barama-Mazaruni Super group. The Barama Mazaruni Super group is comprised of three main greenstone belts surrounded and intruded by numerous irregular granitoid bodies of Trans-Amazonian age (2-2.3 Ga). The three belts are orientated in a general southeast-northwest direction. From south to north the belts are named: The Mazaruni Group, the Cuyuni Group and the Barama Group. The metamorphic grade of the greenstone belts generally decreases from amphibolite on the peripheries to greenschist in the central areas.

The Mazaruni Group is the best exposed of the three belts and consists of the Issineru Formation (predominantly meta-basalt with layers of dolerite or gabbro, tuffs and andesite) and Haimaraka Formation (predominantly meta-sediments with andesite and conglomerate layers).

The Cuyuni Group is less exposed than the Mazaruni Group. At the base of the Cuyuni group are ultramafic and meta-mafic volcanic rocks. The central part of the group is dominated by andesitic and subordinate felsic flows and tuffs. The upper part of the group is dominated by metasediments and conglomerate, locally with an unconformable contact with underlying mafic rock.

The Barama Group is composed of a series of ultramafics, hornblende porphyry units, meta-conglomerates and metavolcanics. This Group is not well exposed.

Roraima Group:

The Roraima group is middle of Proterozoic age and forms the high plateau and hills of the Pakaraima Mountains in the central west part of Guyana and lies unconformably above the Barama-Mazaruni Super group. The Roraima Group is composed of un-metamorphosed arkose, shales, quartz, arenites and conglomerates and is up to 2km thick. Intruding the Roraima Group are the Avanavero Suite of dykes and sills. These are mafic intrusives emplaced between 1.65 and 1.85 Ga.

Recent Tertiary/Quaternary Deposits:

The recent tertiary/ quaternary deposits of the Northern Province comprise of recent sediments of the Corentyne

2 Southern Province

The Southern Province is located in the central part of the Guiana Shield. The nucleus of the Guiana Shield is present in the Southern Province as an "Old Crystalline Basement" and the Proto- Kanuku Complex. The ProtoKanuku Complex has been dated between 3.1-3.4 Ga. The Kanuku Complex is composed of high metamorphic grade migmatitic gneisses and granulites, which were involved in the Imataca thermo-tectonic event around 2.77 Ga. The Kanuku Complex forms a horst which is part of an east-northeast trending mobile belt known as the Central Guyana Granulite belt, which extends into Suriname to the east and Brazil to the west. Prior to the Trans Amazonian event starting at 2.4 Ga, Southern Guyana experienced shallow marine sedimentation and basaltic intrusions of the Kwitaro Group. The Trans Amazonian Tectonic event gave rise to Granitoid rocks (commonly known as the Younger Granites) of the Essequibo-Corentyne Complex, the Southern Guyana Complex and Konashen adamellite intrusion. The Essequibo-Corentyne and Southern Guyana Complexes and associated Kanuku and Kwitaro gneisses, were formed during a reactivation period of the Trans Amazonian event, at approximately 1.8 Ga. This was marked by the emplacement of the Kuyuwini Group (south Guyana) and Burro-Burro Group (north of the North Savannas Rift Valley). These groups represent extensive volcanic activity of acid- intermediate lava composition with sub volcanic granitic plutons and minor shallow marine sedimentation.

The Roraima Formation follows stratigraphically in the geological history of Guyana, but in southern Guyana it is only seen as boulders in the northern savannas. The Roraima Intrusive Suite is only seen as a small dolerite intrusion in the Iwokrama Formation, part of Kuyuwini and Burro-Burro Groups.

3 Takutu Graben Northern Savannas

The Rewa Group, which includes the Takutu Formation and Apoteri volcanics, occupy the Takutu/Northern Savannas Rift Valley, which is bounded by the Kanuku Mountains in the south and the Pakaraima Mountains in the north.

The rift valley/graben extends for 180km into Brazil to the west and is up to 50km wide. The graben is part of a Trans South American fault zone, which extends on an east-northeast direction from the Pacific to the Atlantic. The sediments (lacustrine and evaporite deposits) are dated as Permo- Triassic to Late Cretaceous in age.

The Rewa Group lies unconformably on Precambrian basement and comprises of the Apoteri and Takutu Formations. Takutu Formation is predominantly composed of mudstone with interbedded shales, siltstones and sandstones. The Takutu Formation is rarely seen outcropping due to overlying laterite and unconsolidated sediment. The Apoteri Formation is composed of a series of tholeiitic lavas (114-178 Ma).

