

METALLIC PRODUCTION-VALUE REMAINS BULLISH

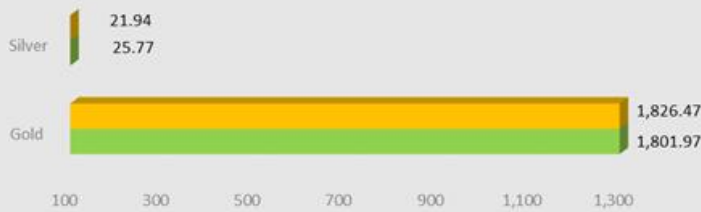
Metallic mineral production value remained upbeat during the first three-quarters of 2022 vis-à-vis 2021 from PhP136.21 billion to PhP175.61 billion, a growth of PhP39.79 billion or 29.21%.

The important factors for this development were the bullish metal prices of nickel ore and gold paired with the increased mine output of gold, silver, chromite, and iron ore during the period. Nickel ore enjoyed a 47.21% or US\$3.84 increment from US\$8.13 per lb. to US\$11.97 per lb. year-on-year. Based on the Bangko Sentral Ng Pilipinas (BSP) price bulletin gold stepped up with a US\$24.51 or 1.36% increase from US\$1,801.97 per troy ounce to US\$1,826.47 per troy ounce year-on-year. While both silver and copper dip by 14.84% and 0.64%, respectively.

Nickel ore together with its nickel by-products, mixed nickel-cobalt sulfide (MNCS), and scandium oxalate continued to have the largest share with PhP86.94 billion or 49.40%. Gold earned the second spot with PhP67.45 billion or 38.32%. Copper, on the other hand, took the third spot accounting for PhP18.99 billion or 10.79%. While the collective value of silver, chromite, and iron ore amounted to PhP2.63 billion which is about 1.49%. This is the first time that the joint values of these three commodities exceeded the one-billion mark. A big factor was due to the increased output of TVI Resource Development (Phils) Inc., Balabag Gold-Silver Project from 1,170 kilograms with an estimated value of PhP41.26 million to 19,088 kilograms with an estimated value of PhP736.76 million. Overall, there was a remarkable increase in the value of mineral commodities, year-on-year.

Figure 1
Gold and Silver Prices

January-September 2022 vs January-September 2021
(US\$/troy ounce)



Source: Bangko Sentral Ng Pilipinas

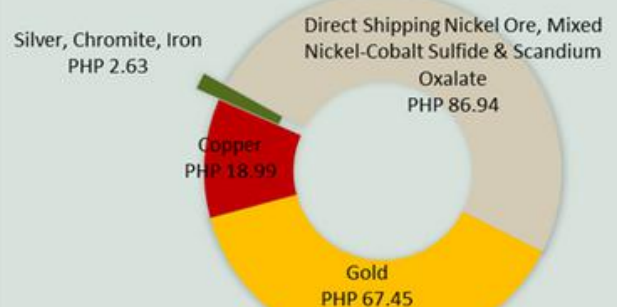
Figure 2
Copper and Nickel Prices

January-September 2022 vs January-September 2021
(US\$/lb)



Source: London Metals Exchange Ltd.

FIGURE 3. CONTRIBUTION OF METALS TO TOTAL METALLIC MINERAL PRODUCTION VALUE, IN BILLION PESOS JANUARY-SEPTEMBER 2022



Source: Mines and Geosciences Bureau

FIGURE 2. CONTRIBUTION OF METALS TO TOTAL METALLIC MINERAL PRODUCTION VALUE, IN BILLION PESOS JANUARY-SEPTEMBER 2021



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In terms of regional contribution to total production value of metallic minerals, Caraga had the major part with 37.26% or PhP65.57 billion, followed by MIMAROPA with 11.19% or PhP19.69 billion, and in third was Cagayan Valley with 10.58% or PhP18.62 billion. In terms of the number of operating metallic mines in the Region. Caraga remains the country's mining hub, with two gold mines, one chromite mine, 18 nickel mines, one hydrometallurgical processing plant, and one gold processing plant. In addition, the BSP gold purchases amounted to about PhP16.36 billion with five gold buying stations strategically located across the country.

