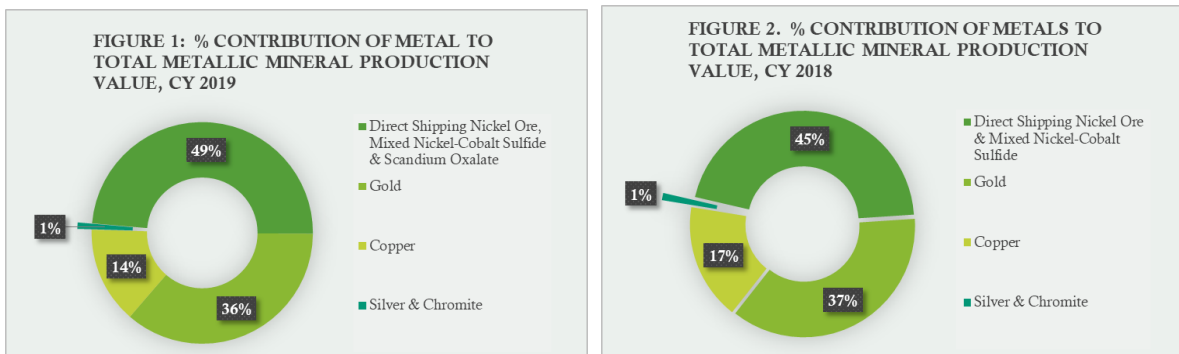


## Metallic production ends 2019 with 7.03% growth

The metallic mineral production value ended the year with a 7.03% growth, from PhP122.14 billion in 2018 to PhP130.73 billion in 2019, up by PhP8.59 billion.

The driving force for the upbeat performance came from the collective production value of nickel ore and its products, mixed nickel-cobalt sulfide (MNCS) and scandium oxalate, output value grew by as much as 15% or PhP8.34 billion from PhP55.38 billion to PhP63.71 billion. Altogether, the nickel group accounted almost 49% of the total metallic production value in 2019. Since 2018, the nickel group continued to outpace the yellow metal. Gold, on the other hand, contributed 36% or PhP47.36 billion. Copper came in third with 14% or PhP18.46 billion while the remaining 1% or PhP1.21 billion came from the combined output of silver and chromite. In addition, there was still no reported production for iron ore during the year.



In 2018, we saw the production of scandium oxalate by Taganito HPAL Nickel Corporation (THPAL) located in Surigao del Norte, a first in Philippine mining and a technical breakthrough according to THPAL. On its second year THPAL reported 12,854 DMT-kg with an estimated value of PhP0.36 billion from only 4,515 DMT-kg with an estimated value of PhP0.14 billion. MNCS on the other hand reported a 5% rise to 88,814 dry metric tons with an estimated value of PhP31.70 billion from 84,514 dry metric tons with an estimated value of PhP26.63 billion. THPAL took the reins with 61% of the total volume while the remaining 39% was from Coral Bay Nickel Corporation (CBNC).

Total nickel ore production and value rose by 1% and 11%, respectively from 25,922,748 dry metric tons with an estimated value of PhP28.61 billion to 26,212,124 dry metric tons with an estimated value of PhP31.65 billion. The 11% or PhP3.05 billion surge in value can be attributed to the better nickel price level in 2019 from US\$13,103.36 per tonne to US\$13,897.85 per tonne, a variance of US\$794.49 per tonne. The big players for the period were Taganito Mining Corporation (TMC) in Surigao Del Norte, Rio Tuba Nickel Mining Corporation (RTNMC) in Palawan and Platinum Group Metals Corporation (PGMC) also in Surigao del Norte accounting for 24%, 14% and, 12%, respectively. Included in the total ore production of TMC and RTNMC were the ores delivered to THPAL and CBNC, respectively. Noteworthy that

out of the 31 operating nickel mines in 2019, about 42% or 13 reported zero production due to under care and maintenance.

