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Wajib Pajak Minerba Tumbuh 3% per Tahun, Penerimaan Mineral Logam Tembus Rp45 Triliun

Penulis : M Ryan Hidayatullah

KEMENTERIAN Keuangan (Kemenkeu) mencatat jumlah wajib pajak subsektor pertambangan mineral dan batu bara (minerba) meningkat dalam lima tahun terakhir. Rata-rata pertambahannya mencapai sekitar 3% per tahun.

“Pada tahun 2021 terdapat sebanyak 6.321 wajib pajak, dan pada tahun 2025 tumbuh menjadi 7.128 wajib pajak,” ucap Direktur Jenderal Pajak Kemenkeu, Bimo Wijayanto, melalui keterangan resmi, dikutip Minggu (7/12/2025).

Menurutnya, penerimaan sektor pertambangan mineral logam mampu meningkat lebih dari 10 kali lipat, dari sebesar Rp4 triliun (2016) menjadi Rp45 triliun (2024). Sementara itu, penerimaan pajak sektor pertambangan batu bara mengalami fluktuasi sejalan dengan pergerakan harga komoditas global.

Bimo menjelaskan bahwa pertambangan termasuk dalam kelompok wajib pajak berisiko tinggi sehingga pengawasan dilakukan berbasis compliance risk management.

Dia juga menekankan pentingnya kepatuhan dalam pemotongan dan pemungutan PPh serta konsistensi penerapan Harga Patokan Mineral (HPM) dan Harga Batu Bara Acuan (HBA).

Oleh karena itu, pemerintah bakal memasukkan komitmen pelunasan pajak sebagai salah satu dokumen kelengkapan pada saat perusahaan tambang mengajukan rencana kerja dan anggaran biaya (RKAB).

Mineral and Coal Taxpayers Grow 3% Annually, Metal Mineral Revenue Reaches IDR45 Trillion

Author: M Ryan Hidayatullah

THE MINISTRY of Finance (MoF) noted that the number of taxpayers in the mineral and coal mining (minerba) subsector has increased over the past five years, with an average annual increase of approximately 3%.

"In 2021, there were 6,321 taxpayers, and by 2025, this number had grown to 7,128," said the Director General of Taxes at the Ministry of Finance, Bimo Wijayanto, in an official statement, quoted Sunday (7/12/2025).

According to him, revenue from the metal mineral mining sector could increase more than tenfold, from IDR 4 trillion (2016) to IDR 45 trillion (2024). Meanwhile, tax revenue from the coal mining sector fluctuates in line with global commodity price movements.

Bimo explained that mining is included in the high-risk taxpayer group, so supervision is carried out based on compliance risk management.

He also emphasized the importance of compliance in withholding and collecting income tax as well as consistent implementation of the Mineral Benchmark Price (HPM) and the Reference Coal Price (HBA).

Therefore, the government will include a tax payment commitment as one of the required documents when mining companies submit their work plans and budgets (RKAB).

“Tujuan DJP bukan menekan pelaku usaha, tetapi memastikan fairness dan level playing field, agar penerimaan negara sesuai potensi riil sektor pertambangan,” ujar Bimo.

Dia menegaskan pentingnya keselarasan antara data RKAB, produksi, penjualan, dan laporan pajak yang disampaikan melalui SPT (Surat Pemberitahuan Tahunan).

Menurutnya, Direktorat Jenderal Pajak (DJP) bersama Kementerian Energi dan Sumber Daya Mineral (ESDM) terus memperkuat joint audit dan pemadanan data melalui MODI/MOMS, data ekspor Bea Cukai, serta laporan keuangan perusahaan. Editor : Aprianus Doni Tolok

"The DGT's goal is not to pressure business actors, but to ensure fairness and a level playing field, so that state revenues align with the real potential of the mining sector," Bimo said.

He emphasized the importance of alignment between RKAB data, production, sales, and tax reports submitted through the SPT (Annual Tax Return).

According to him, the Directorate General of Taxes (DGT) and the Ministry of Energy and Mineral Resources (ESDM) continue to strengthen joint audits and data matching through MODI/MOMS, Customs export data, and company financial reports. Editor: Aprianus Doni Tolok

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Realisasi DMO Batu Bara Oktober 2025 Capai 180,98 Juta Ton

Reporter: Diki Mardiansyah | Editor: Avanty Nurdiana

MENJELANG penutupan tahun, pemenuhan kewajiban pasokan batu bara untuk kebutuhan domestik atau domestic market obligation (DMO) terus bertambah.

Kementerian Energi dan Sumber Daya Mineral (ESDM) mencatat, realisasi DMO telah mencapai 180,98 juta ton hingga Oktober 2025.

“Evaluasi kewajiban akan dilakukan setelah 2025 selesai untuk melihat tingkat pemenuhan masing-masing produsen,” ujar Wakil Menteri ESDM Yuliot Tanjung kepada Kontan, Minggu (7/12/2025).

Coal DMO Realization in October 2025 Reaches 180.98 Million Tons

Reporter: Diki Mardiansyah | Editor: Avanty Nurdiana

AS THE YEAR draws to a close, the domestic market obligation (DMO) continues to grow.

The Ministry of Energy and Mineral Resources (ESDM) noted that the DMO realization had reached 180.98 million tons by October 2025.

"An evaluation of the obligations will be conducted after 2025 is completed to assess the level of compliance of each producer," Deputy Minister of Energy and Mineral Resources Yuliot Tanjung told Kontan on Sunday (7/12/2025).

Berdasarkan laporan ESDM, realisasi tersebut mencakup 27,36% dari total produksi nasional yang mencapai 661,18 juta ton pada Januari–Oktober 2025.

Pelaku usaha di sektor tambang menyebut kewajiban DMO relatif dapat dipenuhi sepanjang tahun. Direktur Eksekutif Asosiasi Pertambangan Batubara Indonesia (APBI), Gita Mahyarani mengatakan, seluruh anggotanya menempatkan kebutuhan domestik sebagai prioritas.

“Penetapan DMO tahun depan pasti mengikuti kebutuhan sektor kelistrikan, semen, smelter, dan lainnya. Kenaikan porsi DMO pun harus diselaraskan dengan produksi dan kemampuan serapan,” jelas Gita.

Dari sisi kepatuhan, Indonesian Mining Association (IMA) menilai produsen telah menjalankan kewajibannya. *Executive Director* IMA, Hendra Sinadia menyebut sebagian besar anggotanya bahkan memasok DMO melebihi ambang batas minimal.

“Sebagian anggota IMA realisasi DMO-nya di atas 25%. Banyak perusahaan setiap tahun menerima surat penugasan tambahan pasokan ke PLN,” ujarnya kepada Kontan, Minggu (7/12/2025)

Meski begitu, Hendra mengingatkan rencana pemerintah menaikkan porsi DMO pada 2026 perlu dikaji lebih mendalam.

“Harga DMO US$70 per ton sudah berlaku sejak 2018, sementara biaya produksi terus naik. Pemerintah juga perlu memperjelas aturan DMO dalam PP 39/2025 yang menimbulkan multitafsir,” tambahnya.

Sementara itu, peluang penyesuaian harga DMO dinilai minim. Direktur Eksekutif Pusat Studi Hukum Energi Pertambangan (Pushep) Bisman Bachtiar, mengatakan kebijakan menaikkan harga DMO berpotensi menambah beban subsidi listrik.

According to the ESDM report, this realization covers 27.36% of the total national production, which reached 661.18 million tons in January–October 2025.

Mining business players reported that the DMO obligation was relatively easily met throughout the year. Gita Mahyarani, Executive Director of the Indonesian Coal Mining Association (APBI), stated that all its members prioritize domestic needs.

"Next year's DMO will definitely be determined based on the needs of the electricity, cement, smelter, and other sectors. The increase in the DMO portion must also be aligned with production and absorption capacity," Gita explained.

In terms of compliance, the Indonesian Mining Association (IMA) assesses that producers have fulfilled their obligations. IMA *Executive Director* Hendra Sinadia stated that most of its members even supply DMO products exceeding the minimum threshold.

"Some IMA members have achieved over 25% of their DMO. Many companies receive additional supply assignment letters from PLN every year," he told Kontan on Sunday (December 7, 2025).

However, Hendra reminded that the government's plan to increase the DMO portion in 2026 requires further study.

"The DMO price of US$70 per ton has been in effect since 2018, while production costs continue to rise. The government also needs to clarify the DMO regulations in Government Regulation 39/2025, which are open to multiple interpretations," he added.

Meanwhile, the chances of adjusting the DMO price are considered minimal. Bisman Bachtiar, Executive Director of the Center for Mining Energy Law Studies (Pushep), stated that the policy of raising the DMO price has the potential to increase the burden of electricity subsidies.

Bisman mengutip simulasi Kementerian Keuangan pada 2024 yang menyebut, jika harga DMO mengikuti harga pasar global, tambahan subsidi listrik bisa mencapai Rp 22 triliun.

"Jika harga DMO naik, beban PLN bertambah, otomatis subsidi meningkat. Dalam kondisi ekonomi sekarang, tidak mungkin menaikkan tarif listrik karena akan membebani masyarakat," kata Bisman kepada Kontan, Kamis (4/12).

Menurut Bisman, harga US$70 per ton saat ini masih cukup moderat.

"Menaikkan harga DMO cukup riskan secara ekonomi dan sosial. Untuk menjaga stabilitas, yang paling aman tahun depan adalah mempertahankan harga dan kuota," ujar dia.

Adapun konsumsi batu bara domestik per Oktober 2025 masih didominasi sektor kelistrikan dengan serapan 7,47 juta ton, disusul industri metalurgi sebanyak 2,98 juta ton. Sementara itu ekspor mencapai 421,92 juta ton atau 63,79% dari total produksi.

Bisman cited a 2024 Ministry of Finance simulation, which stated that if the DMO price followed global market prices, additional electricity subsidies could reach IDR 22 trillion.

"If the DMO price increases, PLN's burden will increase, automatically increasing subsidies. In the current economic climate, raising electricity rates is impossible because it would burden the public," Bisman told Kontan on Thursday (December 4).

According to Bisman, the current price of US$70 per ton is still quite moderate.

"Raising DMO prices is quite risky economically and socially. To maintain stability, the safest course of action next year is to maintain prices and quotas," he said.

Domestic coal consumption as of October 2025 was still dominated by the electricity sector, with 7.47 million tons absorbed, followed by the metallurgy industry with 2.98 million tons. Meanwhile, exports reached 421.92 million tons, or 63.79% of total production.

BT Bloomberg Technoz

ESDM-Danantara Finalisasi Kajian 18 Proyek Hilirisasi Pekan Depan

Azura Yumna Ramadani Purnama

SATUAN Tugas (Satgas) Percepatan Hilirisasi dan Ketahanan Energi mengungkapkan Kementerian ESDM, BPI Danantara, dan Sekretaris Kabinet akan menggelar temuan lanjutan untuk memfinalisasi studi kelayakan 18 proyek hilirisasi yang dicanangkan pemerintah.

ESDM-Danantara to Finalize Studies on 18 Downstream Projects Next Week

Azura Yumna Ramadani Purnama

THE TASK Force for the Acceleration of Downstreaming and Energy Security revealed that the Ministry of ESDM, BPI Danantara, and the Cabinet Secretary will conduct further findings to finalize the feasibility study of 18 downstreaming projects initiated by the government.