Table 1. Contribution to Total Production-Value for Metallic Mineral Commodities, By Region January-September 2022

REGION	Metallic Mineral Commodities	PRODUCTION VALUE (in Billion PhP)
Caraga	Chromite, Gold, Silver, Mixed Nickel Cobalt-Sulfide, Nickel Ore, Scandium Oxalate	65.57
MIMAROPA	Mixed Nickel Cobalt-Sulfide, Nickel Ore	19.69
REGION II - Cagayan Valley	Copper, Gold, Silver, Nickel Ore	18.62
REGION V - Bicol Region	Gold, Silver	16.15
REGION VII - Central Visayas	Copper, Gold, Silver	11.33
Cordillera Administrative Region	Copper, Gold, Silver	10.30
REGION III - Central Luzon	Iron Ore, Nickel Ore	7.09
REGION XI - Southern Mindanao	Gold, Silver, Nickel Ore	6.43
REGION IX - Western Mindanao	Gold, Silver	3.07
REGION VIII - Eastern Visayas	Chromite, Iron Ore, Nickel Ore	1.24
REGION XII - Central Mindanao	Gold, Silver	0.13
Bangko Sentral Ng Pilipinas Gold Purchases*	Gold	16.36
Total		176.01

*Does not include the gold purchases from Acupan Contract Mining Project and Loacan Itogon Pocket Miners Association located in Benguet. Mine output of these Projects was integrated with the contribution of the Cordillera Administrative Region. BSP Gold Buying Stations are in Quezon City, Baguio City, Davao City, Zamboanga City and Naga City



Nickel direct shipping ore together with its by-products MNCS and scandium oxalate exhibited dominance over other metals. Production value went up from PhP70.74 billion to PhP86.94 billion, an almost 23% or PhP16.20 billion boost. Production volume of nickel direct shipping ore however recorded a decline of 17% but settled to a 2% increase in value from 27,238,874 dry metric tons with an estimated value of PhP45.97 billion to 22,525,878 dry metric tons with an estimated value of PhP46.82 billion year-on-year. Breaking it down further, in terms of regional mine production Caraga the nickel capital of the Philippines accounted for 71% with 15,999,698 dry metric tons, followed by MIMAROPA with about 15% or 3,304,900 dry metric tons while Regions III and VIII accounted for about 8% or 1,783,360 dry metric tons and 5% or 1,034,852 dry metric tons, respectively. Finally, rounding up the production circle were Regions II, (Dinapigue Mining Corporation) and XI (ARC Nickel Resources, Inc.) with 232,825 dry metric tons and 170,243 dry metric tons, respectively. Moreover, the production volume and value of scandium oxalate, a by-product in the operation of Taganito THPAL recorded a production volume of 14,264 dry-kilograms, a 14% growth from its previous 12,504 dry-kilograms, year-on-year. On the other hand, MNCS production volume slightly falls by 1% from 60,057 dry metric tons to 59,458 dry metric tons, year-on-year. Production value, however, substantially grew by 63% from PhP24.46 billion to PhP39.81 billion. Included in the MNCS total value was the estimated value of the cobalt content.

Generally, the nine-month 2022 price of nickel was still above the CY2018-CY2021 levels with prices peaking in March 2022 at US\$17.14 per pound from July to September 2022 the 3-month average settled at US\$10.02 per pound. China is our major trading partner for our nickel ore.



Performance of the yellow metal remained robust with production volume and value rising from 18,715 kilograms with an estimated value of PhP52.83 billion to 21,836 kilograms with an estimated value of PhP67.45 billion, up by 3,121 kilograms and PhP14.62 billion, respectively. In terms of mine output, Bicol Region accounted for 23.37% or 5,102 kilograms of the country's gold production. Philippine Gold Processing and Refining Corporation and Joshon Mining Corporation are the current gold mines in the region. Region II - Cagayan Valley was in the second spot accounting for 18.54% or 4,048 kilograms with the output of FCF Minerals and OceanaGold (Phils.) Inc. Taking the third spot was Region XI - Davao Region with 2,119 kilograms courtesy of Apex Mining Company Inc. In 4th and 5th positions were Caraga Region and CAR with 2,060 kilograms and 1,983 kilograms, respectively. Other regions with gold mines include IX and XII. Greenstone Resources Corporation and Johnson Gold Mining Corporation are still under care and maintenance status.

The average price of gold from July to September 2022 was lower vis-à-vis July to September 2021 from US\$1,788.72 per troy ounce to US\$1,730.48 per troy ounce, year-on-year. Still, the nine-month average grew from US\$1,801.97 per troy ounce to US\$1,826.47 per troy ounce year-on-year, up by US\$24.51.



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Overall silver production volume and value aggressively went up by 131% and 112% from 18,045 kilograms with an estimated value of PhP0.72 billion to 41,710 kilograms with an estimated value of PhP1.52 billion year-on-year. The substantial growth in volume was attributed to the contribution of TVI Resources Development (Phils.) Inc., Balabag Gold-Silver Project located in Zamboanga del Sur from 1,170 kilograms with an estimated value of PhP41.26 million to 19,088 kilograms with an estimated value of PhP736.76 million, year-on-year. Incidentally, TVI dominated the production scene accounting for almost 42% of the total silver production. In a distant second was Apex Mining Company Inc. with 9,203 kilograms with an estimated value of PhP295.38 million. While third was OceanaGold with 4,320 kilograms. Silver price during the review period was below the CY2021 price from a nine-month average of US\$25.77 per troy ounce to US\$21.94 per troy ounce, year-on-year.

