Coal
Mid-Year Update 2025

International Energy Agency

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Abstract

Coal's role in the global energy system today remains significant. Over the past decade, the world's demand for coal has stayed relatively stable, apart from a temporary drop during the Covid-19 pandemic and the rapid rebound that followed. Today, global coal consumption, power generation, production and trade are all at record levels.

In many countries, coal continues to be the leading source of electricity generation, helping to meet growing energy needs. These trends carry major implications for energy security, affordability and sustainability, especially as coal remains the single largest contributor to energy-related carbon dioxide emissions.

While the large majority of the world's coal use is concentrated in Asia, particularly China, consumption in Europe and North America remains considerable. Coal's influence therefore remains global in both energy and climate discussions.

The International Energy Agency's 2025 *Coal Mid-Year Update* reviews the latest trends in coal demand, production, trade and prices. It includes preliminary data for the first half of 2025 and provides updated forecasts for 2025 and 2026, grounded in recent market developments and economic conditions.

Overview

Global coal demand grew by 1.5% in 2024, reaching an all-time high

Global coal demand rose by 1.5% in 2024 to reach 8.79 billion tonnes (Bt), a new record. The growth was the slowest annual rate since the Covid-19 crisis in 2020 caused coal demand to decline. The post-Covid economic recovery and high natural gas prices have driven a sharp rise in global coal demand in recent years, but the growth has slowed year-on-year since 2021. Coal demand grew by 7.7% in 2021, 4.4% in 2022 and 2.3% in 2023. Despite slowing demand growth on an annual basis, the cumulative increase since 2020 amounts to more than 16%.

Coal use for power generation, the main driver of global coal demand, reached its highest recorded level at 10 766 terawatt hours (TWh) in 2024. Demand for metallurgical coal for iron and steel production, the largest source of non-power-related coal consumption, has been more stable. In 2024, metallurgical coal use decreased by 0.8%.

China[1] plays a unique role in global coal markets. It accounts for 56% of global coal consumption – almost 30% more than the rest of the world combined. One of every three tonnes of coal consumed globally is used in Chinese power plants, making China and its power sector the largest single driver of global coal demand.

In 2025, global coal demand is set to remain around 2024 levels

In the first half of 2025, global coal demand is estimated to have decreased slightly, by less than 1%, amid fluctuating trends across different regions. In China, weaker electricity demand growth and a surge in power output from renewables caused a decline in coal power generation. The small decline in China's overall coal demand came despite growth in some sectors like chemicals. In India, expansion of wind and solar and an early monsoon resulting in stronger electricity generation from hydropower, and weaker electricity demand growth in the first half of 2025, pushed coal power generation – and overall coal demand – into decline from the high consumption levels seen in the same period a year earlier. By contrast, coal demand in the United States is estimated to have increased by 10% in the first half of 2025, driven by strong electricity demand and higher natural gas prices, which prompted some electricity generation to shift from gas to coal. In the

[1] In this report, "China" refers to the People's Republic of China and Hong Kong (China).

European Union, coal demand grew in the first half of 2025 driven by the electricity sector, as a result of low wind and hydro output and higher gas prices.

Despite such trends in the first half of the year, our full-year forecast for global coal demand in 2025 is little changed from the one published in our annual *Coal 2024* report in December 2024. The structural drivers underlying coal demand remain the same, both in the electricity and industrial sectors. On a global level, the main regional changes compared with our December forecast cancel each other out. In China and India, demand will be weaker than foreseen, but this is offset by higher-than-expected coal demand in the European Union and United States. As a result, global coal demand is still forecast to rise slightly in 2025.

Global coal demand is expected to stay around a similar level in 2026

After the slight increase in global coal demand in 2025, our forecast shows an almost equal decrease in 2026, leaving it close its 2024 level. Developments in China will largely shape global coal trends. In our current forecast, China's coal demand declines slightly in 2025 and recovers in 2026, getting close to 5 Bt. Coal consumption in India is expected to grow by 2.5% in 2026, with the ongoing expansion of renewables continuing to limit its growth in the electricity sector.

