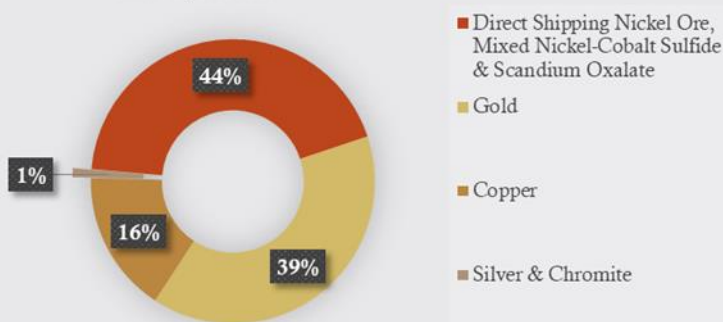


## Nickel leads production value in H1 2019

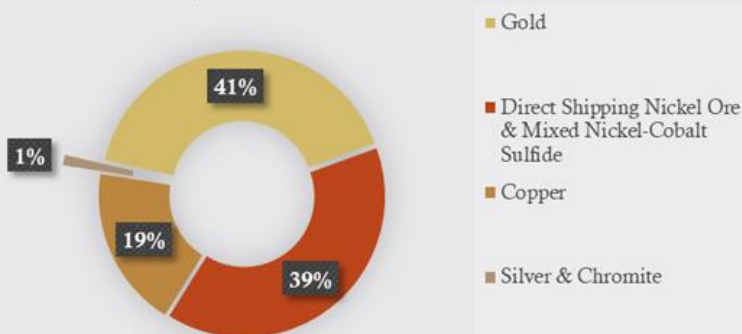
Philippine metallic mineral production value grew by 9.41% in H1 2019 from PhP55.99 billion in H1 2018 to PhP61.26 billion, a PhP5.27 billion rise.

Nickel direct shipping ore together with its by-products mixed nickel-cobalt sulfide and scandium oxalate dominated the production scene accounting for 44% or PhP26.64 billion of the total metallic production value. Gold, on the other hand, took the second spot with 39% or PhP24.11 billion; and followed by copper with 16% or PhP9.89 billion. The remaining 1% or PhP0.62 billion came from the shared values of silver, and chromite. There was no reported production for iron ore during the period. (See Figure 1).

**FIGURE 1: % CONTRIBUTION OF METAL TO TOTAL METALLIC MINERAL PRODUCTION VALUE, H1 2019**



**FIGURE 2. %CONTRIBUTION OF METALS TO TOTAL METALLIC MINERAL PRODUCTION VALUE, H1 2018**



A first in the history of Philippine mining is the production of scandium oxalate by Taganito HPAL Nickel Corporation (THPAL) located in Surigao del Norte. THPAL stated that the recovery of Scandium Oxalate is considered a technical breakthrough since this is the first time that Scandium Oxalate is being recovered as a by-product of the HPAL process. According to the company, “scandium is the lightest rare earth element in the periodic table which has critical utilization areas such as the aerospace industry, solid oxide fuel cells, electronics industry and is also used in metallurgical applications. It is generally produced as a co-product of a metallurgical process in THPAL”. For its initial plant output of scandium oxalate, THPAL reported 6,752 dry-kg with an estimated value of PhP0.19 billion in H1 2019. The scandium oxalate was exported to Sumitomo Metal Mining Co., LTD in Japan.

Production of nickel ore went up by 3% from 11,011,874 dry metric tons with an estimated value of PhP10.67 billion in H1 2018 to 11,306,982 dry metric tons with an estimated value of PhP12.24 billion in H1 2019. The major producers were Rio Tuba Nickel Mining Corporation (RTNMC), and Taganito Mining Corporation (TMC) with 2,608,482 dry metric tons and 2,346,463 dry metric tons, respectively. In addition, RTNMC is the sole supplier of ore to Coral Bay Nickel Corporation while TMC to Taganito HPAL Nickel Corporation. Of the 31 nickel mines 16 or more than 50% reported zero production due to suspension and under care & maintenance status. Mixed nickel-cobalt sulfide (MNCS) likewise reported a 2% increase from 42,622 dry metric tons valued at PhP11.42 billion to 43,363 dry metric tons valued at PhP14.21 billion. Despite the modest mine and plant output of both nickel direct shipping ore and MNCS production value grew by 15% and 24% growth, respectively.