For copper production, we saw copper volume and value grow by 22% and 62%, respectively from 156,864 dry metric tons with an estimated value of PhP11.74 billion to 190,767 dry metric tons with an estimated value of PhP18.98 billion, up by 33,903 dry metric tons and PhP7.25 billion both Philex Mining Corporation and Carmen Copper Corporation incurred production shortfall of 2% and 12%. The output of OceanaGold (Phils) Inc. made the difference during the review period accounting for 48,264 dry metric tons with an estimated value of PhP5.23 billion. It is significant to note that during the first 9-months of 2021 OGPI recorded no production. Carmen Copper Corporation contributed 99,232 dry metric tons or 52% of the total production. Copper price declined by US\$0.64 from US\$4.15 per lb. to US\$4.12 per pound year-on-year.

Iron ore production volume and value went up by 51% and 67% from 37,785 dry metric tons with an estimated value of PhP102.54 million to 57,040 dry metric tons with an estimated value of PhP171.10 million year-on-year. Ore Asia Mining & Development Corporation in Bulacan accounted for almost 95% or 54,031 dry metric tons while the remaining 5% came from the Leyte Ironsand Project of MacArthur Iron Projects Corp with 3,009 dry metric tons. Atro Mining Vitali Iron Inc. still reported zero production.

On chromite production, volume and value also displayed growth from 10,816 dry metric tons with an estimated production value of PhP86.64 million to 100,447 dry metric tons with an estimated production value of PhP936.41 million year-on-year. Same period last year only Techiron Resources Inc. recorded production. This time Techiron was joined by Taganito HPAL Nickel Corporation. THPAL chromite production is a by-product of its MNCS output.

Still, on the local front, the government is aiming to tap the potential of the mining sector to push for the country's economic growth through the Declaration of more Minahang Bayan (MB). The declaration of MB is the government's strategy to first, effect an orderly, systematic, and ecologically balanced administration and disposition of small-scale mining areas (SSM). Second, to regulate this industry, with a view of enhancing its growth and productivity while ensuring environmental protection; and finally, to provide technical, financial, and marketing assistance and ensure efficient collection of government revenues. As of August 2022, the government has already declared 53 MB, there are 17 in the Luzon area, three in Visayas, and 33 in Mindanao. For metallic minerals, commodities will be limited only to gold, silver, and chromite and shall have a term of two years, renewable for like periods but not to exceed a total term of six years. The Declaration of MB is opportune to the marching directive of the President to the Department of Environment and Natural Resources (DENR) regarding small-scale mining operations during a meeting with the Department's top officials at the Malacañang, "We want to strengthen the regulatory framework for them to operate legally so we can give minerals assistance and protection so they can be safe while working" he said. The Chief Executive went on to say for DENR to make sure that all mining firms have updated safety programs.

Also in the same light, the Department of Finance is banking on the extractive sector as a key driver for the country's long-term economic expansion. Being a highly mineralized country out of the total land area of the Philippines of 30 million hectares, in which 9 million hectares were identified as having high mineral potential only about 2.54% or 763,377 hectares of the 9 million hectares as of June 2022 is currently covered by mining tenements. This only pertains to the permits issued by the national government and does not include the permits issued by the local government.

On the international front, experts believe that in terms of short-term outlook in Q4 2022 up to 2023 metal prices are expected to go down, reflective of weaker global growth and concerns over a slowdown in China's demand due to its zero COVID policy and slowdown of its real estate sector. But still, experts went on to say that prices are expected to remain higher than their average over the past five years. Which is a positive thing for our local mining industry.

Table 2. Philippines Metallic Mineral Production
January-September 2022 vs January-September 2021

Mineral Commodity	Unit Used	JAN-SEP. 2022		JAN-SEP. 2021		% Change	
		Quantity	Value	Quantity	Value	Quantity	Value
Gold	KGS.	21,836	67,449,975,808	18,715	52,829,164,490	17	28
Silver	KGS.	41,710	1,519,336,349	18,045	717,393,568	131	112
Copper Concentrate	DMT	190,767	18,985,499,205	156,864	11,735,123,911	22	62
Mixed Nickel-Cobalt Sulfide	DMT	59,458	39,805,069,813	60,057	24,456,771,373	-1	63
Scandium Oxalate	Dry-Kg	14,264	313,858,394	12,504	317,424,390	14	-1
Nickel Direct Shipping Ore	DMT	22,525,878	46,824,318,757	27,238,874	45,969,440,196	-17	2
Chromite	DMT	100,447	936,407,571	10,816	86,636,145	829	981
Iron Ore	DMT	57,040	171,097,407	37,785	102,538,434	51	67
TOTAL			176,005,563,303		136,214,492,508		29.21

Source: Mines and Geosciences Bureau