In Europe, the decline in coal demand is set to accelerate in 2026 after the small expected decrease in 2025. In the United States, demand is expected to return to 2024 levels, with the new administration's measures to support coal use and natural gas market trends likely to affect the trends.

Global coal production grew by 1.4% in 2024 to reach 9.1 Bt

Domestic coal is the largest source of energy supply in both China and India, and therefore, coal production is a key domestic energy security issue. Following shortages in 2021, both countries increased production for several years, hitting a record high in 2024. Indonesia, the world's top exporter, reached 836 million tonnes (Mt) due to strong international and domestic demand. Despite declines in other regions, global coal production reached an all-time high at 9.15 Bt in 2024.

Despite sluggish coal demand, coal production could reach record levels in 2025

China and India increased production in response to 2021 shortages and high energy prices, leading to an oversupply in coal markets. In China and India, efforts to expand production persist, potentially reducing import volumes due to moderate demand. In Indonesia, where production has set new records in recent years, coal

output is projected to fall below 800 Mt in 2025, driven by low prices in international markets. By contrast, production is set to grow in the United States. Overall, despite sluggish demand and high inventories, a new high for coal production, of more than 9.2 Bt, is expected in 2025.

Weaker demand and high stocks are expected to slow coal production and prompt a decline in 2026

Given the current landscape of abundant supply, low prices, and projections indicating stable coal demand through 2026, coal production will decrease across all major producing nations, with the sole exception of India. In India, both state-owned enterprises and private operators of captive and commercial mining blocks are expected to continue increasing coal output. In China, with very high stocks throughout the supply chain and no expected rebound of demand, we expect a decline in 2026, the first since 2022. China, where more than half of the world's coal is produced, is of paramount importance in shaping global coal trends.

We expect Indonesia, the third-largest producer, to reduce production as low prices and weak demand from international markets continue. In the United States, production is expected to decline slightly in 2026, as both domestic and international markets are weaker than in 2025.

Coal trade broke records in 2024

During the 21st century, international coal trade volume has increased nearly every year averaging an annual growth rate of 4%, which is higher than the rates for demand or production. At first glance, the increase of coal trade volumes is counterintuitive, as coal demand in many countries running mostly or completely on importing coal such as the European Union, Japan, Korea, Chinese Taipei and the UK, has been declining, and the bulk of growth of coal demand came from domestic coal consuming countries such as China, India and Indonesia. However, in 2024, Chinese imports increased significantly, resulting in coal trade volumes exceeding 1.5 Bt for the first time.

On the supply side, Australia has maintained its position as the top supplier of high-value coking coal, but Indonesia has proved to be the most flexible exporter, becoming the top exporter by far and surpassing 550 Mt in 2024.

Trade volumes are set to shrink in 2025

As most major importers are reducing imports, a drop in China's imports drives the global trend to decline. Since 2022, China's coal oversupply has boosted stocks. Following two years of higher-than-expected imports, Chinese imports and

global trade volumes are likely to decrease in 2025. In fact, among the top six importers, only Viet Nam is expected to increase imports in 2025.

On the supply side, most exporters will see their volumes shrink. Indonesia, the largest supplier to China, is expected to have the largest reduction. Colombia will also see a big contraction, as Glencore has announced significant production cuts. Australian exports of metallurgical coal are set to decline owing to accidents in some of its mines and the current low-price environment.

Further reductions in trade volumes are expected in 2026

China has been the main engine of growth for international coal trade up to 2025. As things stand today, with demand stagnating, abundant stocks and strong production, we do not expect a rebound in Chinese imports in 2026. With coal imports by the European Union, Japan, Korea and Chinese Taipei expected to continue declining, and India focusing on increased production amid moderate demand growth, we anticipate a further drop in coal trade in 2026—for an unprecedented second consecutive year in this century, according to IEA statistics.

On the supply side, most exporters will struggle amid low prices and weak demand, although Australia can perform better if metallurgical coal mines return to operation. Russian Federation's (hereafter: Russia) exports continue to be uncertain because, while the government has announced support for coal mines, low prices and sanctions place a heavy burden on the industry.