Sekretaris Satgas Percepatan Hilirisasi dan Ketahanan Energi Ahmad Erani Yustika menjelaskan pertemuan tersebut akan digelar pada Selasa (9/12/2025), untuk membahas perkembangan studi kelayakan yang dilakukan Danantara.

Rapat tersebut juga diharapkan dapat memutuskan proyek apa saja yang akan diprioritaskan oleh pemerintah, dari total 18 proyek yang dikaji tersebut.

"Kurang lebih Presiden berharap agar pada bulan Desember sudah ada FS [*feasibility study*/studi kelayakan] yang selesai dan segera ada keputusan proyek-proyek mana yang bisa dimulai begitu dahulu," kata Erani kepada awak media, di Kementerian ESDM, Jumat (5/12/2025).

"*Makanya* kita akan lakukan pertemuan untuk itu Satgas Hilirisasi, Kementerian ESDM, kemudian Danantara, nanti juga ada Setkab," tegasnya.

Dia menegaskan rapat tersebut belum tentu akan memutuskan proyek mana saja yang akan diprioritaskan oleh pemerintah untuk segera dikerjakan dalam waktu dekat.

Akan tetwpi, dia memastikan Kementerian ESDM akan menagih kajian yang dilakukan Danantara berdasarkan dokumen pra kajian yang sebelumnya diberikan oleh ESDM.

"Ya kita kan ingin tahu selama beberapa bulan terakhir ini setelah kita menyerahkan pra-FS-nya itu apa saja yang sudah dikerjakan dan sampai sejauh mana perkembangan untuk FS ini pada masing-masing proyek tadi itu," ucap Erani.

Sebelumnya, Menteri ESDM Bahlil Lahadalia mengatakan kajian kelayakan atau feasibility study 18 proyek hilirisasi dan ketahanan energi yang dikerjakan BPI Danantara rampung pada Desember 2025.

Ahmad Erani Yustika, Secretary of the Task Force for the Acceleration of Downstreaming and Energy Security, explained that the meeting would be held on Tuesday (9/12/2025) to discuss the progress of the feasibility study conducted by Danantara.

The meeting is also expected to decide which projects will be prioritized by the government, from the total of 18 projects being reviewed.

"More or less, the President hopes that the FS [feasibility study] will be completed by December and that a decision will be made soon on which projects can be started first," Erani told the media crew at the Ministry of ESDM, Friday (5/12/2025).

"*That's why* we will hold a meeting for that purpose with the Downstream Task Force, the Ministry of Energy and Mineral Resources, then Danantara, and later the Cabinet Secretariat," he stressed.

He emphasized that the meeting would not necessarily decide which projects the government would prioritize for immediate implementation in the near future.

However, he confirmed that the Ministry of Energy and Mineral Resources would demand that Danantara conduct a study based on the pre-study documents previously provided by the Ministry of Energy and Mineral Resources.

"Yes, we want to know what has been done over the past few months, after we submitted the pre-FS, and how far the FS has progressed for each of the projects," said Erani.

Previously, Energy and Mineral Resources Minister Bahlil Lahadalia stated that the feasibility study for 18 downstream and energy security projects being undertaken by BPI Danantara would be completed in December 2025.

Target itu disampaikan Bahlil saat menyampaikan laporan terkini ihwal kemajuan rencana pembiayaan proyek hilirisasi BPI Danantara kepada Presiden Prabowo Subianto.

Bahlil mengatakan salah satu proyek hilirisasi yang sedang dikaji Danantara berkaitan dengan ekosistem mobil listrik atau *electric vehicle* (EV), termasuk proyek baterai mobil listrik.

“Kami melaporkan kepada Bapak Presiden, bahwa terkait dengan proyek hilirisasi, kami sama Pak Rosan sudah menyerahkan 18 proyek yang total nilai investasinya kurang lebih Rp300 triliun,” kata Bahlil dalam sambutannya di Peresmian Pabrik Petro-kimia PT Lotte Chemical Indonesia di Cilegon, Kamis (6/11/2025).

Adapun, proyek ekosistem mobil listrik dan baterai listrik itu sebelumnya absen dalam proposal yang diajukan Satgas Percepatan Hilirisasi dan Ketahanan Energi Nasional kepada BPI Danantara akhir Juli 2025.

“*Insyallah* awal Desember sudah selesai. Termasuk dalamnya adalah kita akan membangun ekosistem daripada baterai mobil kemudian mobil listrik,” ungkap Bahlil.

Sebelumnya, CEO BPI Danantara Rosan Perkasa Roeslani mengatakan lembaga-nya tengah mematangkan feasibility study sejumlah proyek yang diajukan Satgas Hilirisasi, dengan fokus pada koreksi dan penyesuaian asumsi di dalamnya.

"Itu sudah berjalan dan beberapa juga sudah duduk dengan Kementerian ESDM untuk kita fine tuning lagi, karena ada beberapa mungkin yang koreksinya kita mesti duduk bersama, asumsinya seperti apa," kata Rosan.

Senagai informasi, nilai paket proyek yang disodorkan Satgas Hilirisasi itu mencapai US$38,63 miliar atau sekitar Rp640,4 triliun (asumsi kurs Rp16.578 per dolar AS).

Bahlil conveyed this target when delivering the latest report on the progress of the BPI Danantara down-stream project financing plan to President Prabowo Subianto.

Bahlil said one of the downstream projects currently being studied by Danantara relates to the electric vehicle (EV) ecosystem, including the electric car battery project.

"We reported to the President that regarding downstream projects, Mr. Rosan and I have submitted 18 projects with a total investment value of approximately IDR 300 trillion," Bahlil said in his remarks at the inauguration of the PT Lotte Chemical Indonesia Petrochemical Factory in Cilegon, Thursday (6/11/2025).

Meanwhile, the electric car and electric battery ecosystem project was previously absent from the proposal submitted by the National Downstream Acceleration and Energy Security Task Force to BPI Danantara at the end of July 2025.

" *God willing,* it will be completed by early December. This includes building an ecosystem for car batteries and then electric cars," Bahlil said.

Previously, BPI Danantara CEO Rosan Perkasa Roeslani said his institution was finalizing the feasibility study for a number of projects proposed by the Downstream Task Force, with a focus on correcting and adjusting the assumptions within them.

"It's already underway, and we've already sat down with the Ministry of ESDM to fine-tune some of the issues. There are some areas where we might need to make corrections and discuss the assumptions," Rosan said.

For your information, the value of the project package proposed by the Down-stream Task Force reached US$38.63 billion or around Rp640.4 trillion (assuming an exchange rate of Rp16,578 per US dollar).

Dari 18 proyek yang diajukan, 8 di antaranya program hilirisasi di sektor mineral dan batu bara (minerba), masing-masing 2 proyek di sektor transisi dan ketahanan energi, dan masing-masing 3 proyek di sektor pertanian, kelautan dan perikanan.

Daftar 18 Proyek Prioritas Hilirisasi dan Ketahanan Energi:

Proyek Sektor Minerba:

1. Industri Smelter Aluminium (bauksit) Mempawah, Kalimantan Barat dengan nilai investasi Rp60 triliun.
2. Industri DME (batu bara) di Bulungan, Kutai Timur, Kota Baru, Muara Enim, Pali, Banyuasin dengan nilai investasi Rp164 triliun.
3. Industri aspal di Buton, Sulawesi Tenggara dengan nilai investasi Rp1,49 triliun.
4. Industri Mangan Sulfat di Kupang Nusa Tenggara Timur (NTT) dengan nilai investasi Rp3,05 triliun.
5. Industri Stainless Steel Slab (nikel) di Kawasan Industri Morowali, Sulawesi Tengah dengan nilai investasi Rp38,4 Triliun.
6. Industri Copper Rod, Wire & Tube (katoda tembaga) di Gresik, Jawa Timur dengan nilai investasi Rp19,2 triliun.
7. Industri Besi Baja (pasir besi) di Kabupaten Sarmi, Papua dengan nilai investasi Rp19 triliun.
8. Industri Chemical Grade Alumina (bauksit) di Kendawangan, Kalimantan Barat dengan nilai investasi Rp17,3 triliun.

Proyek Sektor Pertanian:

9. Industri Oleoresin (pala), di Kabupaten Fakfak, Papua Barat dengan nilai investasi Rp1,8 triliun.

Of the 18 projects proposed, 8 are downstream programs in the mineral and coal (minerba) sector, 2 projects each in the energy transition and security sector, and 3 projects each in the agriculture, maritime and fisheries sectors.

List of 18 Priority Downstream and Energy Security Projects:

Mineral and Coal Sector Projects:

1. Mempawah Aluminum (bauxite) Smelter Industry, West Kalimantan with an investment value of IDR 60 trillion.
2. The DME (coal) industry in Bulungan, East Kutai, Kota Baru, Muara Enim, Pali, Banyuasin with an investment value of IDR 164 trillion.
3. The asphalt industry in Buton, Southeast Sulawesi with an investment value of IDR 1.49 trillion.
4. Manganese Sulfate Industry in Kupang, East Nusa Tenggara (NTT) with an investment value of IDR 3.05 trillion.
5. Stainless Steel Slab (nickel) Industry in the Morowali Industrial Area, Central Sulawesi with an investment value of IDR 38.4 trillion.
6. Copper Rod, Wire & Tube (copper cathode) industry in Gresik, East Java with an investment value of IDR 19.2 trillion.
7. Iron and Steel Industry (iron sand) in Sarmi Regency, Papua with an investment value of IDR 19 trillion.
8. Chemical Grade Alumina (bauxite) Industry in Kendawangan, West Kalimantan with an investment value of IDR 17.3 trillion.

Agricultural Sector Projects:

9. Oleoresin (nutmeg) industry, in Fakfak Regency, West Papua with an investment value of IDR 1.8 trillion.

10. Industri Oleofood (kelapa sawit) di KEK Maloy Batuta Trans Kalimantan Timur (MBTK) Rp3 triliun.
11. Industri Nata de Coco, Medium-Chain Triglycerides (MTC), Coconut Flour, Activated Carbon (kelapa) di Kawasan Industri Tenayan, Riau dengan nilai investasi Rp2,3 triliun.

Proyek Sektor Kelautan dan Perikanan:

12. Industri Chlor Alkali Plant (garam) di Aceh, Kalimantan Timur, Jawa Timur, Sumatera Selatan, Riau, Banten, dan NTT dengan nilai transaksi Rp16 triliun.
13. Industri Fillet Tilapia (ikan tilapia) di Banten, Jawa Barat, Jawa Tengah, dan Jawa Timur dengan nilai investasi Rp1 triliun.
14. Industri Carrageenan (rumput laut) di Kupang, NTT dengan nilai investasi sebesar Rp212 miliar.

Proyek Ketahanan Energi (Kilang 1 Juta Barel):

15. Kilang Minyak (oil refinery) dengan nilai investasi sebesar Rp160 triliun.
16. Tangki Penyimpanan Minyak (oil storage tank) dengan nilai investasi sebesar Rp72 triliun.

Proyek tersebut tersebar di Lhokseumawe, Sibolga, Natuna, Cilegon, Sukabumi, Semarang, Surabaya, Sampang, Pontianak, Badung, Bima, Ende, Makassar, Donggala, Bitung, Ambon, Halmahera Utara dan Fakfak.