Several economic minerals are exploited in the Guiana Shield. The main economic minerals mine and with potential for further extraction in Guyana are: Gold, Diamonds and Bauxite. The other commodities extracted within the Mining Industry are Aggregates, Gravel and Sand.

Gold (Au)

Gold extraction and exploration has been reported in the Guiana Shield since the colonial expansion of the 16th Century. Gold is mainly found in areas of greenstone belts of Guyana.

Placer Gold

Placer deposits are observed on most of the main rivers draining the greenstone terrain, which hosts the majority of the primary gold. The Barama- Mazaruni Greenstone belt has low relief, deep weathering, which accompanied by the tropical climate and a lack of a post-Proterozoic cover, are good/right conditions for mobilization of gold.

Lode Gold

Lode gold is frequently found in Precambrian terrains (notably the greenstone belts of the Barama-Mazaruni Group). In many cases, the gold is hosted in quartz veins, which dip at high angle to sub-vertical. In the Guiana Shield gold occurs as macroscopic, irregular gold grains occurring in fractures within quartz veins, disseminated in country rocks and silicified shear zones, as inclusions in disseminated/vein hosted Pyrite, Chalcopyrite and Pyrrhotite, or intergrowths with Sulphides.

Diamonds

Diamonds are only found in placer deposits in many of the main rivers of northwest Guyana. The alluvial diamonds seen in northern Guyana are thought to be derived from the Pakaraima Mountains, although the primary source of the diamonds is unclear.

Silica Sand

Silica sand is abundant in Guyana and found as the Pliocene-Pleistocene "White sand" deposits which form a cover in many regions, notably the coastal area. Apart from areas stained by ferruginous ground water, the white sand is very homogeneous with few impurities, with heavy mineral concentration rarely exceeding 0.1 % and an absence of clay. Silica sand can be used for a number of industrial applications including: glass, ceramics, abrasives, silicon carbide, silica tetrachloride, activated silica, silica flour and filtration.

Bauxite

Bauxite extraction is a major mining industry in Guyana and the country is one of the main world producers of Bauxite. The town of Linden is the principle centre for Bauxite Mining in Guyana. The bauxite mining area is defined by a coastal strip 30km wide extending from the Essequibo River to the south-southeast passing through Linden towards the Suriname border, including Kwakwani.

On the coastal plains there are two types of Bauxite present: residual and alluvial. Residual bauxite is derived from in situ weathering of bedrock formed during the upper Oligocene unconformity. Ore bodies are usually 8-10m thick. Bauxite also exists in intermediate elevations as in situ bauxite, around 5m thick, capping hills. Average deposits have 50% aluminium and 4% silica.

In plateau areas bauxite forms from the weathering of a variety of rocks in situ and ore body thickness can be up to 8m.

Other Minerals

Some other Minerals known to occur in Guyana are:

- Chromium
- Scandium
- Columbite-tantalite
- Copper
- Feldspars
- Iron ore
- Kaolin
- Kyanite
- Lithium
- Manganese
- Magnesite
- Molybdenum
- Nickel
- Oil
- Potash
- Soapstone
- Tin (Cassiterite)
- Platinum & REE's
- Semi-Precious stones:
- Amethyst
- Agate
- Jasper
- Tourmaline
- Rose quartz
- Beryl
- Garnet
- Green quartz

Table 1: Simplified Stratigraphic Sequence of Guyana

PERIOD	AGE (MA)	FORMATION	LITHOLOGY	ASSOCIATED MINERALS AND COMMODITIES *DENOTES MAIN ECONOMIC MINERALS
Tertiary & Quaternary			Marine Clays	- Brick Clays*
		White Sand	Fluvial and Marine Sands	- White Sand/Silica Sand
		Mackenzie Formation	Bauxite and Kaolin	- Bauxite* and Kaolin
Mesozoic: Takutu Graben	65-150	Takutu Formation	Continental Sands and Silts	- Petroleum* and Natural Gas' - Agate'
	114-178	Apoteri Volcanics	Andesite Flows	- Potash
Upper Proterozoic		Muri Alkaline Suite	Nepheline Syenites	
Middle	1650-1850	Avanavero Suite	Gabbro-Norite Sills and Dykes	- Diamonds' (?) - Gold' - Cu, Ta, **PGE** - Potarite (PdHg) - Jasper
	1600-1700	Roraima Group	Fluvial Sands and Conglomerates	
	1700-1900	Iwokrama and Kuyuwini Formations	Sub volcanic Granites	
			Acid/intermediate Volcanics	
	1800	Muruwa Formation	Fluvial Sands and cherty mudstone	
Trans-Amazonian Tectono-thermal Event	2000-2300	Younger Granites	Granitoids and dolerite	- Columbite/Tantalite - Feldspar - Uraninite - Monazite - Rutile - Building Stone / aggregates'
			Small Granitic intrusions	
	2300	Bartica Assemblage	Gneissose syn-tectonic Granites and Dolerite	
		Badidku Suite/older Basic rocks	Ultra-mafics and layered Gabbros	- Magnesite
Lower Supracrustals	1900-2200	Barama-Mazaruni Super Group	Greenstone Belts: Metavolcanics & Metasediments	- Gold' (Au+Zn+Cu±MO±Ni) - Ni in mafic Metavolcanics
			Amphibolite facies	- Manganese'
	2000-2700	Kanuku Group	High Grade Gneisses Granulites and Charnockites	- Banded Iron Formation - Copper in gneiss