Recent oversupply in China has suppressed coal prices

Coal prices soared after coronavirus (Covid-19) lows, peaking in 2022 due to Russia's full-scale invasion of Ukraine and the resulting energy supply disruptions. Meanwhile, China's coal supply has outpaced demand, boosting inventories and putting downward pressure on prices domestically and internationally. As a result, thermal coal prices in the first half of 2025 dropped to their lowest since 2021.

International thermal coal prices stabilised in 2025

While thermal coal prices in China continue to decline, international prices in July remain similar to those in February. Low prices and weak demand are hurting producers. In Colombia, Glencore has announced reduced production up to 10 Mt in 2025. In Russia, where estimates suggest more than half of coal companies are making a loss, the government has announced support for the coal industry. In Indonesia, the largest coal exporter and one that relies heavily on China, producers will try to use the growing domestic market to redirect part of the volumes lost in the international markets.

Demand

Global coal demand grew by 1.5% in 2024 to reach an all-time high

In 2024[2], global coal demand increased by 1.5% compared with 2023, reaching a new all-time high of 8.79 Bt. This represents a continuation of the upward trend in coal consumption, albeit at a slower pace than growth rates of 4.4% in 2022 and 2.3% in 2023.

The increase in 2024 was primarily driven by emerging economies in Asia, particularly China and India. China recorded the largest absolute growth, with demand rising by 82 Mt (1.7%) while India's consumption increased by 45 Mt (4%). Additional growth was observed in Indonesia and Viet Nam. In contrast, coal demand declined significantly in advanced economies, notably in the European Union (down 40 Mt, or 11%) and the United States (down 14 Mt, or 4%), largely due to reduced coal-fired power generation.

Asia-Pacific's share of global coal consumption continued to grow, with China, India, and the Association of Southeast Asian Nations (ASEAN) countries estimated to have accounted for approximately 77% of total demand in 2024, more than double their share at the start of this century. This shift highlights the region's increasing influence on global coal market dynamics.

Coal-fired power generation, the main driver of global coal demand, also reached a record high in 2024, estimated at 10 766 TWh. In contrast, metallurgical coal consumption, primarily used in iron and steel production, remained relatively stable, with a slight decline estimated for the year.

China remains the dominant player in global coal markets, consuming roughly 30% more coal than the rest of the world combined. Its power sector alone accounts for one-third of global coal consumption, underscoring China's central role in shaping the trajectory of global coal demand.

In 2025, global coal demand is set to remain near similar levels to 2024

In the first half of 2025, we estimate that global coal demand saw a slight decline of less than 1%, driven by diverging regional trends. With a modest rebound

[2] 2024 numbers are still preliminary.

anticipated in the second half of the year, we project a 0.2% increase for the full year, effectively keeping demand broadly steady compared to the previous year.

In China, coal-fired power generation fell by around 3% through June 2025, driven by subdued electricity demand and a significant increase in output from renewable sources. Industrial coal use also declined due to weak manufacturing activity, except for the chemical sector, which remained relatively resilient. For the second half of the year, we expect a modest recovery, and therefore anticipate overall coal demand in China to fall by 0.5% in 2025.

Similarly, India experienced a 2.1% year-on-year drop in coal demand for power generation in the first half of the year. This was primarily due to an early onset of the monsoon season and a high baseline of consumption in 2024, which was marked by an intense heatwave. On the other hand, the Indian steel sector showed signs of strength, as overall industrial coal demand was estimated to have risen by 6% in the first six months of the year. Total annual demand is projected to increase to 1 314 Mt, up 1.3%, due to an expected rebound in coal-fired power generation in the second half of the year.