Proyek Transisi Energi:

17. Modul Surya Terintegrasi (bauksit dan silika) di Kawasan Industri Batang, Jawa Tengah dengan nilai investasi Rp24 triliun.
18. Industri Bioavtur (used cooking oil) di KBN Marunda, Kawasan Industri CIkarang dan Kawasan Industri Karawang dengan nilai investasi Rp16 triliun. (azr/wdh)

10. Oleofood (palm oil) industry in the Maloy Batuta Trans East Kalimantan (MBTK) Special Economic Zone (SEZ) is IDR 3 trillion.
11. Nata de Coco, Medium-Chain Triglycerides (MTC), Coconut Flour, Activated Carbon (coconut) industry in the Tenayan Industrial Area, Riau with an investment value of IDR 2.3 trillion.

Marine and Fisheries Sector Projects:

12. Chlor Alkali Plant (salt) industry in Aceh, East Kalimantan, East Java, South Sumatra, Riau, Banten, and NTT with a transaction value of IDR 16 trillion.
13. Tilapia Fillet Industry (tilapia fish) in Banten, West Java, Central Java, and East Java with an investment value of IDR 1 trillion.
14. Carrageenan (seaweed) industry in Kupang, NTT with an investment value of IDR 212 billion.

Energy Security Project (1 Million Barrel Refinery):

15. Oil refinery with an investment value of IDR 160 trillion.
16. Oil storage tank with an investment value of IDR 72 trillion.

The projects are spread across Lhokseumawe, Sibolga, Natuna, Cilegon, Sukabumi, Semarang, Surabaya, Sampang, Pontianak, Badung, Bima, Ende, Makassar, Donggala, Bitung, Ambon, North Halmahera and Fakfak

Energy Transition Project:

17. Integrated Solar Module (bauxite and silica) in Batang Industrial Area, Central Java with an investment value of IDR 24 trillion.
18. The Bioavtur (used cooking oil) industry in KBN Marunda, the Cikarang Industrial Estate, and the Karawang Industrial Estate has an investment value of Rp16 trillion. (azr/wdh)

Barometer.co.id

Dorong Kepatuhan, DJP-Ditjen Minerba Undang 1800 WP Usaha Tambang

DIREKTORAT Jenderal Pajak (DJP) berkolaborasi dengan Direktorat Jenderal Mineral dan Batubara (Ditjen Minerba) Kementerian ESDM melaksanakan kegiatan sosialisasi Rencana Kerja dan Anggaran Biaya (RKAB) serta Kepatuhan Perpajakan Badan Usaha Pertambangan Minerba di aula Cakkti Buddhi Bhakti Kantor Pusat DJP pada Rabu, 26 November 2025. Kegiatan dilaksanakan secara *hybrid* dengan peserta hadir langsung sebanyak 800 undangan dan hadir daring sebanyak 1000 peserta.

Direktur Jenderal Pajak Bimo Wijayanto menyampaikan pelaksanaan kegiatan kolaborasi ini merupakan upaya bersama dalam mengelola kekayaan negara, baik oleh Pemerintah selaku regulator maupun wajib pajak selaku pelaku kegiatan ekonomi dari sektor pertambangan mineral dan batubara. “Pesan Pak Presiden kembali ke pasal 33 UUD 1945 sebagai landasan utama membangun sistem ekonomi Indonesia yang berkeadilan, yaitu pentingnya prinsip gotong royong,” ungkap-Nya.

Berdasarkan data internal DJP, dalam lima tahun terakhir jumlah populasi wajib pajak dari sektor pertambangan minerba cenderung meningkat dari tahun ke tahun dengan rata-rata pertambahan sekitar 3%. Pada tahun 2021 terdapat sebanyak 6.321 wajib pajak hingga pada tahun 2025 tumbuh menjadi 7.128 wajib pajak. Selain itu, Penerimaan sektor pertambangan mineral logam mampu meningkat lebih dari 10 kali lipat dari sebesar Rp4 triliun (2016) menjadi Rp45 triliun (2024). Sedangkan…

To Encourage Compliance, the DGT and the DG of Minerba Invite 1,800 Mining Business Taxpayers (WP)

THE DIRECTORATE General of Taxes (DGT) in collaboration with the Directorate General of Minerals and Coal (Ditjen Minerba) of the Ministry of Energy and Mineral Resources carried out a socialization activity on the Work Plan and Budget (RKAB) and Tax Compliance of Mineral and Coal Mining Business Entities at the Cakkti Buddhi Bhakti Hall of the DGT Head Office on Wednesday, November 26, 2025. The activity was carried out in a *hybrid* manner with 800 participants attending in person and 1000 participants attending online.

Director General of Taxes Bimo Wijayanto stated that this collaborative activity represents a joint effort to manage state assets, both by the government as regulator and taxpayers as economic actors in the mineral and coal mining sector. "The President's message harkens back to Article 33 of the 1945 Constitution as the primary foundation for building a just Indonesian economic system, namely the importance of the principle of mutual cooperation," he said.

Based on internal DGT data, over the past five years, the number of taxpayers in the mineral and coal mining sector has tended to increase year-on-year, with an average increase of around 3%. In 2021, there were 6,321 taxpayers, which is expected to grow to 7,128 by 2025. Furthermore, revenue from the metal mineral mining sector is expected to increase more than tenfold, from IDR 4 trillion (2016) to IDR 45 trillion (2024). Meanwhile,…

Sedangkan penerimaan pajak sektor pertambangan batubara mengalami fluktuasi sejalan dengan pergerakan harga komoditas global.

"Kami tidak bisa berdiri sendiri apabila tidak ada sumbangsih dari bapak ibu selaku pelaku ekonomi (sektor minerba) yang menyumbang 20 sampai 25 persen dari penerimaan negara," ujar Bimo.

Lebih lanjut Bimo juga menjelaskan pihaknya terus memperkuat basis data perpajakan melalui pertukaran data dan informasi, termasuk dengan aplikasi Minerba-one milik Kementerian ESDM agar terintegrasi dengan Coretax DJP. Hal ini ditujukan agar seluruh data dapat dimanfaatkan dalam mengumpulkan penerimaan negara. DJP juga telah bersepakat dengan Ditjen Minerba untuk memasukan komitmen pelunasan pajak sebagai salah satu dokumen kelengkapan pada saat mengajukan RKAB.

Bapak Ibu silahkan mempersiapkan diri, mulai perpanjangan tahun berikutnya RKAB akan mensyaratkan kewajiban *tax clearance*." pungkas Bimo menutup paparannya. (jou)

Meanwhile, tax revenue from the coal mining sector fluctuates in line with global commodity price movements.

"We cannot stand alone without the contribution of you, ladies and gentlemen, as economic actors (in the mineral and coal sector), who contribute 20 to 25 percent of state revenue," said Bimo.

Bimo further explained that his office continues to strengthen its tax database through data and information exchange, including integrating the Ministry of Energy and Mineral Resources' Minerba-one application with the DGT's Coretax. This is intended to ensure all data can be utilized in collecting state revenue. The DGT has also agreed with the Directorate General of Mineral and Coal to include tax payment commitments as one of the required documents when submitting the RKAB.

"Ladies and gentlemen, please prepare yourselves. Starting next year's extension of the Work Plan and Budget (RKAB) will require *tax clearance*," Bimo concluded his presentation. (jou)

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Freeport Indonesia Raih GeoInnovation Award

Penulis : Media Digital

PT FREEPORT Indonesia (PTFI) meraih GeoInnovation Award 2025 untuk kategori Sustainability Impact dari Environmental Systems Research Institute (Esri) Indonesia.

"Freeport unggul karena menjadi pionir dalam menerapkan teknologi geospatial di sektor keselamatan karyawan. Pendekatan ini…

Freeport Indonesia Wins GeoInnovation Award

Author: Media Digital

PT FREEPORT Indonesia (PTFI) won the 2025 GeoInnovation Award for the Sustainability Impact category from the Environmental Systems Research Institute (Esri) Indonesia.

"Freeport excels because it is a pioneer in implementing geospatial technology in the employee safety sector. This approach…

Pendekatan ini jarang diterapkan di industri dan menjadi contoh inspiratif dalam mendukung praktik operasi yang lebih bertanggung jawab," kata Perwakilan Dewan Juri GeoInnovation Award 2025 Ronald Adrianta usai penyerahan penghargaan di Jakarta, Kamis, 4 Desember 2025.

Senior Vice President Geoengineering & Environmental PTFI Ardhin Yuniar menjelaskan inovasi teknologi geospatial merupakan solusi strategis untuk efisiensi operasional dan tata kelola pertambangan yang berkelanjutan. "Penghargaan ini menunjukkan bagaimana teknologi dapat memperkuat perlindungan tenaga kerja dan meningkatkan standar operasional di lingkungan kerja kami," kata Ardhin.

Ia mengatakan teknologi geospatial memungkinkan PTFI mengidentifikasi area berisiko kebisingan tinggi secara lebih cepat dan akurat sehingga perusahaan dapat lebih efektif dan efisien untuk melindungi pekerja.

Zona pemantauan kebisingan di PTFI kini dapat divisualisasikan secara real time melalui dashboard digital, menggantikan metode survei manual yang sebelumnya memakan waktu dan sumber daya lebih besar.

GeoInnovation Award merupakan penghargaan tahunan yang diselenggarakan oleh Esri Indonesia, perusahaan pemimpin teknologi geospatial dan penyedia resmi platform ArcGIS di Indonesia.

Hanya sembilan organisasi dari ratusan peserta di seluruh Indonesia yang terpilih sebagai pemenang berdasarkan inovasi dan dampak yang dihasilkan terhadap tujuan pembangunan berkelanjutan. Editor : Media Digital

This approach is rarely used in the industry and serves as an inspiring example in supporting more responsible operational practices," said Ronald Adrianta, a representative of the 2025 GeoInnovation Award jury after the award ceremony in Jakarta on Thursday, December 4, 2025.

PTFI Senior Vice President of Geoengineering & Environmental Ardhin Yuniar explained that geospatial technology innovation is a strategic solution for operational efficiency and sustainable mining governance. "This award demonstrates how technology can strengthen worker protection and improve operational standards in our work environment," said Ardhin.

He said geospatial technology allows PTFI to identify high-noise risk areas more quickly and accurately, allowing the company to protect workers more effectively and efficiently.

Noise monitoring zones at PTFI can now be visualized in real time via a digital dashboard, replacing the previous manual survey method which was more time-consuming and resource-intensive.

The GeoInnovation Award is an annual award held by Esri Indonesia, a leading geospatial technology company and the official provider of the ArcGIS platform in Indonesia.

Only nine organizations from hundreds of participants across Indonesia were selected as winners based on their innovation and impact on sustainable development goals. Editor: Media Digital

Kontan.co.id

Pemangkasan Produksi Batubara Tahun 2026 Dikaji, Begini Rekomendasi Sahamnya

Reporter: Vatrischa Putri Nur | Editor: Herlina Kartika Dewi

WACANA pemerintah membuka opsi pengetatan DMO batubara tahun depan dinilai dapat menekan kinerja emiten sektor batubara di tengah rencana pemangkasan produksi nasional dan tren harga global yang masih melemah.

Asal tahu saja Pemerintah membuka kemungkinan untuk menaikkan porsi kewajiban pemenuhan batu bara untuk kebutuhan dalam negeri atau *domestic market obligation* (DMO) lebih dari 25% dari total produksi pada 2026.

Kebijakan ini dinilai perlu dikaji secara komprehensif dan proporsional, termasuk mengenai harga patokan DMO, guna memastikan keadilan untuk semua perusahaan tambang.