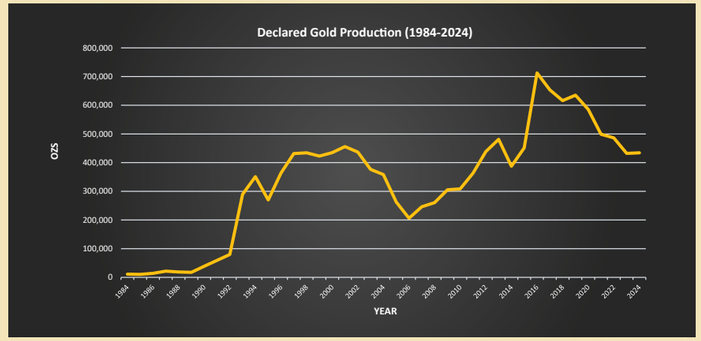
GUYANA MINERAL PRODUCTION DECLARED
1979 - 2024

MINERALS	GOLD [Small & Medium]		GOLD - OMAI [1993 -2005]		GRAND TOTAL		DIAMONDS		STONE	SAND	LOAM	LATERITE	BAUXITE	Manganese
Units / Year	Ozs	Kgs	Ozs	Kgs	Ozs	Kgs	Old Eng. Cts	Metric Cts	Tonnes	Tonnes	Tonnes	Tonnes	x 1000 Tonnes	Tonnes
1979	10,592	340.56	-	-	10,592.00	340.56	15,410.29	15,826.37	NA	NA	NA	NA	1,533	
1980	11,003	353.77	-	-	11,003.00	353.77	9,968.07	10,237.21	89,912	12	NA	NA	1,626	
1981	19,263	619.35	-	-	19,263.00	619.35	9,289.98	9,540.81	71,823	396	NA	NA	1,503	
1982	8,655	278.28	-	-	8,655.00	278.28	11,191.84	11,494.02	28,112	1,054	NA	NA	1,174	
1983	5,039	162.02	-	-	5,039.00	162.02	12,043.45	12,368.62	41,622	477	NA	NA	1,091	
1984	11,132	357.92	-	-	11,132.00	357.92	7,236.23	7,431.61	38,975	217	NA	NA	1,333	
1985	10,328	332.07	-	-	10,328.00	332.07	11,569.91	11,882.30	22,112	2,019	NA	NA	1,573	
1986	14,036	451.29	-	-	14,036.00	451.29	9,237.54	9,486.95	33,847	2,366	NA	NA	1,470	
1987	21,415	688.54	-	-	21,415.00	688.54	7,460.21	7,661.64	24,335	2,717	NA	NA	1,359	
1988	18,803	604.56	-	-	18,803.00	604.56	4,240.43	4,354.92	11,755	9,505	NA	NA	1,339	
1989	17,343	557.62	-	-	17,343.00	557.62	7,846.01	8,057.85	61,492	11,173	NA	NA	1,322	
1990	38,717	1,244.84	-	-	38,717.00	1,244.84	14,877.31	15,279.00	3,288	43,995	NA	NA	1,456	
1991	59,296	1,906.50	-	-	59,296.00	1,906.50	22,524.09	23,132.24	63,377	17,017	NA	NA	2,204	
1992	79,581	2,558.71	-	-	79,581.00	2,558.71	43,649.83	44,828.38	13,260	90,021	NA	NA	2,336	
1993	87,100	2,800.46	202,229.96	6,502.15	289,329.96	9,302.62	48,773.51	50,090.40	69,333	166,247	NA	NA	2,110	
1994	99,095	3,186.13	251,848.64	8,097.51	350,943.64	11,283.64	36,443.30	37,427.27	92,525	751,357	NA	NA	2,091	
1995	91,451	2,940.36	178,356.15	5,734.56	269,807.15	8,674.91	51,049.34	52,427.68	98,104	171,881	NA	NA	2,036	
1996	110,135	3,541.09	253,442.49	8,148.75	363,577.49	11,689.84	44,304.50	45,500.73	336,506	118,917	NA	NA	2,369	
1997	98,051	3,152.56	333,567.81	10,724.96	431,618.81	13,877.53	34,675.62	35,611.87	176,913	149,070	NA	NA	2,491	
1998	110,047	3,538.26	324,245.31	10,425.22	434,292.31	13,963.49	32,614.11	33,494.70	32,445	290,619	NA	NA	2,489	
1999	110,684	3,558.74	312,089.79	10,034.40	422,773.79	13,593.14	44,246.19	45,440.84	128,477	211,300	19,173	NA	2,539	
2000	105,289	3,385.28	329,603.37	10,597.50	434,892.37	13,982.78	79,557.92	81,706.00	120,179	261,764	14,568	1,000	2,667	
2001	101,849	3,274.68	354,068.59	11,384.11	455,917.59	14,658.79	174,744.98	179,463.12	117,904	243,127	43,275	12,000	1,953	
2002	117,240	3,769.53	319,431.00	10,270.43	436,671.00	14,039.97	241,905.19	248,436.66	54,746	186,327	10,730	4,500	1,686	