Japan is anticipated to experience a moderate decline in coal demand. Economic uncertainties are weighing on both power generation and steel production, leading to a projected total coal demand of 153 Mt in 2025. In Korea, coal consumption recorded a significant year-on-year decline of 17% during the first half of the year. This downward trend is expected to soften, with total coal demand forecast to reach 103 Mt in 2025. In Chinese Taipei, the ongoing nuclear phase-out has not resulted in increased reliance on coal. Instead, gas-fired power generation has effectively filled the gap. As a result, coal demand from the power sector is projected to decline by 8% year-on-year, reaching 43 Mt in 2025. Non-power sector demand is also expected to fall by 1.8%, bringing total coal demand to 53 Mt.

In Indonesia, coal demand is set to expand by 7% to 268 Mt this year. The growth is mainly driven by the power sector, although we also expect growth in the demand for coking coal and thermal non-power uses such as the smelting industry.

Coal demand rose in the first half of the year in the United States and European Union, reversing the declining trend seen in recent years. US coal demand rose an estimated 12% in the first half of the year, with full-year demand expected to climb by 7% to 400 Mt. Strong electricity demand growth and higher natural gas prices are the main reasons for this trend. In the European Union, in the first quarter of 2025, we estimate coal demand growth of around 5%. With industrial consumption in decline, the main driver was the electricity sector, with low hydro and wind power output pushing up coal use in a context of rising electricity

demand. In Germany, the largest coal consumer in the European Union, we estimate that coal power generation increased by 11% in the first half of 2025. However, these developments are not expected to alter the underlying structural decline in coal use in the region, and as a result, we expect a decline of around 1.6% in 2025, which is a significant slowdown compared with the drops of almost 11% in 2024 and almost 25% in 2023.

A significant event in the EU electricity sector was the blackout that occurred in the Iberian Peninsula on 28 April 2025. However, this event has not impacted our coal forecast due to the limited coal capacity in the region.

Global metallurgical coal demand is expected to decline by 1.6% in 2025, due to ongoing economic uncertainty and slower GDP growth forecasts. Alongside the iron and steel industry, the key drivers of metallurgical coal demand are infrastructure and construction, so demand for metallurgical coal reflects broader economic trends.

Despite the regional and sectoral variations, the full-year forecast for global coal demand in 2025 remains broadly unchanged from what was published in *Coal 2024* in December 2024. Lower-than-expected consumption in China and India is offset by stronger-than-anticipated demand in other regions, resulting in a flat projection overall for 2025.

The plateau in coal consumption is expected to continue in 2026

For 2026, global coal demand is expected to decline only slightly, broadly remaining on a plateau at around 8.78 Bt. China remains the biggest force shaping global coal demand. The country's electricity sector is the primary factor driving coal use, influenced by rising electricity needs and the pace of renewable energy deployment. China's coal power generation is forecast recover slightly in 2026 after a decline in 2025. Growth in the coal conversion sector is expected to continue in 2026, while coal use in cement and steel is set to fall. Overall, an expected 0.9% increase in 2026 could push China's total coal demand close to 5 Bt.

India is once again expected to record the second-largest increase in coal consumption. Rising electricity demand will be partially met by coal, pushing the country's coal consumption up by 2.5% to 1.35 Bt.