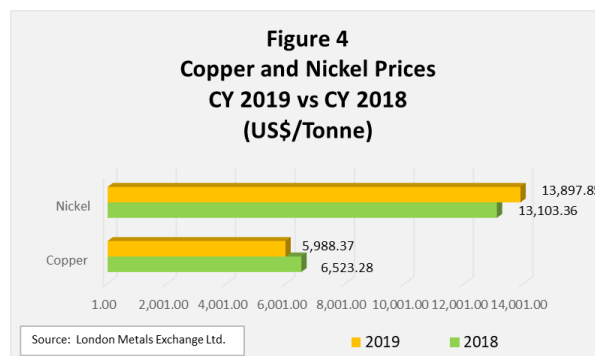
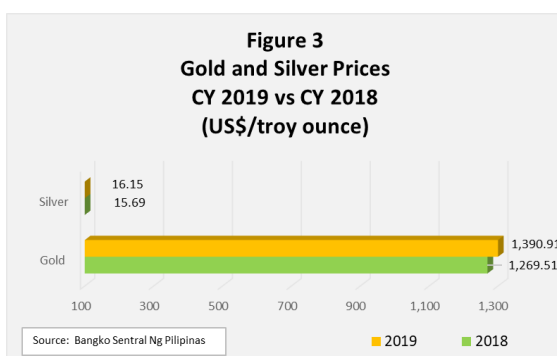
In relation, to Care and Maintenance Program (CMP) the Mines and Geosciences Bureau (MGB) recently issued the Guidelines for Care and Maintenance Programs for Mining Projects or MGB Memorandum Order No. 20-001. Said Guidelines was crafted by DENR-MGB in line with its policy to ensure the integration of environmental protection and stakeholder involvement in every stage of mining operation. DENR-MGB is adamant, that provision for care and maintenance measures shall be integral components of mining operations. The coverage of said Memorandum Order include all mining tenements, excluding those under Exploration Permit stage/period, and those issued permits by DENR/MGB covering quarrying resources. CMP shall be implemented in case of the following: 1) Operational Constraint (Voluntary Stoppage); and 2) Suspension (Involuntary Stoppage). *Voluntary Stoppage* include any dispute with surface owners or workforce, peace and order, flooding, fire, massive landslide and other natural or man-made calamities while *Involuntary Stoppage* can be due to non-conformance/s with the regulatory provision of the mining law and its implementing rules and regulations; other pertinent environmental laws, rules and regulations; and the terms and conditions of mining contracts/permits. Again, the issuance of said Guidelines is the manifestation that DENR-MGB is leaving no stone unturned when it comes to environmental and stakeholder's protection.

For gold production, despite the negligible 0.6% increase in volume from 20,765 kilograms to 20,646 kilograms, the value went up by 6% or PhP2.55 billion from PhP44.81 billion to PhP47.36 billion. The positive change was brought by the 10% improved price of gold from US\$1,269.15 per troy ounce to US\$1,390.91 per troy ounce, a difference of US\$121.76. Key players include Philippine Gold Processing & Refining Corporation (PGPRC) with 6,760 kilograms valued at PhP15.61 billion, Mindanao Mineral Processing and Refining Corporation with 3,243 kilograms valued at PhP7.49 billion OceanaGold (Phils) Inc. (OGPI) with 2,651 kilograms valued at PhP5.95 billion, and FCF Minerals with 2,133 kilograms valued at 4.82 billion. Greenstone Resources Corporation in Surigao del Norte was still under care and maintenance.

The Apex Maco Operation of Apex Mining Company Inc., again bested the others with a reported output of 10,999 kilograms of silver metal valued at PhP0.30 billion and in a distant second was PGPRC with 5,136 kilograms valued at PhP0.14 billion. Over the years, Apex consistently dominated the production scene, this year it contributed about 39% of the country's total silver.

The performance of copper was quite diverse, with mine output rising as value declined. Production volume displayed growth from 282,391 dry metric tons to 296,997 dry metric tons but was down by 11% or PhP2.22 billion in value from PhP20.68 billion to PhP18.46 billion. Copper price, dipped by 8.20% from US\$6,523.28 per tonne to US\$5,988.37 per tonne year-on-year. The four local copper producers were: Padcal

Copper-Gold Project of Philex Mining Corporation; Didipio Copper-Gold Project of OceanaGold Philippines, Inc.; Toledo Copper Operations of Carmen Copper Corporation and Quartz-Pyrite-Gold Project of Lepanto Consolidated Mining Corporation. Toledo Copper Operations located in Cebu reported the highest production with 186,502 dry metric tons valued at PhP11.36 billion. It accounted for 63% of the total copper production. Quite notable development, Didipio Gold Project of OceanaGold Phils. Inc. (OGPI), the first company to be granted by the government of a Financial or Technical Assistance Agreement reported zero production in November and December 2019. OGPI operations contributed substantially to the country's gold, silver, and copper production. Production volume and value declined by 31% and 37%, respectively from 64,458 dry metric tons with an estimated value PhP5.16 billion to 44,504 dry metric tons with an estimated value of PhP3.26 billion, year-on-year.



Translating the mineral production output in terms of their estimated peso values, the five (5) mining projects and mineral processing plants in 2019 that reported the highest output value was the following:

Project Name	Company Name	Type of Permit	Mineral Commodity	Project Location	Estimated Production Value 2019 (in Billion PhP)
1. <b>Taganito HPAL Project</b>	Taganito HPAL Nickel Corporation	MPP	Mixed Nickel-Cobalt Sulfide & Scandium Oxalate	Surigao del Norte	20.43
2. <b>Masbate Gold Project</b>	Filminer Mining Corporation/Philippines Gold Processing and Refining Corporation	MPP	Gold, Silver	Masbate	15.74
3. <b>Toledo Copper Operations (Carmen and Lutopan Projects)</b>	Carmen Copper Corporation	MPSA	Copper, Gold, Silver	Cebu	14.20
4. <b>Coral Bay HPAL Project</b>	Coral Bay Nickel Corporation	MPP	Mixed Nickel-Cobalt Sulfide	Palawan	11.63
5. <b>Didipio Copper Gold Project</b>	Oceana Gold Philippines Inc.	FTAA	Copper, Gold, Silver	Nueva Vizcaya and Quirino	9.32