2003	105,747	3,400.01	270,693.00	8,703.40	376,440.00	12,103.40	401,691.28	412,537.00	154,093	253,674	10,677	5,250	1,882	
2004	116,236	3,737.25	242,192.00	7,787.02	358,428.00	11,524.27	433,242.39	444,940.00	285,583	142,094	17,300	3,000	1,506	
2005	162,527	5,225.61	100,001.00	3,215.26	262,528.00	8,440.87	347,565.68	356,950.00	315,964	573,150	4,000	12,000	1,648	
2006	205,970	6,622.40	-	-	205,970.00	6,622.40	331,591.00	340,544.00	204,000	285,000	21,017	0	1,574	
2007	246,200	7,915.89	-	-	246,200.00	7,915.89	261,854.88	268,925.00	368,008	715,500	15	0	2,239	
2008	260,387	8,372.03	-	-	260,387.00	8,372.03	164,483.91	168,925.00	449,565	683,815	9,620	0	2,109	
2009	305,178	9,812.17	-	-	305,178.00	9,812.17	140,196.67	143,982.00	340,016	478,572	2,000	0	1,448	
2010	308,438	9,916.98	-	-	308,438.00	9,916.98	48,607.59	49,920.00	514,932	652,175	0	0	1,010	
2011	363,083	11,673.94	-	-	363,083.00	11,673.94	50,898.73	52,273.00	539,105	674,880	12,133	0	1,827	
2012	438,645	14,103.43	-	-	438,645.00	14,103.43	39,692.30	40,764.00	483,858	1,478,184	92,064	0	2,210	
2013	481,103	15,468.56	-	-	481,103.00	15,468.56	54,457.64	55,928.00	654,995	2,334,000	94,559	0	1,694.30	
2014	387,507	12,459.24	-	-	387,507.38	12,459.24	97,322.77	99,950.50	840,073.58	4,169,387.14	100,800.00	0	1,601.70	
2015	411,567.81	13,232.84	39,491.00	1,269.73	451,058.81	14,502.57	115,336.68	118,450.79	398,250.11	1,669,379.30	n/a	0	1,497.60	
2016	482,612.84	15,517.10	230,094.25	7,398.05	712,707.29	22,915.16	136,211.85	139,889.59	517,770.20	1,687,657.87	23,564.34	0	1,480.43	
2017	419,618.38	13,491.68	234,136.03	7,528.01	653,754.41	21,019.69	50,789.73	52,161.06	588,936.62	1,674,490.19	51,053.74	0	1,481.50	
2018	361,970.87	11,638.19	254,252.36	8,174.79	616,223.23	19,812.98	60,477.80	62,110.71	661,476.12	2,427,420.00	73,910.85	0	1,924.46	
2019	448,320.89	14,414.54	186,583.93	5,999.10	634,904.82	20,413.63	53,547.35	54,993.14	635,506.20	2,993,664.00	66,574.99	2,030.00	1,920.33	
2020	485,551.81	15,611.59	99,881.81	3,211.43	585,433.32	18,823.01	24,109.11	24,760.06	737,750.29	2,618,500.00	41,096.25	0	595.29	
2021	430,786.09	13,850.75	68,268.29	2,194.98	499,054.38	16,045.73	43,920.33	45,106.18	854,849.99	5,538,210.00	173,798.53	0	618.45	
2022	384,997.51	12,378.55	101,417.82	3,260.81	486,415.33	13,789.64	83,614.44	83614.44	935,078.00	6,411,180.99	508,833.99	-	706.58	278,446.00
2023	322,754.83	10,377.30	109,358.39	3,516.12	432,113.22	13,893.42	65,670.67	67,443.79	1,851,132.00	8,496,699.99	949,051.83	-	523.7	314,538.00
2024	289,474.34	9,307.26	144,593.00	4,648.99	434,067.33	13,956.25	54,499.55	55,971.05	3,338,760.00	12,619,998.00	1,814,591.10	-	1,696.24	291,932.00
Total	8,774,821	282,130	4,939,846	158,827	13,714,667	439,108	4,034,642	4,141,321	17,400,744	61,308,209	4,154,407	39,780	76,944	884,916