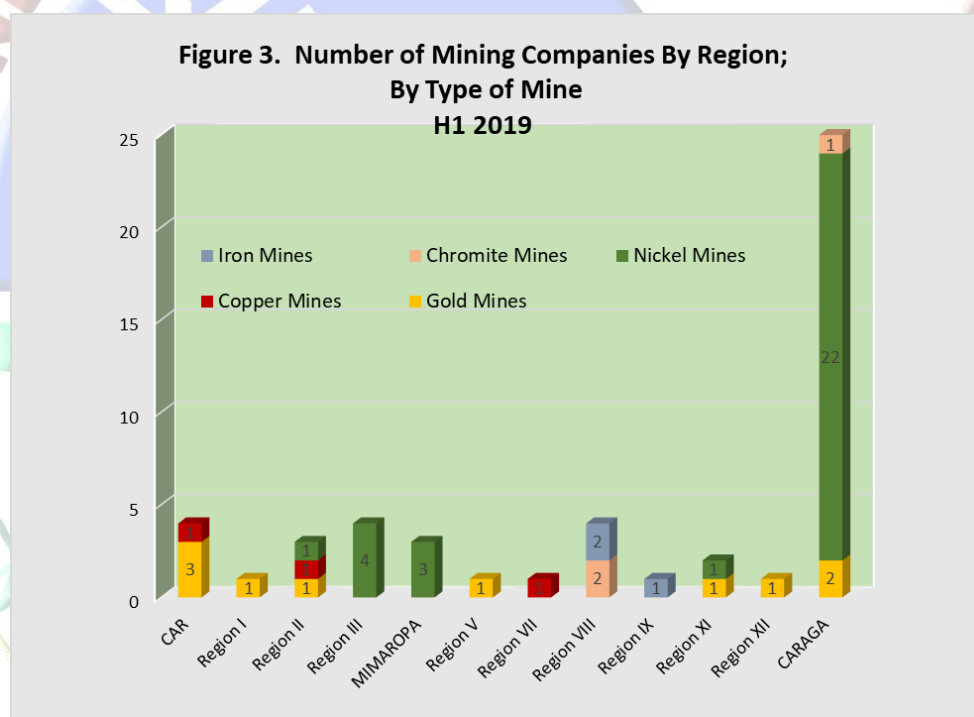
Production of precious metals, gold and silver was up by 6% from 10,436 kilograms to 11,078 kilograms and 7% from 14,777 and 15,849 kilograms, respectively year-on-year. Top players for the yellow metal include Philippine Gold Processing & Refining Corporation (PGPRC) with 3,579 kilograms, OceanaGold (Phils) Inc. (OGPI) with 2,117 kilograms and Mindanao Mineral Processing and Refining Corporation with 1,742 kilograms. Greenstone Resources Corporation in Surigao del Norte is still under care and maintenance.

For white metal, Apex Mining Company, Inc. consistently reported the highest mine output with 4,514 kilograms or 28% of the total silver production followed by OGPI with 3,164 kilograms or 20% and in third was PGPRC with 2,677 kilograms or 17%.

With regard to Bangko Sentral Ng Pilipinas (BSP) gold purchases, although not yet reflective in the H1 2019 BSP data. The government remains optimistic that 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. Small scale miners and traders will be attracted to sell their gold to BSP once again. All in all, there are 26 Declared Minahang Bayan or People's Small-Scale Mining Area, 21 for gold, four chromite, and one non-metallic silica quartz.

Similarly, copper production went up by 14% from 137,929 dry metric tons to 156,745 dry metric tons year-on-year, a change of 18,816 dry metric tons. The four copper producer, 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 contributed the most at 58% or 90,540 dry metric tons of total copper production.

Currently, the country has 50 operating metallic mines, consisting of the following: 31 nickel mines; 10 gold mines with silver as co-product; three copper mines with gold and silver as co-products; three chromite mines; and three iron mines. These are in addition to the two hydrometallurgical nickel processing plants; and two gold processing plants.