Harry Su Managing Director Research & Digital Production Samuel Sekuritas Indonesia menyebut bahwa kenaikan porsi DMO berpotensi menekan profitabilitas emiten sektor batubara, seperti PT Alamtri Resources Indonesia Tbk (ADRO), PT Indo Tambangraya Megah Tbk (ITMG), PT. Bukit Asam Tbk (PTBA), PT United Tractors Tbk (UNTR), dan PT Adaro Andalan Indonesia Tbk (AADI).

Hal ini sebab, harga jual DMO jauh lebih rendah daripada harga ekspor. Menurutnya, dampaknya akan paling terasa bagi ADRO, ITMG, AADI yang porsi ekspornya tinggi.

Sementara PTBA relatif neutral karena portofolionya memang dominan domestik dan dekat dengan PLTU mulut tambang.

Coal Production Cuts in 2026 Under Review, Here Are the Stock Recommendations

Reporter: Vatrischa Putri Nur | Editor: Herlina Kartika Dewi

THE GOVERNMENT's plan to open up the option of tightening the coal DMO next year is considered to be able to suppress the performance of coal sector issuers amid plans to cut national production and the continuing weakening global price trend.

Just so you know, the government is opening up the possibility of increasing the domestic *market obligation* (DMO) to more than 25% of total coal production by 2026.

This policy is deemed necessary to be reviewed comprehensively and proportionally, including regarding the DMO benchmark price, to ensure fairness for all mining companies.

Harry Su, Managing Director of Research & Digital Production at Samuel Sekuritas Indonesia, stated that the increase in the DMO portion has the potential to suppress the profitability of coal sector issuers, such as PT Alamtri Resources Indonesia Tbk (ADRO), PT Indo Tambangraya Megah Tbk (ITMG) , PT Bukit Asam Tbk (PTBA), PT United Tractors Tbk (UNTR), and PT Adaro Andalan Indonesia Tbk (AAD I).

This is because the DMO selling price is much lower than the export price. According to him, the impact will be most felt by ADRO, ITMG, and AADI, which have a high export share.

Meanwhile, PTBA is relatively neutral due to its predominantly domestic portfolio and proximity to mine-mouth coal-fired power plants.

Untuk UNTR, dampaknya lebih tidak langsung-profit turunan bisa terjadi melalui segmen jasa tambang PAMA jika aktivitas produksi klien ikut menurun.

Selain itu, belakangan wacana kenaikan porsi DMO batubara mencuat seiring rencana Kementerian Energi dan Sumber Daya Mineral (ESDM) untuk memangkas produksi batubara pada tahun depan.

Hal ini tak lepas dari harga emas hitam global yang lesu imbas ketidakseimbangan kebutuhan pasar dengan suplai batu bara dari Indonesia.

Kata Harry, sentimen pemangkasan produksi dapat berdampak negatif pada emiten yang tengah melakukan ekspansi untuk menaikkan produksi seperti PTBA.

"Di lain sisi, penurunan *supply* dapat berpotensi menjadi *cushion* harga di tengah kenaikan produksi domestik China," ujar Harry kepada Kontan, Jumat (5/12/2025).

Dicatat persediaan batubara di China tetap tinggi sebesar 714 juta ton pada Oktober 2025, yang mana rata-rata 5 tahun sebelumnya sebesar 428 juta ton. Hal ini menyebabkan impor batubara 10 bulan pertama tahun 2025 turun 11% yoy.

"Dengan stok yang tinggi dan meningkatnya *output* energi terbarukan, kami memperkirakan harga batubara akan tetap tertekan dalam 6- 12 bulan ke depan," jelas Jacquelin Hamdani dan Edward Halim Analis CGS Internasional Sekuritas dalam risetnya, Senin (24/11/2025).

Dengan kondisi tersebut, Jacquelin dan Edward menurunkan perkiraan laba bersih *full year* 2026 untuk UNTR, ITMG dan PTBA sebesar 13%. Ini mencerminkan harga batubara yang lebih lemah secara yoy dan biaya yang lebih tinggi, terutama biaya bahan bakar. Adapun AADI, diestimasi laba bersihnya akan naik pada keseluruhan tahun 2026 karena ASP yang sedikit lebih baik.

For UNTR, the impact is more indirect—derived profits could be generated through the PAMA mining services segment if client production activity also declines.

In addition, recently, discourse on increasing the DMO portion of coal has emerged in line with the Ministry of Energy and Mineral Resources' (ESDM) plan to cut coal production next year.

This is inseparable from the sluggish global price of black gold, which is the result of an imbalance between market demand and coal supply from Indonesia.

Harry said that sentiment regarding production cuts could have a negative impact on issuers that are expanding to increase production, such as PTBA.

"On the other hand, a decrease *in supply* could potentially act as a price *cushion* amidst rising domestic production in China," Harry told Kontan on Friday (December 5, 2025).

China's coal inventories remained high at 714 million tons in October 2025, compared to the previous five-year average of 428 million tons. This resulted in an 11% year-on-year decline in coal imports in the first 10 months of 2025.

"With high stocks and increasing renewable energy *output* , we estimate that coal prices will remain depressed in the next 6-12 months," explained Jacquelin Hamdani and Edward Halim, analysts at CGS International Securities, in their research on Monday (24/11/2025).

Given these conditions, Jacquelin and Edward lowered their full-year 2026 net profit estimates for UNTR, ITMG, and PTBA by 13%. This reflects weaker year-on-year coal prices and higher costs, particularly fuel costs. AADI, on the other hand, is estimated to see net profit increase for the full year of 2026 due to slightly better ASPs.

Sebaliknya, Erinda Krisnawan dan Kafi Ananta Analis BRI Danareksa Sekuritas menyampaikan harga batubara Indonesia telah *rebound* sejak akhir 2025.

Kondisi ini dipimpin oleh produk CV menengah-rendah (ICI3 dan ICI4, masing-masing naik 17% dan 20% sejak titik terendah pada Juni 2025). Sementara CV menengah dan tinggi juga telah pulih 4%-16% dari level terendah.

Sementara itu, data terbaru menunjukkan bahwa total level persediaan hanya terkoreksi sedikit dan tetap jauh di atas level historis, sehingga masih berpotensi membatasi keberlanjutan pemulihan harga hingga 2026.

"Pemulihan harga ini didorong oleh *restocking* persediaan di pelabuhan China, sejalan dengan pola musiman," jelas Erinda dan Kafi dalam riset, Kamis (27/11/2025).

Terakhir, Harry pun menekankan bahwa soal kinerja emiten sektor batubara kemungkinan secara QoQ akan ada perbaikan seiring dengan kenaikan harga batubara menjelang antisipasi *winter season.*

Namun memasuki 2026, kinerja sektor batubara diperkirakan Harry akan *mixed* di mana harga batubara masih akan tertekan seiring dengan kenaikan produksi domestik dari China dan India namun ada beberapa perusahaan yang menaikkan volume produksi untuk mengantisipasi hal tersebut.

Dengan ragam potensi dan sentimen di atas, Harry merekomendasikan investor untuk mencermati sejumlah emiten sektor batubara di atas.

Dia beri rekomendasi beli saham PTBA dengan target harga Rp 2.160 per saham. Kemudian beli UNTR dengan target harga Rp 30.700 per saham. Beli saham ADRO dengan target harga Rp 2.500 per saham. Tak ketinggalan beli AADI dengan target harga Rp 12.200 per saham.

Conversely, BRI Danareksa Securities analysts Erinda Krisnawan and Kafi Ananta reported that Indonesian coal prices have *rebounded* since the end of 2025.

This trend was led by mid-low CV products (ICI3 and ICI4, up 17% and 20%, respectively, since their lows in June 2025). Meanwhile, mid- and high-CV products have also recovered 4%-16% from their lows.

Meanwhile, recent data shows that total inventory levels have only slightly corrected and remain well above historical levels, potentially limiting the sustainability of the price recovery until 2026.

"This price recovery was driven by *restocking* of supplies at Chinese ports, in line with seasonal patterns," Erinda and Kafi explained in their research on Thursday (11/27/2025).

Finally, Harry emphasized that the performance of coal sector issuers is likely to improve QoQ in line with rising coal prices in anticipation of *the winter season.*

However, entering 2026, Harry estimates that the coal sector's performance will be *mixed*, with coal prices remaining depressed due to rising domestic production from China and India. However, several companies are increasing production volumes to anticipate this.

Given the diverse potential and sentiments mentioned above, Harry recommends that investors closely monitor a number of coal sector issuers listed above.

He recommended buying PTBA shares with a target price of Rp 2,160 per share. He also recommended buying UNTR shares with a target price of Rp 30,700 per share. He also recommended buying ADRO shares with a target price of Rp 2,500 per share. He also recommended buying AADI shares with a target price of Rp 12,200 per share.

Kemudian Erinda dan Kafi merekomendasikan investor untuk beli AADI dengan target harga Rp 9.850 per saham. Beli ADRO dengan target harga Rp 2.630 per saham. Beli ITMG dengan target harga Rp 27.300 per saham. Kemudian beli PTBA dan UNTR dengan target harga masing-masing Rp 3.100 dan Rp 32.000 per saham.

Sedang Jacquelin dan Edward merekomendasikan investor untuk *reduce* (mengurangi porsi saham) PTBA dan ITMG dengan masing-masing target harga Rp 1.700 dan Rp 20.800 per saham.

Erinda and Kafi then recommended investors buy AADI with a target price of Rp 9,850 per share. Buy ADRO with a target price of Rp 2,630 per share. Buy ITMG with a target price of Rp 27,300 per share. Then, buy PTBA and UNTR with target prices of Rp 3,100 and Rp 32,000 per share, respectively.

Meanwhile, Jacquelin and Edward recommend investors to *reduce* their stakes in PTBA and ITMG with target prices of Rp 1,700 and Rp 20,800 per share, respectively.

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Digitalisasi Bantu Pantau Produksi dan Emisi Tambang Batu Bara

Eko Nordiansyah

TRANSFORMASI digital menjadi fondasi penting bagi MIND ID dalam mendorong penguatan industri batu bara nasional. Dengan penerapan aplikasi teknologi digital terkini, perusahaan dapat memantau aktivitas pertambangan secara real-time, mengoptimalkan proses kerja, dan meningkatkan hasil produksi.

Corporate Secretary MIND ID Pria Utama menjelaskan, penerapan digitalisasi secara real-time mampu meningkatkan produksi batu bara sebesar 10 hingga 20 persen dibandingkan sebelum diterapkannya digitalisasi.

Digitalisasi juga akan menjadi fondasi Bagi Grup MIND ID dalam meningkatkan produksi batu bara dari 41 juta ton menjadi 100 juta ton ke depannya. Sejalan dengan tujuan menjawab kebutuhan energi dan program hilirisasi nasional.

Digitalization Helps Monitor Coal Mining Production and Emissions

Eko Nordiansyah

DIGITAL transformation is a crucial foundation for MIND ID in strengthening the national coal industry. By implementing the latest digital technology applications, the company can monitor mining activities in real time, optimize work processes, and increase production output.

MIND ID Corporate Secretary Pria Utama explained that the implementation of real-time digitalization can increase coal production by 10 to 20 percent compared to before the implementation of digitalization.

Digitalization will also be the foundation for the MIND ID Group to increase coal production from 41 million tons to 100 million tons in the future. This aligns with the goal of meeting energy needs and the national downstreaming program.