2024 Mineral Industry Review Summary

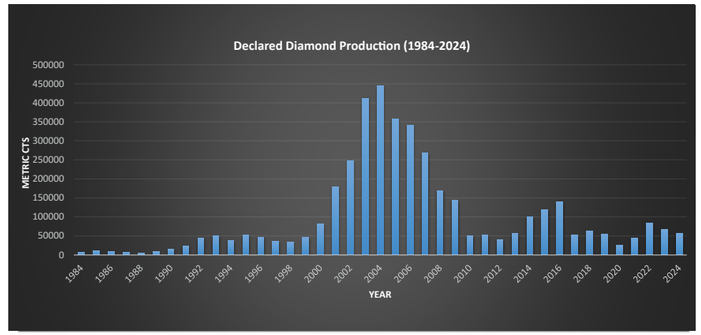
GOLD

In 2024, domestic gold mine declarations increased to 434,067.33 ounces, a 0.5% rise from the previous year's recorded output of 432,113.22 ounces.



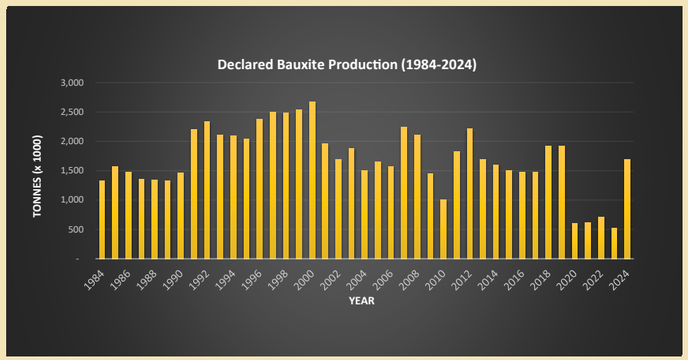
DIAMOND

The diamond industry experienced a 17% decline in declarations in 2024 compared to 2023. Output fell from 67,443.79 metric carats in 2023 to 55,971.05 metric carats in 2024.



BAUXITE

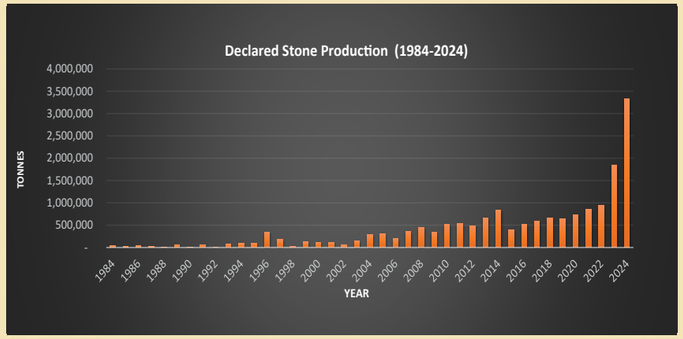
Bauxite declarations saw a significant increase of 223.9% in 2024, reaching 1,696,241 metric tonnes, compared to 523,732 metric tonnes in 2023.



Construction Materials

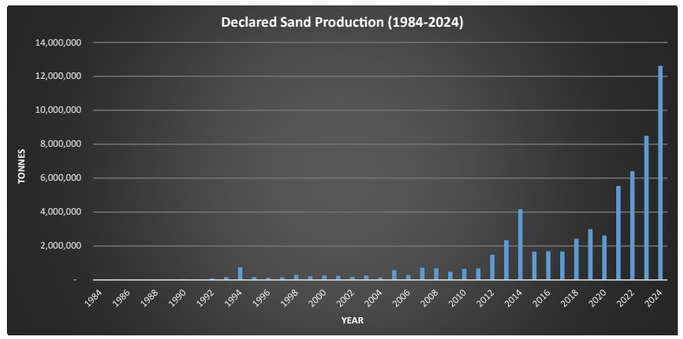
QUARRY STONE

Quarry stone production rose by 80.4% in 2024, with total output increasing from 1,851,152 metric tonnes in 2023 to 3,338,760 metric tonnes.