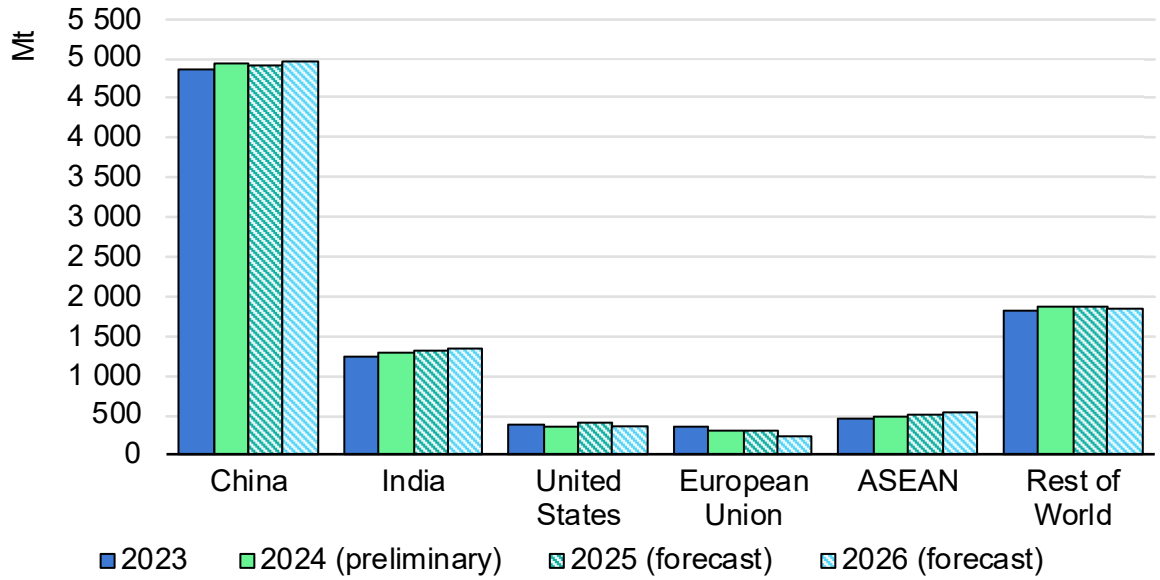
Similarly, coal consumption in the ASEAN region is expected to increase by 5% in 2026, reaching 547 Mt. This growth is primarily driven by rising demand in key countries such as Indonesia and Viet Nam. In Indonesia, coal demand is projected to rise by 16 Mt, supported by higher power generation needs and continued expansion of the smelting industry. In Viet Nam, demand is expected to increase

by 5 Mt, largely due to additional coal-fired power generation. In contrast, the mature economies in Asia, Japan and Korea are expected to reduce coal demand by 8% and 4% respectively.

Asia's share of global coal use will continue to rise as the biggest decline is likely to happen in the European Union, for which we anticipate a sharp reduction of 61 Mt. The reason for this expected slump is the combination of increased power generation by renewable sources and the continuation of coal phase outs.

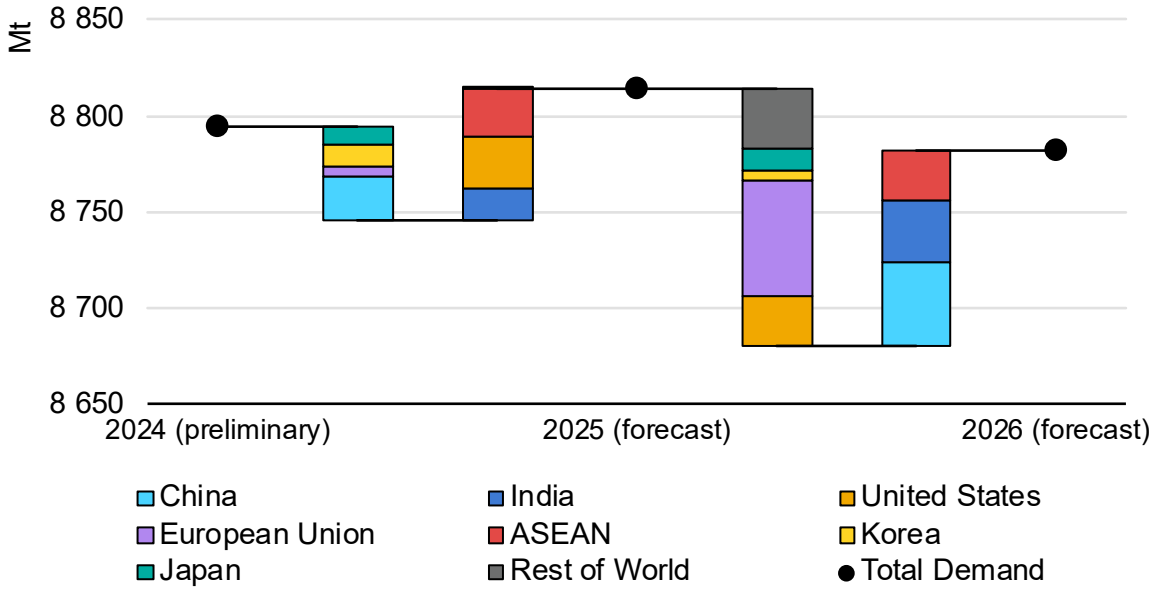
Recent developments in the United States have influenced the coal demand outlook. The new United States administration has signalled support for the coal industry, while rising electricity demand and elevated natural gas prices have contributed to increased coal-fired power generation. On 8 April, the President of the United States issued the Executive Order to Reinvigorate America's Beautiful Clean Coal Industry, which contains measures to support the United States coal sector. For example, some coal plants have received temporary waivers from environmental regulations, enabling higher coal use than previously expected. The full impact of other measures will depend on implementation, but as a result, the 2026 coal demand forecast for the United States has been revised slightly upward, softening the previously projected decline.