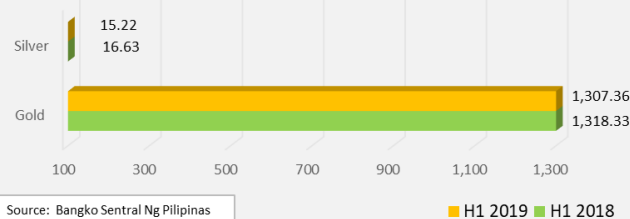


During the review period, prices of metals remained lackluster. Gold and silver declined 0.83% and 8.46%, respectively year-on-year. The average price of gold went down from US\$1,318.33 in H1 2018 to US\$1,307.36 per ounce in H1 2019, a US\$10.97 difference. In the same way, base metals, copper and nickel, went down by 10.83% and 11.13%. Copper declined from US\$6,913.34 per ton to US\$6,164.74 per ton year-on-year while nickel waned from US\$13,858.78 to US\$12,316.06 per ton year-on-year.

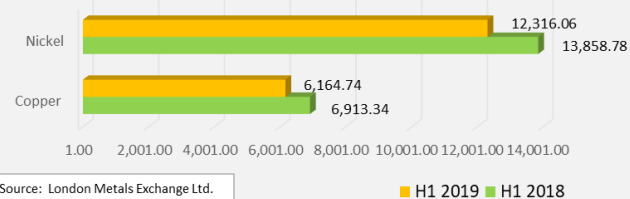
Despite low metal prices, market analysts expect prices to go up during the remaining quarters of this year specifically for base metals. This positive outlook was motivated by expected economic growth and increased demand from China. The growing concern for possible disruptions in the operations of main nickel producers in the world market coupled with the growing demand for electronic vehicles will also push prices to higher-level analysts say.

A major development in the world nickel ore market that will boost nickel price is the announcement of Indonesia's Energy and Mineral Resources Ministry on the export ban of nickel ore with nickel content below 1.7% effective 31 December 2019. Said situation will naturally result in a lower supply vis-à-vis higher demand. It should be noted, that according to USGS, Mineral Commodity Summaries, February 2019 publication, in terms of mine production for CY 2018, Indonesia was the world's largest nickel-producing country with 560,000 tons followed by the Philippines with 340,000 tons.

**Figure 4**  
**Gold and Silver Prices**  
**H1 2019 vs H1 2018**  
**(US\$/troy ounce)**



**Figure 5**  
**Copper and Nickel Prices**  
**H1 2019 vs H1 2018**  
**(US\$/MT)**





On the local front, the Mines & Geosciences Bureau is all business in implementing reforms in the minerals industry by providing new policies that will guarantee that social, economic, technical, and environmental aspects during and after mining operations are of supreme consideration. Forthcoming major policy reforms include: (1) Amendment of DAO No.2010-21, the Implementing Rules and Regulations (IRR) of Mining Act of 1995; and (2) Amendment of the IRR of Republic Act No. 7076, An Act Creating a People's Small-Scale Mining Program and For Other Purposes.

Philippine Metallic Mineral Production  
H1 2019 vs H1 2018

Mineral Commodity	Unit Used	JAN-JUN, 2019		JAN-JUN, 2018		% Change	
		Quantity	Value	Quantity	Value	Quantity	Value
PRECIOUS METALS							
Gold	KGS.	11,078	24,109,599,167	10,436	22,857,795,585	6	5
Silver	KGS.	15,849	396,174,340	14,777	404,366,506	7	-2
BASE METALS							
Copper Concentrate	DMT	156,745	9,889,405,410	137,929	10,375,522,805	14	-5
Copper Metal Equivalent	MT	37,357		32,859		14	
Mixed Nickel-Cobalt Sulfide	DMT	43,363	14,207,272,621	42,622	11,419,353,563	2	24
Mixed Nickel-Cobalt Sulfide (Metal)	MT	24,956		24,454		2	
Scandium Oxalate	Dry-Kg	6,752	190,298,901	0	0		
Scandium Oxalate Content	Dry-Kg	2,291		0			
Nickel Direct Shipping Ore	DMT	11,306,982	12,242,514,291	11,011,874	10,675,336,396	3	15
Nickel Content of Ore	MT	141,584		132,491		7	
Chromite	DMT	18,910	224,959,268	24,064	258,060,242	-21	-13
TOTAL			61,260,223,998		55,990,435,096		9.41

Source: Mines and Geosciences Bureau