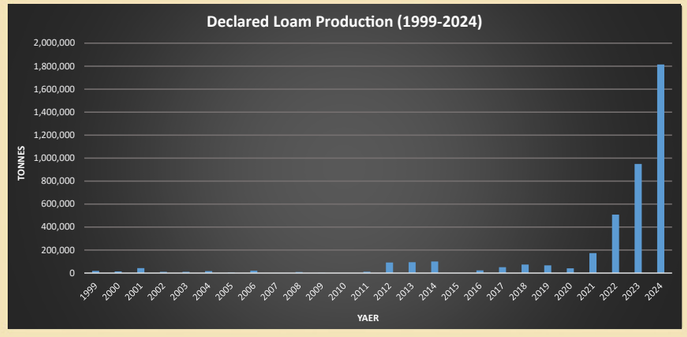
SAND

Commercial silica sand production in 2024 reached 12,618,998 metric tonnes, marking a 48.5% increase from 8,496,699.99 metric tonnes in 2023.



LOAM

Loam production grew by 91.2% in 2024, rising from 949,051.83 metric tonnes in 2023 to 1,814,591.10 metric tonnes.



Core Divisions within the GGMC

GEOLOGICAL SERVICES

The Geological Services Division undertakes geological fieldwork throughout Guyana to investigate the geology and mineral resources and compiles relevant geological reports. Sampling and analytical methods used are the same for each project, allowing for data to be combined in the first geochemical atlas of Guyana. Geochemical sampling techniques employed are those commonly used in wet tropical areas, with bulk-30# sediments samples taken using a flocculants and a -80 fraction separated in the laboratory. All sample processing and analysis is currently being done by Actlabs in Canada. There are a 2kg - 30# split which is analysed for Au, Ag, Cu, Pd and Pt using a cyanide leach method (BLEG), and the -80# fraction is analysed for "Au plus 48" using INAA and ICP. Several reports on Geology, Geochemistry and Structure covering a total area of approximately 7000km2 in Northern Guyana are available both as hard and digital copies and on the Guyana Geology and Mines Commission webpage.

LAND MANAGEMENT

This division provides an efficient & transparent service for licensing & permitting mineral property holders, administering licenses & permits, & providing map-based information, giving active consideration to customer satisfaction & feedback. The Land Management Division falls under the Commissioner's office and consists of the following units:

- Cartographic /GIS
- Mineral Property Administration

The Guyana Geology & Mines Commission is the statutory body that processes all applications for mineral properties in Guyana.

ENVIRONMENTAL

The Environmental Division of GGMC seeks to build a solid foundation in environmental & OHS management in small, medium and large scale mining operations through awareness, knowledge, skills, good practice & legal compliance. The role of the Environment Research and Development Department (ERDD) is to coordinate, promote and oversee the implementation of efficient mineral processing and environmentally sound mining techniques across the spectrum of the mineral industry.

MINES

The Mines Division is organized to provide efficient service to the Mining Sector through its team of professionals, semi-professionals and support staff. These include such skilled personnel as Mining and Mineral Processing Engineers, Mining and Geological Technicians, Surveyors and Surveying Technicians. There are also trained Mines Officers, Administrators.

PETROLEUM

There are five active blocks being operated by three companies and their coventurers.

While the Stabroek Block is the only block with both exploration and established production activities, the other blocks are all being actively explored with companies either processing seismic, assessing commerciality of discoveries, or planning to drill this year.

To date, there have been 45 discoveries offshore, three of which were non-commerical. The country promotes investment opportunities in petroleum prospecting areas of the Guyana Maritime Zone, the adjacent coastal onshore areas and the Takutu Basin in the hinterland Rupununi District.