"Melalui transformasi digital ini, kami berupaya agar sektor pertambangan mampu menjadi tulang punggung untuk kemajuan bangsa," kata Pria, dalam keterangan tertulis, Sabtu, 6 Desember 2025.

Aplikasi Cisea

PT Bukit Asam Tbk (PTBA) menjadi salah satu contoh yang telah mengembangkan integrasi digital secara menyeluruh dari tingkat operasional hingga sistem informasi perusahaan. Dalam pengoperasiannya, PTBA menggunakan aplikasi Cisea.

Dengan Cisea, PTBA saat ini mengoperasikan lebih dari seratus modul digital yang digunakan oleh lebih dari tujuh ribu pengguna internal, dengan tingkat pengumpulan data mencapai tujuh puluh persen dari seluruh aktivitas operasional.

Sistem ini telah mengintegrasikan jaringan sensor, peralatan otomatis, sistem pemantauan alat berat, hingga analitika berbasis machine learning.

Melalui pendekatan ini, proses produksi batu bara dapat dikontrol dengan lebih presisi, termasuk perencanaan tambang, penjadwalan alat produksi, hingga pemantauan energi dan emisi.

Sistem digital ini juga memungkinkan perusahaan memperkuat tata kelola lingkungan melalui pemantauan kualitas air, rehabilitasi lahan, serta pengendalian area operasional secara digital.

Dengan otomatisasi dan transparansi data, PTBA memastikan seluruh proses penambangan berjalan sesuai kaidah *good mining practice*. (Eko Nordiansyah)

"Through this digital transformation, we are striving to ensure that the mining sector becomes the backbone of the nation's progress," Pria said in a written statement on Saturday, December 6, 2025.

Cisea Application

PT Bukit Asam Tbk (PTBA) is one example that has developed comprehensive digital integration, from the operational level to the company's information systems. PTBA utilizes the Cisea application in its operations.

With Cisea, PTBA currently operates more than one hundred digital modules used by more than seven thousand internal users, with data collection rates reaching seventy percent of all operational activities.

This system has integrated sensor networks, automated equipment, heavy equipment monitoring systems, and machine learning-based analytics.

Through this approach, the coal production process can be controlled more precisely, including mine planning, production equipment scheduling, and energy and emissions monitoring.

This digital system also enables companies to strengthen environmental governance through water quality monitoring, land rehabilitation, and digital control of operational areas.

With automation and data transparency, PTBA ensures that the entire mining process adheres to *good mining practices*. (Eko Nordiansyah)

Indonesian Mining Association

MEDIA NIKEL INDONESIA

Dosen ITSB Perkenalkan Metode Hibrida ANN–AOA untuk Tingkatkan Akurasi Estimasi Kadar Nikel

Penulis: Lili Handayani

UPAYA meningkatkan akurasi estimasi kadar bijih terus dilakukan seiring tuntutan industri pertambangan yang memasuki era *Mining Industry 5.0.*

Menjawab kebutuhan tersebut, dosen Teknik Pertambangan Institut Teknologi Sains Bandung (ITSB), Veriyadi, M.Sc., Ph.D., memperkenalkan metode hibrida berbasis *artificial neural network* (ANN) dan *archimedes optimization algorithm* (AOA) sebagai pendekatan baru dalam estimasi kadar bijih, khususnya nikel.

Metode ini sudah dipresentasikan oleh Veriyadi dalam ajang *Mineral Resource Estimation Conference 2025* di London dan menjadi salah satu inovasi yang menarik perhatian karena menawarkan akurasi lebih tinggi dibandingkan metode konvensional.

Dia menjelaskan, metode hibrida ANN–AOA dikembangkan untuk mengatasi keterbatasan metode pembobotan klasik, seperti *inverse distance weighting* (IDW) dan *ordinary kriging* (OK). Kedua metode tersebut umumnya bergantung pada jarak atau korelasi spasial dan performanya menurun pada data yang tidak normal, tidak stasioner, non-linier, atau heteroskedastik kondisi yang umum ditemui pada endapan nikel laterit.

"Faktor estimasi kadar tidak hanya ditentukan oleh jarak atau korelasi spasial. Ada variabel geologi lain, seperti litologi, kadar kobalt, besi, MgO, SiO_2, hingga faktor lokasi yang juga berpengaruh.

ITSB Lecturer Introduces ANN–AOA Hybrid Method to Improve Nickel Content Estimation Accuracy

Penulis: Lili Handayani

EFFORTS to improve the accuracy of ore grade estimation continue to be carried out in line with the demands of the mining industry entering *the Mining Industry 5.0 era.*

Responding to this need, a lecturer in Mining Engineering at the Bandung Institute of Technology and Science (ITSB), Veriyadi, M.Sc., Ph.D., introduced a hybrid method based on *artificial neural networks* (ANN) and *the Archimedes optimization algorithm* (AOA) as a new approach in estimating ore grade, especially nickel.

This method was presented by Veriyadi at the *Mineral Resource Estimation Conference 2025* in London and has become an innovation that has attracted attention because it offers higher accuracy than conventional methods.

He explained that the ANN–AOA hybrid method was developed to overcome the limitations of classical weighting methods, such as *inverse distance weighting* (IDW) and *ordinary kriging* (OK). Both methods generally rely on spatial distance or correlation, and their performance decreases with non-normal, non-stationary, non-linear, or heteroscedastic data—conditions commonly found in laterite nickel deposits.

"Grade estimation factors aren't solely determined by distance or spatial correlation. Other geological variables, such as lithology, cobalt, iron, MgO, and SiO_2 content, and location factors also play a role.

Metode hibrida memungkinkan semua variabel tersebut ikut diperhitungkan dan dioptimasi," ujarnya kepada *Media Nikel Indonesia* (www.nikel.co.id), Jumat (5/12/ 2025).

Veryadi yang kini juga menjabat sebagai CEO PT Grabuma menjelaskan, metode hibrida adalah gabungan dua atau lebih metode untuk menghasilkan estimasi yang lebih optimal dan akurat. Dalam penelitiannya, ANN digunakan sebagai model kecerdasan buatan yang meniru cara kerja otak manusia dalam memproses pola data, sementara AOA sebagai algoritma metaheuristik berbasis prinsip fisika hukum Archimedes, digunakan untuk mengoptimalkan performa ANN.

"AOA mengadopsi cara perhitungan volume benda dalam air menurut Archimedes, yang kemudian dikonversi ke dalam bentuk algoritma optimasi. Kombinasi keduanya membuat performa estimasi meningkat signifikan," jelasnya.

Lebih Akurat

Dalam studi kasus pada deposit nikel, dia mencatat, metode hibrida ANN–AOA memberikan tingkat akurasi terbaik dibandingkan beberapa metode estimasi yang umum digunakan. Nilai *root mean square error* (RMSE) dan *R-squared* yang diperoleh adalah sebagai berikut:

METODE	RMSE	R^2
OK	0,56	0,56
IDW	0,50	0,67
ANN	0,27	0,89
Hibrida ANN–AOA	0,20	0,97

"Hibrida ANN–AOA terbukti lebih akurat dibandingkan OK, IDW, maupun ANN standar. Metode ini juga dapat diverifikasi secara *fair* melalui proses *training* dan *test*, sehingga hasilnya terukur dan dapat dipertanggungjawabkan," katanya menerangkan.

The hybrid method allows all of these variables to be taken into account and optimized," he told *Media Nikel Indonesia* (www.nikel.co.id) on Friday (December 5, 2025).

Veryadi, who currently also serves as CEO of PT Grabuma, explained that the hybrid method combines two or more methods to produce more optimal and accurate estimates. In his research, ANN is used as an artificial intelligence model that mimics the human brain's processing of data patterns, while AOA, a metaheuristic algorithm based on the physics principle of Archimedes' law, is used to optimize the ANN's performance.

"AOA adopts Archimedes' method for calculating the volume of objects in water, which is then converted into an optimization algorithm. The combination of the two significantly improves estimation performance," he explained.

More Accurate

In a case study of nickel deposits, he noted that the ANN–AOA hybrid method provided the best accuracy compared to several commonly used estimation methods. The resulting *root mean square error* (RMSE) and *R-squared values are as follows:*

METHOD	RMSE	R^2
OK	0.56	0.56
IDW	0.50	0.67
ANN	0.27	0.89
ANN–AOA hybrid	0.20	0.97

"The ANN–AOA hybrid has proven to be more accurate than OK, IDW, and standard ANN. This method can also be verified fairly *through* training *and* testing, so the results are measurable and accountable," he explained.

Walaupun studi kasus yang dibawanya berfokus pada nikel, metode hibrida ini dapat diterapkan untuk estimasi kadar komoditas logam lainnya, seperti emas, tembaga, timah, dan mineral ekonomis lain. Selain itu, metode ini dinilai mampu menjawab tantangan karakteristik data geologi yang kompleks dan variatif di berbagai jenis deposit.

Industri pertambangan, tuturnya, kini bergerak menuju integrasi kecerdasan buatan dan automasi dalam pengelolaan sumber daya mineral. Metode hibrida yang ia kembangkan akan menjadi bagian penting dari transformasi tersebut.

“Dengan tuntutan *Mining Industry 5.0* yang menekankan *artificial intelligence* (AI), kebutuhan akan estimasi kadar yang akurat dan efisien sudah menjadi keharusan. Penerapan AI dalam estimasi kadar bukan lagi pilihan, tetapi kebutuhan,” ujarnya seraya optimistis metoda hibrida ANN–AOA semakin populer dalam beberapa tahun mendatang walaupun belum digunakan secara komersial. *(Lili Handayani)*

Although the case study focuses on nickel, this hybrid method can be applied to grade estimation for other metal commodities, such as gold, copper, tin, and other economically valuable minerals. Furthermore, this method is considered capable of addressing the challenges of complex and varied geological data characteristics across various deposit types.

The mining industry, he said, is now moving towards integrating artificial intelligence and automation in mineral resource management. The hybrid method he developed will be a key part of this transformation.

"With the demands of *Mining Industry 5.0*, which emphasizes *artificial intelligence* (AI), the need for accurate and efficient grade estimation has become a necessity. Applying AI to grade estimation is no longer an option, but a necessity," he said, optimistic that the ANN–AOA hybrid method will become increasingly popular in the coming years, even though it is not yet commercially available. *(Lili Handayani)*

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Lonjakan Perak dan Tembaga Geser Dominasi Emas

Penulis : Lorenzo Anugrah Mahardhika

HARGA perak dan tembaga kian naik menjelang 2026, melampaui kinerja emas. Lonjakan harga logam putih berkilau itu terjadi di tengah kelangkaan pasokan dan derasnya arus dana investor

Melansir Bloomberg pada Senin (8/12/2025), harga perak hampir berlipat ganda sepanjang tahun ini, dengan sebagian besar kenaikan terjadi dalam dua bulan terakhir. Lonjakan tersebut…

Silver and Copper Surge Overtakes Gold

Author: Lorenzo Anugrah Mahardhika

SILVER and copper prices are continuing to rise ahead of 2026, outperforming gold. The surge in the price of the shiny white metal comes amidst supply shortages and a surge in investor funds.

According to Bloomberg on Monday (December 8, 2025), silver prices have nearly doubled this year, with most of the increase occurring in the past two months. The surge…

Lonjakan tersebut dipicu oleh kelangkaan pasokan bersejarah di pasar acuan London di tengah meroketnya permintaan dari India serta dana bursa berbasis perak (exchange-traded funds/ETF).