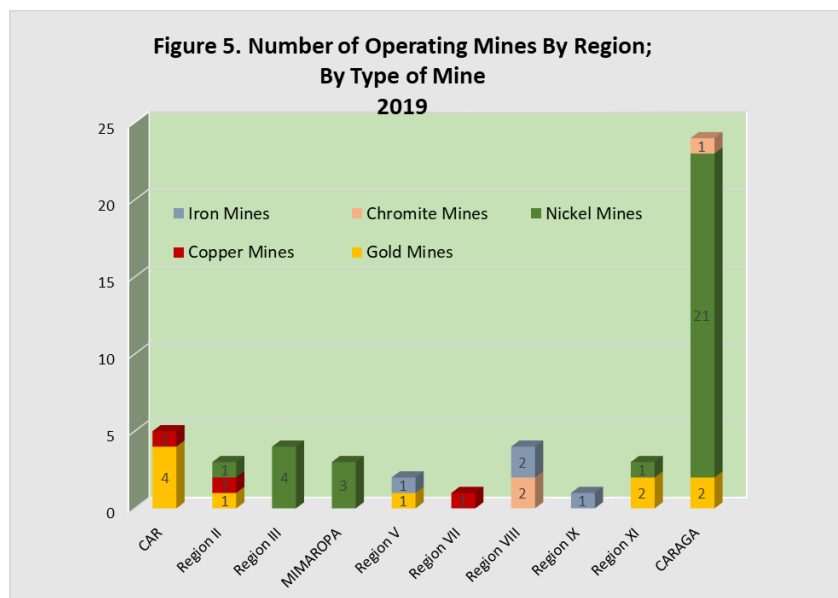
Notes:

FTAA - Financial or Technical Assistance Agreement

MPSA - Mineral Production Sharing Agreement

MPP - Mineral Processing Permit

The figures stated for Taganito Mining Corporation include the nickel ores delivered to Taganito HPAL Nickel Corporation.



Currently, the country has five (5) processing plants: two (2) gold processing plants – Philippine Gold Processing and Refining Corporation located in Masbate and Mindanao Mineral Processing and Refining Corporation in Agusan del Sur; two (2) nickel processing plants – Coral Bay Nickel Corporation in Palawan and Taganito HPAL Nickel Corporation in Surigao del Norte; and one (1) copper smelter - Philippine Associated Smelting and Refining Corporation in Leyte.

Positive developments for the minerals industry is the passage of Republic Act No. 11256 or An Act to Strengthen the Country's Gross International Reserves (GIR), amending for the Purpose Sections 32 and 151 of the National Internal Revenue Code, as Amended, and for Other Purposes last 29 March 2019 and only last 29 January 2020 the approval of Revenue Regulations No. 4-2020. Salient features of said Regulation is the tax exemptions for the following transactions:

- a) Income derived from the following sale of gold are excluded in the gross income and shall be exempt from income tax, and, and consequently from withholding taxes:
  - 1) The sale of gold to the BSP by registered SSMS and accredited traders; and
  - 2) The sale of gold by registered SSMS to accredited traders for eventual sale to BSP.
- b) Excise tax shall not be levied, assessed and collected on the following;
  - 1) The sale of gold to the BSP by registered SSMS and accredited traders; and
  - 2) The sale of gold by registered SSMS to accredited traders for eventual sale to BSP.

This action by the government is expected to motivate small scale miners and traders, to sell their gold to BSP once again. All in all, there are 35 Declared Minahang Bayan or People's Small-Scale Mining Area, 30 for gold, four chromite, and one silica quartz.

**Metallic Mineral Production  
CY 2019 vs CY 2018**

Mineral Commodity	Unit Used	CY 2019		CY 2018		% Change	
		Quantity	Value	Quantity	Value	Quantity	Value
<b>PRECIOUS METALS</b>							
Gold	KGS.	20,646	47,357,070,332	20,765	44,807,203,837	-1	6
Silver	KGS.	31,267	827,269,356	29,782	790,728,449	5	5
<b>BASE METALS</b>							
Copper Concentrate	DMT	296,997	18,456,262,112	282,391	20,678,459,054	5	-11
Copper Content of Concentrate	MT	71,892		69,933		3	
Mixed Nickel-Cobalt Sulfide	DMT	88,814	31,700,955,961	84,514	26,630,972,791	5	19
Mixed Nickel-Cobalt Sulfide (Metal)	MT	51,144		48,633		5	
Scandium Oxalate	Dry-Kg	12,854	358,356,578	4,515	137,632,563	185	160
Scandium Oxalate content	Dry-Kg	4,355		1,618		169	
Nickel Direct Shipping Ore	DMT	26,212,124	31,653,009,469	25,922,748	28,606,965,141	1	11
Nickel Content of Ore	MT	323,325		344,966		-6	
Chromite	DMT	31,743	379,129,068	45,011	488,713,607	-29	-22
<b>TOTAL</b>			<b>130,732,052,876</b>		<b>122,140,675,443</b>		<b>7.03</b>