OFFSHORE GUYANA BASIN

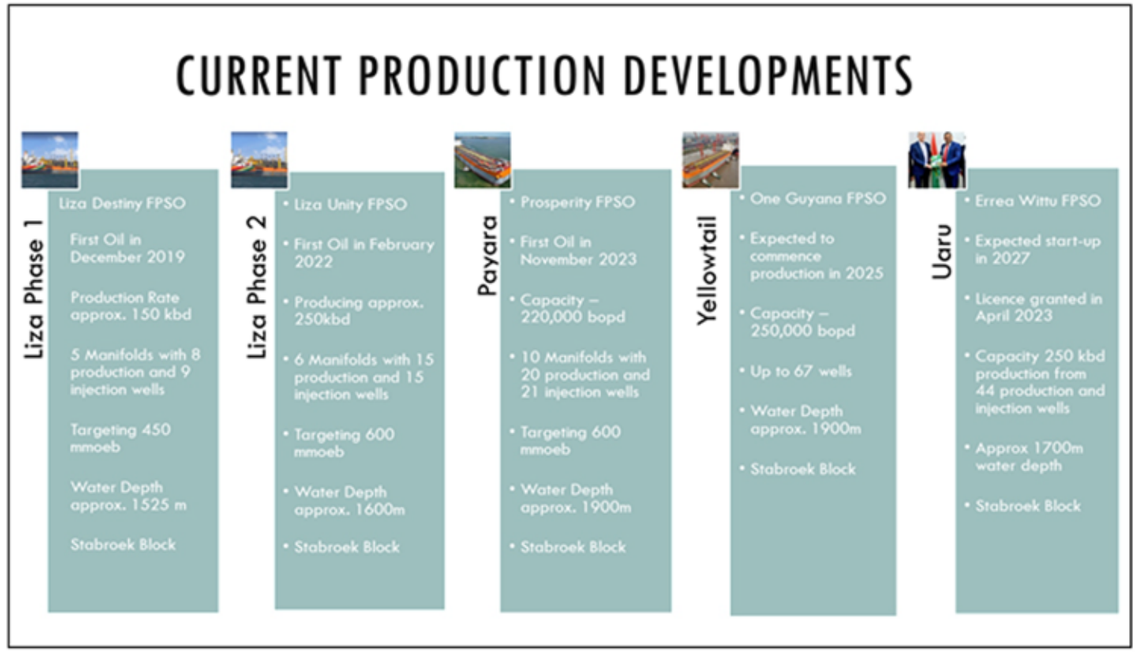
The Offshore Guyana Basin stretches from the nearshore and extends in excess of 80 miles north. It encompasses the continental shelf environment and moves seawards into the deep and ultra-deep waters of the continental slope and basin floor environments. In May 2015, Esso Exploration and Production Guyana Limited (ESSO) made a significant discovery of petroleum while drilling in its Stabroek Block (Liza-1). Prior to the ESSO discovery, our "best" well has been Karanambo-1 well drilled by Home Oil in the Takutu Basin in 1982. Since the Liza-1 discovery, ESSO has managed to make more than 30 additional discoveries in its Stabroek concession and has extended exploration efforts to the Canje and Kaieteur Blocks.

ONSHORE GUYANA BASIN

The deepest part of the southern "boundary" is some 150 miles from the Guyanese Coastline. The eastern part of the Onshore Guyana Basin has the largest thickness of sediments reaching some 2,500 m. It should also be noted that the gas found on the coast is nearly all biogenic, with a very small area yielding thermogenic gas. Some areas within this part of the basin is still available for exploration and continues to attract prospective investors at this time.

TAKUTU BASIN

Located in the southwestern area of Guyana and of which, the last concession holder was CANACOL/TOGI, a joint Canadian and Guyanese partnership until May 2015, when the partners relinquished its Block. The Karanambo-1 well drilled there in 1982 by Home Oil Company, was the best prospect drilled within this Basin. Located in southwestern Guyana a small amount of light crude was accrued. Tests conducted on samples from Karanambo-1 found that the oil is of good quality (420API) and is of a "sweet" variety, that is, it contains less than 0.5% hydrogen sulphides. However, its geological characteristics are mainly naturally fractured reservoirs, thus proving more difficult to find commercial petroleum than regular reservoirs. Other wells drilled in the Takutu are Lethem-1 (1980), Turantsink-1 (1992) and Apoteri K2 (2011) wells, respectively. To date, applications have been made for concessions in the Basin.



Petroleum Opportunities in Guyana

Although petroleum has recently been discovered in commercial quantities, the country continues to promote investment opportunities in the shelfal and deep-water Guyana Offshore Basin, adjacent coastal onshore areas and the Takutu Basin, respectively. The Guyana government continues to use the Production Sharing Agreement with its commitment Petroleum Licence arrangement for awarding of petroleum blocks to successful companies/consortiums.
New petroleum legislation has replaced the 1986 Petroleum (Exploration & Production) Act. The Petroleum Activities Act 2023 has brought a number of significant improvements to Guyana's regulatory framework which includes:

- Expansion in the scope of licenses that may be applied for the include pipeline operations license, a geological storage license for carbon dioxide, and a geophysical survey permit.