Meski tekanan pasokan mulai mereda dalam beberapa pekan terakhir seiring masuknya pasokan baru ke gudang London, keterbatasan suplai masih terlihat di pasar lain. Persediaan perak di China dilaporkan jatuh ke level terendah dalam satu dekade.

Reli perak juga diiringi volatilitas yang lebih tinggi. Analis Marex Group Inc., Ed Meir, menilai pergerakan harga kali ini jauh lebih tajam dibandingkan reli sebelumnya.

“Jika melihat grafiknya, reli kali ini membentuk pergerakan parabola yang lebih curam dibandingkan periode sebelumnya. Pembelian juga jauh lebih terkonsentrasi dan terjadi dalam waktu yang lebih singkat,” ujarnya.

Kinerja perak belakangan melampaui emas. Sejak emas batangan mencetak rekor pada 20 Oktober lalu, pergerakannya cenderung mendatar. Sebaliknya, harga perak melonjak lebih dari 11% ke level tertinggi baru, sementara tembaga naik hampir 9%.

Volatilitas tersirat pada opsi iShares Silver Trust, ETF perak terbesar di dunia, pekan lalu melesat ke level tertinggi sejak awal 2021, ketika perak sempat menjadi sasaran trader saham meme.

Dalam sepekan terakhir, dana hampir US$1 miliar mengalir ke ETF tersebut, melampaui arus masuk pada ETF emas terbesar dan semakin menopang harga spot perak.

Investor Barat yang selama ini relatif kurang mengalokasikan dana pada logam mulia kini berbondong-bondong masuk ke ETF perak. Menurut analis Global X ETFs,…

The surge was fueled by a historic supply shortage in the London benchmark market amid skyrocketing demand from India and silver exchange-traded funds (ETFs).

Although supply pressures have eased in recent weeks as new supplies arrive at London warehouses, supply constraints remain evident in other markets. Silver inventories in China reportedly fell to their lowest level in a decade.

The silver rally has also been accompanied by higher volatility. Marex Group Inc. analyst Ed Meir believes this price movement is much sharper than previous rallies.

"If you look at the chart, this rally is forming a steeper parabolic movement than the previous period. Buying is also much more concentrated and occurs over a shorter period of time," he said.

Silver's performance has recently outperformed gold. Since bullion hit a record high on October 20th, its price has been relatively flat. Conversely, silver prices have surged more than 11% to a new high, while copper has risen nearly 9%.

Implied volatility on options on the iShares Silver Trust, the world's largest silver ETF, last week surged to its highest level since early 2021, when silver was a target of meme stock traders.

In the past week, nearly US$1 billion of funds have flowed into the ETF, surpassing inflows into the largest gold ETF and further supporting spot silver prices.

Western investors, who have previously allocated relatively little to precious metals, are now flocking to silver ETFs. According to Global X ETFs analyst Trevor Yates,…

Menurut analis Global X ETFs, Trevor Yates, masih ada ruang besar untuk tambahan arus dana seiring normalisasi alokasi investasi.

Di pasar derivatif, opsi kontrak berjangka perak Comex juga diborong investor untuk melindungi portofolio dari potensi lonjakan volatilitas serta spekulasi kenaikan harga lanjutan. Data CME Group Inc. menunjukkan volume rata-rata lima hari kontrak micro futures saat ini berada di level tertinggi kedua sepanjang tahun, hanya kalah dari periode pertengahan Oktober.

Salah satu gambaran euforia pasar terlihat dari perdagangan opsi berisiko tinggi bergaya “tiket lotre”. Lebih dari 5.000 lot call spread perak Comex Februari dengan strike US$80/US$85 atau setara 25 juta troy ounce berpindah tangan pada Rabu dan Kamis, mencerminkan posisi spekulatif terhadap potensi reli besar di awal tahun depan.

Meski demikian, volatilitas tinggi masih bergantung pada pergerakan harga yang signifikan untuk menopang reli menuju wilayah harga yang belum terjamah. Menurut catatan analis Bloomberg Intelligence, Mike McGlone, per 2 Desember, harga perak diperdagangkan dengan premi 82% dibandingkan rata-rata lima tahun, mendekati deviasi akhir tahun paling ekstrem sejak 1979.

Di sisi lain, arah akhir reli perak dinilai masih sulit dipastikan. Meir menuturkan, ketika grafik harga menembus level seperti sekarang, tidak ada lagi patokan resistensi yang jelas.

“Puncaknya bisa saja di US$85, atau hanya di US$60," katanya.

Reli Tembaga

Adapun reli harga tembaga, meski lebih didorong faktor fundamental ketimbang spekulasi keuangan, tetap mendapat dukungan kuat dari lonjakan permintaan untuk kebutuhan elektrifikasi, pusat data kecerdasan buatan (AI), serta proyek energi bersih. Para analis menilai…

According to Global X ETFs analyst Trevor Yates, there remains significant room for additional capital inflows as investment allocations normalize.

In the derivatives market, Comex silver futures options are also being snapped up by investors to protect portfolios from potential spikes in volatility and speculation about further price increases. Data from CME Group Inc. shows that the five-day average volume of micro futures contracts is currently at its second-highest level this year, second only to mid-October.

One example of market euphoria is the high-risk, "lottery ticket"-style options trading. More than 5,000 lots of February Comex silver call spreads with strikes of US$80/US$85, equivalent to 25 million troy ounces, changed hands on Wednesday and Thursday, reflecting speculative positioning for a potential major rally early next year.

However, high volatility still relies on significant price movements to sustain a rally into untouched price territory. According to Bloomberg Intelligence analyst Mike McGlone, as of December 2, silver prices were trading at an 82% premium to the five-year average, approaching the most extreme year-end deviation since 1979.

On the other hand, the final direction of the silver rally is still difficult to determine. Meir stated that once the price chart breaks through the current level, there is no longer a clear resistance level.

“The peak could be at US$85, or just US$60,” he said.

Copper Rally

The copper price rally, while driven more by fundamental factors than financial speculation, remains strongly supported by surging demand for electrification, artificial intelligence (AI) data centers, and clean energy projects. Analysts believe…

Para analis menilai kondisi tersebut berpotensi memicu defisit pasokan dalam beberapa tahun mendatang.

Pekan lalu, harga tembaga di London Metal Exchange (LME) melambung ke rekor di atas US$11.600 per ton. Bersamaan dengan itu, volatilitas opsi kontrak Comex Maret di New York naik lebih dari 4 poin, dengan minat terbuka terbesar terkonsentrasi pada opsi beli di atas harga pasar saat ini.

Perdagangan tembaga global turut terguncang sejak Presiden Amerika Serikat Donald Trump pada Februari mengumumkan rencana pengenaan tarif impor tembaga guna mendorong pasokan domestik AS.

Kebijakan tersebut memicu lonjakan harga kontrak berjangka di New York hingga melampaui harga di LME, sehingga mendorong arus impor besar-besaran ke AS. Sejumlah pedagang besar seperti Mercuria Energy Group Ltd., Trafigura Group, dan Glencore Plc memanfaatkan peluang arbitrase tersebut.

Namun, aliran impor sempat melambat pada akhir Juli setelah Trump secara mengejutkan mengecualikan tembaga kualitas komoditas dari tarif. Dalam beberapa pekan terakhir, perusahaan dagang kembali mempercepat pengiriman setelah Trump menyatakan akan meninjau ulang rencana pengenaan bea masuk untuk tembaga primer tahun depan.

Trader StoneX Financial Inc., Xiaoyu Zhu, menilai risiko penurunan harga tembaga relatif terbatas karena fundamental jangka panjang masih sangat bullish. Gangguan pasokan dari sejumlah tambang utama terjadi di tengah melonjaknya permintaan dari transisi energi dan elektrifikasi global.

Sementara itu, manajer portofolio Pacific Investment Management Co. (PIMCO), Greg Sharenow, menyebut neraca pasokan global semakin ketat akibat berpindahnya material ke AS, dipicu kebijakan tarif aktual maupun potensi penerapannya.

Analysts believe this situation has the potential to trigger a supply deficit in the coming years.

Last week, copper prices on the London Metal Exchange (LME) soared to a record high above US$11,600 per tonne. Simultaneously, options volatility on the March Comex contract in New York rose more than 4 points, with the largest open interest concentrated in call options above the current market price.

The global copper trade has been shaken since US President Donald Trump announced plans to impose tariffs on copper imports in February to boost US domestic supply.

This policy triggered a surge in futures prices in New York, surpassing those on the LME, thus driving a massive influx of imports into the US. Several large traders, such as Mercuria Energy Group Ltd., Trafigura Group, and Glencore Plc, took advantage of this arbitrage opportunity.

However, import flows slowed in late July after Trump surprisingly exempted commodity-grade copper from tariffs. In recent weeks, trading companies have accelerated shipments again after Trump announced he would review plans to impose tariffs on primary copper next year.

StoneX Financial Inc. trader Xiaoyu Zhu believes the downside risk to copper prices is relatively limited because long-term fundamentals remain very bullish. Supply disruptions from several major mines occur amid surging demand from the energy transition and global electrification.

Meanwhile, Pacific Investment Management Co. (PIMCO) portfolio manager Greg Sharenow said the global supply balance is tightening due to the shift of materials to the US, triggered by actual and potential tariff policies.

Perbedaan harga yang tinggi antara pasar AS dan acuan global menciptakan insentif bagi pelaku pasar untuk mempertahankan pasokan di AS.

Sebagian dari tekanan pasokan global tersebut, baik pada logam mulia maupun tembaga, didorong oleh aktivitas perdagangan arbitrase. Meski demikian, Sharenow menilai koreksi harga jangka pendek masih mungkin terjadi tanpa mengubah prospek jangka panjang.

"Sangat sulit menilai seberapa tahan lama kondisi ini. Kita bisa melihat koreksi 10% hingga 15% pada masing-masing komoditas, namun hal itu tidak akan mengubah cerita jangka panjangnya," ujarnya. Editor : Anggara Pernando

The large price differential between the US market and global benchmarks creates an incentive for market participants to maintain supplies in the US.

Part of this global supply pressure, in both precious metals and copper, is driven by arbitrage trading activity. However, Sharenow believes a short-term price correction is still possible without altering the long-term outlook.

"It's very difficult to assess how long this situation will last. We could see a 10% to 15% correction in each commodity, but that won't change the long-term story," he said. Editor: Anggara Pernando

INVESTOR.ID

Ada Desakan dari AS Agar RI Pangkas Produksi Nikel

Penulis : Prisma Ardianto

TIGA eksekutif pertambangan dan pengolahan Amerika Serikat (AS) mendesak Presiden AS Donald Trump untuk bertindak lebih cepat dalam memperkuat proyek-proyek mineral kritis domestik dan secara khusus meminta pemerintah menekan Indonesia agar mengurangi produksi nikelnya.

Mengutip *Reuters* pada Minggu (7/12/2025), langkah ini dinilai penting untuk mengurangi dominasi China atas pasokan global bahan baku vital, seperti nikel, yang digunakan untuk elektronik, senjata, dan berbagai barang lainnya.

Para eksekutif dari Perpetua Resources, American Rare Earths, dan Westwin Elements menyampaikan tuntutan ini dalam sebuah konferensi di New York, Kamis (5/12/2025). Mereka menggarisbawahi bahwa…

The US is urging Indonesia to cut nickel production

Author: Prisma Ardianto

THREE US mining and processing executives urged US President Donald Trump to act more quickly to strengthen domestic critical mineral projects and specifically asked the government to pressure Indonesia to reduce its nickel production.