Global coal consumption, 2023-2026



Note: ASEAN = Association of Southeast Asian Nations

Change in global coal consumption, 2024-2026



Note: ASEAN = Association of Southeast Asian Nations

Supply

Regardless of mixed regional trends in 2024, coal supply reached an unprecedented level

Global coal production reached a record 9.15 Bt in 2024, driven primarily by strong output in China, India and Indonesia. Domestic coal is the largest source of energy supply in both China and India making coal production central to their energy security strategies. After shortages in 2021, both countries boosted production, a push that lasted a few years to reach an all-time high in 2024. China remained the largest producer, maintaining output at 4 666 Mt. Although Shanxi, traditionally the largest coal producing province, reduced production by 7% to 1 273 Mt due to safety-related constraints, national volumes were sustained by strong growth in Inner Mongolia (up 90 Mt) and Xinjiang (up 78 Mt).

India increased production by 7% to reach 1 082 Mt, around three-quarters of which is produced by Coal India Limited (CIL), which remains the main driver of national output. CIL output grew 4%, or 29 Mt. However, the largest gains came from captive and commercial mines, which expanded 31%, producing an additional 44 Mt. Singareni Collieries Company Limited (SCCL), the second largest producer in India, experienced a decline of 2.5 Mt.

Indonesia, the world's third-largest producer, increased output by 8% to 836 Mt, supported by high domestic demand and increasing export volumes, particularly to China. In Australia, production increased around 3% to 475 Mt, despite heavy rainfalls in the beginning of the year. The United States saw a 11% drop, mainly due to a halt in the stock building in 2024. Mongolia's production jumped by 21% as Chinese import demand strengthened. South African production increased by 1%, as power outages impacted growth of domestic coal demand.

Despite sluggish coal demand, 2025 is set to be another record year for coal production

In 2025, we expect global coal production to rise slightly to 9.2 Bt, setting a new record. This increase is once again led by China and India, with China's output growing by 6% year-on-year during the first six months of the year. However, the same period in 2024 marked a low base due to the production cuts in Shanxi. The province is expected to regain its position as China's top coal-producing region in 2025. As a result, output for the full year is expected to rise by 3%, reaching 4.8 Bt. That said, the overall growth masks signs of softening demand, which have led to

elevated stock levels in several regions and persistently low international coal prices. India's production in 2025 will grow by another 3% to 1.11 Bt, with the biggest increase coming from captive and commercial mines.

Indonesia experienced an estimated 8% decrease in production during the first half of the year, primarily due to low international market prices, particularly in China. Adverse weather conditions also disrupted mining operations. For the entire year, production is expected to decline by 10%, reaching 755 Mt. In the United States, coal output rose an estimated 8% in the first half of 2025, though growth is expected to moderate in the second half. Full-year production is forecast to reach 477 Mt. Australia's production, which was impacted by mine accidents and adverse weather conditions, will fall by 5% to 434 Mt. Russia's coal production is expected to decrease slightly in 2025. However, the outlook remains highly uncertain due to ongoing sanctions. In 2024, more than half of Russian coal producers reported losses, prompting the government to introduce rail transport subsidies in May 2025 to support the sector.