- An updated and transparent system for the award of licenses through competitive tender or direct negotiations (only in cases where special circumstances exist and by the direction of Cabinet).

- Detailed provisions regarding the Licensee's work plan and budget.

- Provisions for the Licensee to apply for the retention of a discovery if it is not considered to be of potential commercial interest at the time of discovery but is likely to be commercial within 5 years.

- Provisions for the creation of a Decommissioning Fund, submission of a Decommissioning Plan and assigning obligations of the Licensee.

- Provisions which introduce and provide for safety requirements, risk assessment, emergency preparedness and response and security.

NEW CONTRACTUAL FRAMEWORK

Contract Duration (years)

Terrain	Exploration period				Production period	
	Initial period	Renewal period			Initial period	Renewal period
		1st	2nd	3rd		
Shallow water	3	2			20	10
Deepwater	3	3	2	2	20	10

The duration of the contract period for the shallow water and deepwater blocks :

- Maximum five-year exploration licence and a 20-year production licence for shallow water blocks. Renewal of the production licence at the end of the 20-year production period is subject to negotiation with application made no later than 12-months prior to the scheduled expiry of the production licence
- Maximum 10-year exploration licence and a 20-year production licence that may be extended by an additional 10-year period for deepwater blocks

Note: The grant of renewals to the exploration period beyond the initial period is conditional upon the contractor having completed the proposed work program in the preceding period, and payment of the bank guarantee associated with the work program for the subsequent period.

SUMMARY OF NEW FISCAL TERMS

Type of Levy	Amount / Rate	Comment
Signature Bonus	N/A	Where licence is granted through competitive tender a minimum will be provided. Alternatively, can be subject to direct negotiation
Training Fee	USD 1 MM	Payable annually during exploration phase.
Rental	USD 1 MM per year	Payable annually during the exploration phase
Royalty	10%	Same for deepwater and shallow water blocks
Cost Recovery	65%	65% of gross production after royalty is allocated for cost recovery
Profit Sharing	50%	Production remaining after cost recovery and royalty is shared between the state and the contractor.
Income Tax	10%	Indicative

These new fiscal terms are improvements to be seen in the new Production Sharing Agreement.

Legislations in the Mining Industry

- The Guyana Gold Board Act of 1981
- The Mining Act of 1989 and its Regulations
- The Environmental Protection Act of 1996
- The Amerindian Act
- Occupation Safety Healthy Act 1994 (OHS)
- Financial and trade laws that Govern the payment of taxes and custom duties

Why invest in Guyana's Mining Sector?

- Long history of mining
- Right Geological Environment for discovering large deposits for other minerals such as Columbite-Tantalite, Uranium, Copper, Nickel and PGM in the Precambrian Granite Greenstone Belts, etc.
- Wide range of minerals currently mined: - Gold, Diamond, Bauxite, Silica Sands, Manganese and Quarriable Stones.
- Potential for other minerals largely under explored by modern methods
- English Common law
- Security of Title and Property Rights with 100% Foreign Ownership of PL's & ML's
- Rights to assign and transfer ownership under Prospecting and Mining Licenses
- Pro-mining Government
- English speaking country
- Digital Geological and Cartographic data easily available for most of the mining areas
- Environmental Regulations
- Zero rating on all equipment, process materials and spares used for surveys, exploration or mining by licensee or his contractor(s)*. Food and Beverages are not included.
- Stability of agreements with mining companies
- Straight forward procedures for Application, Licensing and Operation
- Repatriation of funds
- Grant of Mining License, once the terms of the Prospecting License are fulfilled, in accordance with the Mining Act 1989

Notes:

VISION STATEMENT

"To fortify our position as the repository for all incidental and geoscientific data pertaining to Guyana's mineral resources (including petroleum), mining and development experiences: to utilize all enablers, disseminate same as "best in class" service to the public, targeting the mining (and petroleum) sector(s); relevant stakeholders and legitimate investors; while giving high regard to employees' welfare and their development."

MISSION STATEMENT

"To promote; facilitate, monitor and regulate for sustainable utilization of Guyana's minerals' resources (including petroleum). To provide effective stewardship of Guyana's minerals resources (including petroleum) through the deployment of competent human resources employing innovative tools and methods, research and analysis. To collaborate with relevant stakeholders in an environment for optimum, mutually benificial outcomes.

CORE VALUES

INTEGRITY
EXCELLENCE
ACCOUNTABILITY
EFFECTIVENESS
TEAMWORK
FAIRNESS

GET IN TOUCH !

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