Quoting *Reuters* on Sunday (7/12/2025), this step is considered important to reduce China's dominance over the global supply of vital raw materials, such as nickel, which is used for electronics, weapons, and various other goods.

Executives from Perpetua Resources, American Rare Earths, and Westwin Elements made these demands at a conference in New York on Thursday (December 5, 2025). They emphasized that…

Mereka menggarisbawahi bahwa meskipun dukungan dari Washington terhadap sektor mineral kritis telah meningkat, upaya tersebut belum cukup untuk mengatasi persaingan sengit dengan China dan memenuhi kebutuhan industri.

Menurut mereka, Pemerintah AS perlu merilis rencana mineral yang komprehensif, mempercepat waktu persetujuan pembiayaan pinjaman oleh Bank Ekspor-Impor AS, dan menekan Indonesia.

Fokus utama para eksekutif AS adalah melonjaknya produksi nikel Indonesia. KaLeigh Long, CEO Westwin Elements, perusahaan swasta yang sedang membangun satu-satunya pabrik pengolahan nikel di AS, meminta pemerintahan Trump untuk campur tangan.

Produksi nikel Indonesia melonjak tajam dalam dua tahun terakhir, mencapai sekitar 60% dari total pasokan global. Akibatnya, harga nikel anjlok hampir 50%. Penurunan harga ini telah memaksa perusahaan global seperti BHP Group (Australia) menghentikan operasinya dan menciptakan tantangan besar bagi Westwin dalam mendapatkan pembiayaan untuk memurnikan 34.000 ton metrik nikel per tahun di Oklahoma pada tahun 2030.

“Saya benar-benar mendesak pemerintah AS untuk berpikir sederhana. Dalam hal nikel, mari tetapkan kuota produksi Indonesia. Jika itu dilakukan, saya hampir bisa menjamin bahwa harga nikel akan pulih dalam semalam,” kata Long.

Long berpendapat bahwa menetapkan batas harga minimum untuk nikel dari Washington tidak praktis, mengingat ukuran pasar logam tersebut yang besar. Pembatasan produksi Indonesia dinilai sebagai solusi yang lebih cepat dan efektif.

Selain masalah nikel, para eksekutif juga menyoroti kebutuhan akan strategi industri yang terintegrasi.

They emphasized that while Washington's support for the critical minerals sector has increased, it hasn't been enough to overcome fierce competition with China and meet the industry's needs.

They said the US government needs to release a comprehensive mineral plan, expedite the approval time for loan financing by the US Export-Import Bank, and put pressure on Indonesia.

A major focus for US executives is Indonesia's surging nickel production. KaLeigh Long, CEO of Westwin Elements, a private company building the only nickel processing plant in the US, called on the Trump administration to intervene.

Indonesia's nickel production has surged sharply in the past two years, reaching approximately 60% of total global supply. Consequently, nickel prices have plummeted by nearly 50%. This price drop has forced global companies like Australia's BHP Group to cease operations and created significant challenges for Westwin in securing financing to refine 34,000 metric tons of nickel per year in Oklahoma by 2030.

"I really urge the US government to think simply. When it comes to nickel, let's set a production quota for Indonesia. If that happens, I can almost guarantee that nickel prices will recover overnight," Long said.

Long argued that setting a minimum price cap for nickel from Washington is impractical, given the metal's large market size. Capping Indonesian production is seen as a quicker and more effective solution.

In addition to the nickel issue, executives also highlighted the need for an integrated industrial strategy.

“Kami membutuhkan visi industri. Yang kami butuhkan adalah rencana terintegrasi untuk membangun rantai pasokan mineral kritis dengan semua masukan yang beragam, seperti antimoni, nikel, tembaga, logam langka, dan bagaimana hal itu mengalir ke produsen baterai, produsen magnet, dan berbagai pengguna akhir,” ujar Melissa Sanderson, direktur di American Rare Earths.

Sanderson, mantan diplomat AS dan eksekutif di Freeport-McMoRan, menambahkan bahwa meskipun pasar nikel terlalu besar untuk intervensi harga, pasar logam langka (*rare earth metals*) yang jauh lebih kecil membutuhkan dukungan harga hingga ada penetapan harga yang lebih transparan, sebab pasar ini juga didominasi oleh China.

Ia juga menyinggung bahwa London Metal Exchange (LME) memperdagangkan nikel tetapi belum menunjukkan minat untuk mengembangkan pasar logam langka, yang membuat harga pasar menjadi tidak transparan dan didikte oleh China. Editor: Prisma Ardianto

"We need an industry vision. What we need is an integrated plan to build a critical minerals supply chain with all the various inputs, like antimony, nickel, copper, and rare earths, and how they flow to battery manufacturers, magnet manufacturers, and various end users," said Melissa Sanderson, director at American Rare Earths.

Sanderson, a former US diplomat and executive at Freeport-McMoRan, added that while the nickel market is too large for price intervention, the much smaller *rare earth* metals market needs price support until there is more transparent pricing, as this market is also dominated by China.

He also mentioned that the London Metal Exchange (LME) trades nickel but has not shown any interest in developing a rare earth metals market, which makes market prices opaque and dictated by China. Editor: Prisma Ardianto

sharecafe

Copper Prices Surge to Record High

By Sharecafe Team

COPPER prices on the London Metal Exchange (LME) have soared, closing 1.5 per cent higher at $US11,620.50 a tonne on Friday. Earlier in the day, the industrial metal reached a record high of $US11,705 a tonne, surpassing the previous all-time high from earlier in the week. This surge is partly driven by a bullish price outlook from Citi analysts, who foresee a potential shortage due to increased stockpiling in the United States.

Citi analysts, including Max Layton, anticipate copper averaging $US13,000 a tonne in the second quarter. In a note on Friday, they stated, “We have conviction in copper upside through 2026 supported by multiple bullish catalysts, including an incrementally constructive fundamental and macro backdrop.”

They forecast a 2.5 per cent rise in global end-use consumption next year, attributing growth to a lower interest-rate environment and fiscal expansion in the US, along with European rearmament and the energy transition.

Copper, essential for pipes, power cables, and electric vehicles, has increased in value by more than 30 per cent on the LME this year. The recent rally has intensified due to growing worries about a metal exodus to the US, prompted by expectations of import tariffs next year. This anticipated shift is expected to deplete inventories in other key global locations, further contributing to the price surge. Traders are closely watching inventory levels and import/export data to gauge the full impact of these market dynamics on future prices.

INTERNATIONAL MINING

Metso expands screening portfolio with high capacity Grande Series

THE LAUNCH of the Grande Series™ by Metso it says marks a major advancement for customers by delivering high-performance screening solutions specifically engineered to maximise productivity and efficiency in mining and aggregates operations and to meet the most demanding screening requirements.

Covering three new stationary screen types – GLH, GMF and GFF – the new series is designed to help customers handle even the most demanding, high-capacity 24/7 applications. The larger screen sizes within the Grande Series enables customers to take advantage of enhanced capacity, reduced downtime, and greater operational flexibility to support their business targets.

"It's all about helping our customers succeed with the right tools for their unique needs. With the newly launched Grande Series, customers gain more flexibility, easier screen replacements, and access to solutions for even the most demanding screening tasks," says Jouni Mähönen, Vice President, Screening business line, Metso.

The GLH Series horizontal screens are engineered for, among other things, heavy-duty slurry and water handling in demanding mining environments. The GMF Series multi-slope banana screens offer high-capacity screening of both fine- and near-size particles.

These new additions bring flexible engineered-to-order (ETO) configurations and very large screen designs to the portfolio – capabilities not previously available in Metso's stationary screen range.

The GFF Series, featuring flip-flow technology, enables efficient screening of challenging materials and fine separation, further strengthening our position as a comprehensive screening solutions partner.

The Grande Series also includes Trellex® screening media compatibility, "ensuring customers benefit from a complete solution that integrates seamlessly with Metso's broader offering."

Easier replacement of third-party screens and flexible configurations for replacements are key benefits of this new series, ensuring that customers can seamlessly upgrade or modify their existing setups.

“The Grande Series is a result of our continuous screening portfolio development. We are strengthening Metso’s position as a screening solutions partner – expanding our offering with larger screens, lighter duty screens, and new flip-flow technology. With new technologies, larger sizes, and advanced capabilities, we’re expanding our portfolio to support the most demanding applications and strengthen our position in the growing screening market,” says Michael Gyberg, Vice President, Capital Equipment Business, Screening, Metso.

The Grande Series will be available globally, with external launches for GLH and GMF in early December 2025; the GFF Series will be available for customers at the end of the first quarter of 2026.

The Grande Series screens complement Metso‘s screen offering that includes the high-performance energy- and water-efficient UFS Series™, EF Series™ and BSE Series™ screens that are part of the Metso Plus offering, and multi-slope, horizontal, inclined, mobile, portable, and ultrafine screens. With Trellex rubber and polyurethane screening media solutions, Metso offers screening media systems for a wide range of screening applications.

THE ECONOMIC TIMES

Gold gains as Fed rate-cut optimism dents dollar

By Reuters

GOLD prices edged higher on Monday, as rising expectations of a U.S. Federal Reserve interest rate cut this week pressured the dollar.

Spot gold was up 0.3% at $4,206.99 per ounce, as of 0118 GMT.

U.S. gold futures for December delivery lost 0.2% to $4,236.30 per ounce.

The U.S. dollar edged lower to hover near six-week lows touched on December 4, making greenback-priced gold cheaper for overseas buyers.

U.S. consumer spending increased moderately in September after three straight months of solid gains, suggesting a loss of momentum in the economy at the end of the third quarter as a lacklustre labour market and rising cost of living curbed demand.

This followed private payroll data showing the sharpest decline in more than two-and-a-half years last month.

Dovish commentary from several Fed officials has further fuelled expectations of monetary easing.
CME's FedWatch tool indicates an 88.4% probability of a 25-basis-point rate cut at the Fed's December 9-10 meeting.

Lower interest rates tend to favour non-yielding assets such as gold.

On Thursday, data showed new U.S. unemployment benefit claims dropped to 191,000 for the week ended November 29, the lowest in more than three years and well below economists' estimate of 220,000.

Elsewhere, silver was steady at $58.25 per ounce, platinum gained 0.3% to $1,646.56, while palladium slid 0.5% to $1,455.55.

Business Line

Coking coal imports climb in October on winter restocking, overall coal shipments fall

Coking coal is a critical raw material used in steel production.

By PTI

COAL imports in October saw a mixed trend with general coal shipments declining while coking coal imports rose.

The fall in overall coal imports was on account of availability of surplus coal in the domestic market.

Coking coal shipments increased 12 per cent to 5.04 million tonnes (MT) during the month over 4.50 MT a year earlier, driven primarily by winter restocking activities by steel mills.

Coking coal is a critical raw material used in steel production.

Overall coal imports in October dropped 3.9 per cent to 20.97 MT over 21.84 MT in the year-ago period, according to B2B e-commerce platform mjunction services ltd.

According to industry experts, steel manufacturers typically boost coking coal purchases ahead of the colder months to secure raw material supplies for sustained production during winter, when transportation and logistics face disruption risks. This seasonal demand prompted the rise in coking coal imports despite the broader slowdown in coal shipments.

Looking ahead to the fourth quarter, import levels are expected to remain subdued.

"During the coming months, imports are expected to remain subdued due to higher domestic production in the fourth quarter (January-March)," mjunction MD & CEO Vinaya Varma said.

Coal and Mines Minister G Kishan had informed Parliament that efforts are being made on a continuous basis to ensure more domestic supplies of coal. Thus, the entire substitutable imported coal is expected to be met by the country and no import other than the very essential should happen.

A new sub-sector 'Steel using Coking coal through WDO (washery developer operator) route' was created in 2024 with an aim to increase domestic coking coal consumption and also increase availability of washed coking coal in the country, thereby reducing coking coal imports.

Coking Coal Mission has been launched to enhance coking coal supply to the steel sector to reduce imports of coking coal. Initiatives have been taken to enhance coking coal production.

Adani, Hindalco seek Peru copper assets as demand surges

By Reuters

INDIAN conglomerate Adani and miner Hindalco Industries are exploring investments in Peru's copper sector, either through joint ventures or by taking stakes in existing mines, a senior Peruvian diplomat told Reuters.

Peru, the world's third-largest producer of copper used in sectors such as power lines, construction and manufacturing, is courting new investment as it negotiates a broader free trade agreement with India.

"Birla (Hindalco) and Adani are trying to invest in Peru. We are willing to facilitate," Javier Paulinich, Peru's ambassador to India, told Reuters in New Delhi.

Peru produced about 2.7 million metric tons of copper in 2024 and attracted $4.96 billion in foreign investment in the sector.

Anticipating a surge in demand and potential supply shortfalls, India, the world's fastest-growing major economy, has urged its mining companies to invest overseas to secure copper supply chains and manage possible disruptions, according to a government policy document published in July.

India, the world's second-biggest importer of refined copper, may have to source 91%-97% of its copper concentrate requirements from overseas by 2047, according to official estimates.

Adani sent a delegation to Peru earlier this year, Paulinich said, adding that Hindalco has initiated similar efforts.

"They are in the first stage, trying to find out opportunities," he said, referring to both Adani and Hindalco.

A top company executive told Reuters last year that Indian billionaire Gautam Adani's group would source copper concentrates from Peru and other suppliers such as Chile and Australia for its $1.2 billion copper smelter, the world's biggest single-location plant of its type.

Adani and Hindalco did not respond to Reuters emails seeking comment.

India's copper imports rose 4% to 1.2 million metric tons in the fiscal year to March 2025. Demand is expected to climb to 3-3.3 million tons by 2030 and 8.9-9.8 million tons by 2047, the government has said.

Free trade pact

India has also sought a detailed chapter on copper in its free trade negotiations with Peru to secure a fixed quantity of copper concentrate, Paulinich said, adding that discussions were still underway.

The free trade talks could conclude by May and the next round of meetings is scheduled for January, Paulinich said.

"It is in final stages," he said. (By Neha Arora and Mayank Bhardwaj; Editing by Stephen Coates)

MINING.COM

Silver, copper eclipse gold as top metals bets on supply fears

Bloomberg News

SILVER and copper have replaced gold as the hot metal trade heading into 2026, with institutional and retail traders positioning for record rallies.

Silver has nearly doubled this year, with most gains occurring in the past two months due to a historic supply squeeze in the benchmark London market amid surging demand from India and silver-backed exchange-traded funds. While that crunch has eased in recent weeks as more metal is shipped to London vaults, other markets have seen supply constraints: Chinese inventories are at decade lows.

The silver rally has seen higher volatility, said Ed Meir, an analyst with Marex Group Inc. "If you look at the chart, there's been a steeper parabolic move up than seen in previous rallies. The buying is much more concentrated, and in a much shorter time frame."

Silver has outpaced gold of late. Since bullion hit a record on Oct. 20, it's moved mostly sideways, while silver has gained more than 11% to a fresh record and copper has climbed almost 9%.

Implied options volatility in the iShares Silver Trust, the biggest ETF tracking the metal, rose last week to the highest since early 2021, when for a brief period silver attracted meme-stock traders. Almost $1 billion flowed into the ETF over the past week, exceeding the influx into the largest gold fund and adding further support to spot prices.

Western investors — who have been significantly under-allocated to precious metals — have flocked to silver ETFs in recent months, and there's significant room for further inflows as allocation normalizes, said Trevor Yates, a senior investment analyst at Global X ETFs.

Options on Comex silver futures have also faced a buying spree amid demand for protection against wider swings and especially further rallies. Retail traders are pouring into the market — five-day average volume on micro futures contracts is at a level only exceeded in mid-October, CME Group Inc. data show.

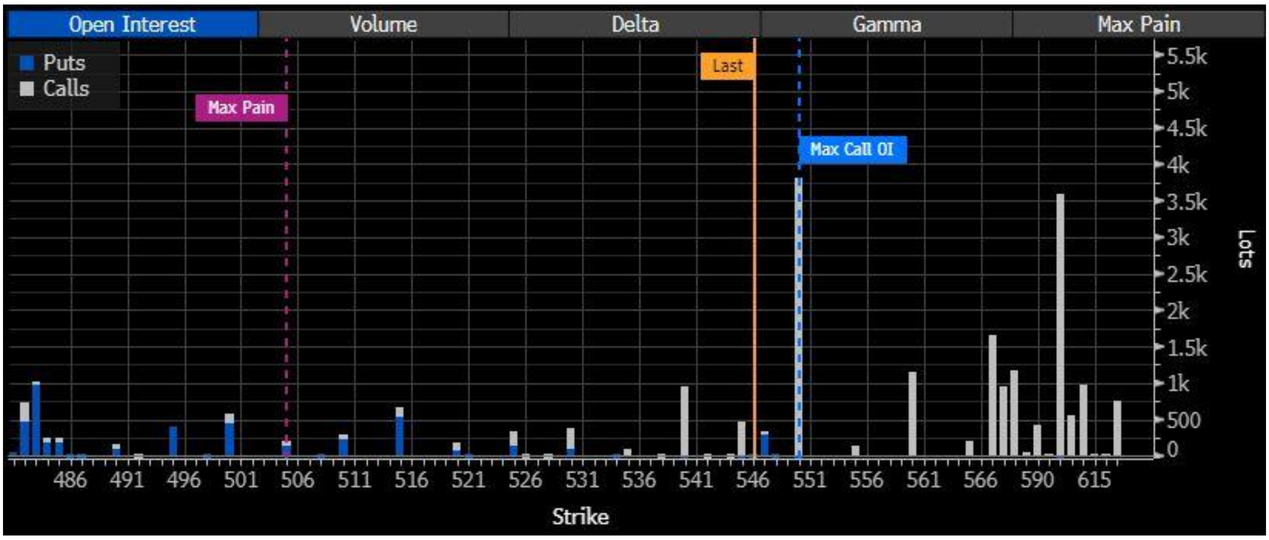
One example of the fervor is lottery-ticket style options: more than 5,000 lots of Comex silver February $80/$85 call spreads — equivalent to 25 million troy ounces — changed hands on Wednesday and Thursday, building up a position to profit from a feverish rally to start the new year.

To be sure, higher volatility will need to be fed by further large swings, especially to support rallies into uncharted territory. At an 82% premium to its five-year average on Dec. 2, silver is approaching its most extreme year-end deviation from this mean since 1979, Bloomberg Intelligence senior commodity strategist Mike McGlone wrote in a note to clients.

Where the silver rally ends is hard to pin down, according to Marex's Meir.

"When a chart breaks out like this, there are no resistance signposts," he said. The top "could be $85, could be $60."

While copper has less of a financial component, the growing demand for electrification to feed AI data centers as well as clean-energy projects has strategists predicting supply shortfalls in years to come.



In the past week, as copper rose to an all-time high of more than $11,600 a ton on the London Metal Exchange, at-the-money volatility on March Comex contracts in New York was up more than 4 points, with the biggest open interest clustered in call options above the current market level.

Copper pricing and trade flows have been upended since US President Donald Trump in February announced plans to place tariffs on the metal in a bid to boost US supply. The decision caused futures in New York to spike above those on the LME, spurring a record surge in US imports as traders including Mercuria Energy Group Ltd., Trafigura Group and Glencore Plc capitalized on the arbitrage.

Downside for copper prices will be limited because of the metal's structurally bullish fundamentals, said Xiaoyu Zhu, a trader at StoneX Financial Inc. Supply constraints from disruptions at major mines come just as demand from electrification and the energy transition is on the rise, he said.

While the flow slowed in late July after Trump unexpectedly spared commodity-grade forms of the metal from tariffs, in recent weeks trading houses have again been racing to ship more metal after Trump pledged to revisit plans to impose duties on primary copper next year.

Global balances have tightened substantially as material has shifted into the US largely due to actual or potential tariffs, and the incentives — reflected in much higher US prices compared with global benchmark prices — favor keeping the material in the US, according to Greg Sharenow, a portfolio manager at Pacific Investment Management Co.

Part of what has fueled the global tightness in some of the metal markets, whether it be precious or in copper, has been a function of the arbitrage trade.

"It's hard to say how durable that is, so we could have a 10% or 15% retrace in either commodity and not impact the long-term stories for them," Sharenow said.

(By David Marino and Yvonne Yue Li)

CREAMER MEDIA'S MINING WEEKLY

BHP, Rio begin testing first battery-electric haul trucks in the Pilbara

By: Creamer Media Reporter

DIVERSIFIED mining companies BHP and Rio Tinto have taken delivery of Australia's first Cat 793 XE Early Learner battery-electric haul trucks at BHP's Jimblebar mine, marking the start of on-site trials of Caterpillar's zero-exhaust heavy haulage technology in the Pilbara.

The two trucks, supplied under an industry-first collaboration between BHP, Rio Tinto and Caterpillar, will undergo commissioning before formal trials begin.

The testing will examine whether battery-electric haulage can replace diesel in large-scale iron-ore operations and what infrastructure and operational changes would be required to support a shift to lower-emissions mining fleets.

“Powering up our first battery-electric haul trucks in the Pilbara is an important step forward on the mining industry’s road to decarbonisation," said BHP Western Australia Iron Ore asset president Tim Day.

“Replacing diesel is not just about changing energy sources, it is about reimagining how we operate and creating the technologies, infrastructure and supply chains to transform mining operations. These trials will help us understand how all the pieces of the puzzle fit together: the battery technologies, generation and charging infrastructure, power management, as well as the supply chains to potentially deliver this at scale.”

He added that the shift would require sustained research and collaboration. “This is going to take time to get right, which is why trials like this one with Rio Tinto and Caterpillar are so critical…. We are excited about what we will learn about how best to deliver the breakthroughs required to accelerate this transition.”

Rio Tinto Iron Ore Pilbara Mines MD Andrew Wilson said decarbonising the company’s truck fleet across 18 mines remained a major challenge. “By exploring solutions like this to reduce emissions, we hope that, over time, we will be able to move away from diesel.

"No single company can achieve zero emissions haulage on its own. It takes the whole industry working together. That’s why we are working with BHP and Caterpillar to develop new solutions that will reduce emissions in mining and help us reach our net zero commitments.”

Following the joint trial period, BHP and Rio Tinto will separately decide on the next phase, including potential scaled trials and fleet integration. The collaboration forms part of both miners’ efforts to meet their operational net-zero emissions targets by 2050. Edited by Creamer Media Reporter