European producers will see continued declines. The Republic of Türkiye's (hereafter "Türkiye") production is decreasing by 10%, and Poland's by 4%. Although Germany's lignite output is slightly up in the first half of 2025, full-year output is expected to decline by 3% as more renewable generation comes online in the second half of the year. Mongolia's production will drop by 5% to 99 Mt. South African production is expected to grow by 3%, while Colombia's output will fall sharply by 20%.

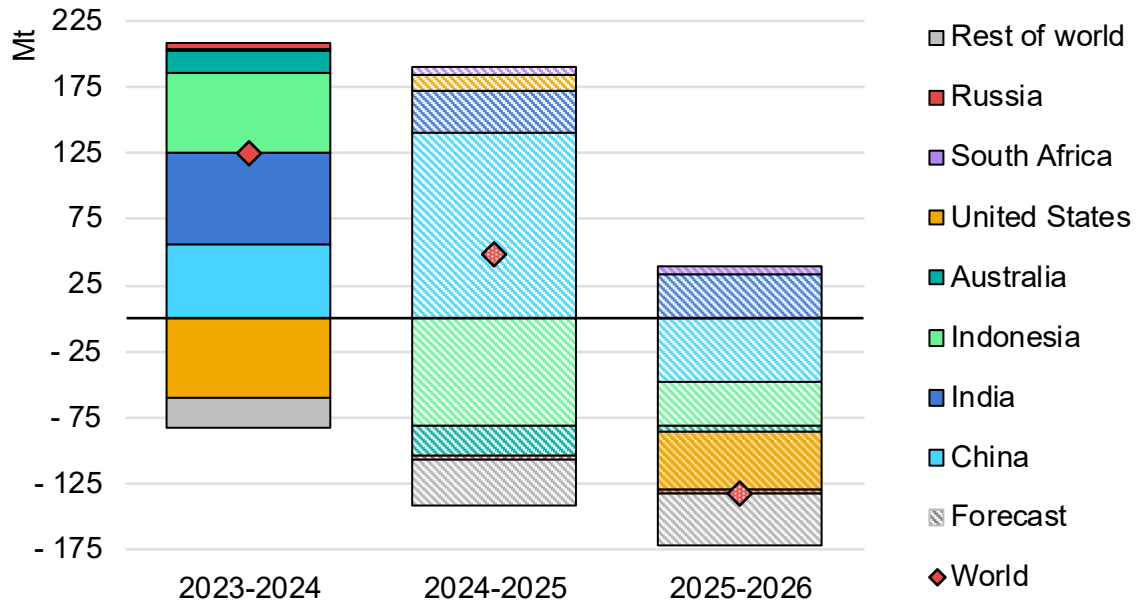
Production declines in 2026 but remains above 9 Bt

As things stand today, with abundant stocks and low prices, and expectations of coal demand gradually reducing through 2026, global coal production is projected to decline by 1.4% in 2026, falling to 9.1 Bt. This would mark the first annual decrease since the recent peak, driven by weakening demand, high stock levels, and policy shifts in major markets. However, despite the decline, production will remain above the 9 Bt threshold, highlighting coal's ongoing role in the global energy mix.

China's output is expected to fall by 1% to 4.76B t, while Indian production will continue to grow at 3%, reaching 1.15 Bt. Indonesia will reduce production at 721 Mt, as continued inventory pressure and reduced export demand will not be offset by stronger domestic demand from the power sector. In the United States, production is projected to decline by 9% to 434 Mt. The situation in Russia is uncertain because it is suffering serious losses amid the Western sanctions and low prices despite receiving government support. Australia will see another 1% drop in production, bringing output to 447 Mt.

The European Union's decline in coal production will continue, with output falling 13% down to 209 Mt, with the largest reductions occurring in Germany and Poland. Mongolia's production will rebound 3% to 102 Mt. Kazakhstan is projected to maintain production close to 110 Mt, while South Africa is expected to see an increase of 3% up to 247 Mt. Meanwhile, Colombia's production is set to decline further, reaching 59 Mt.

Change in global coal production, 2023-2026

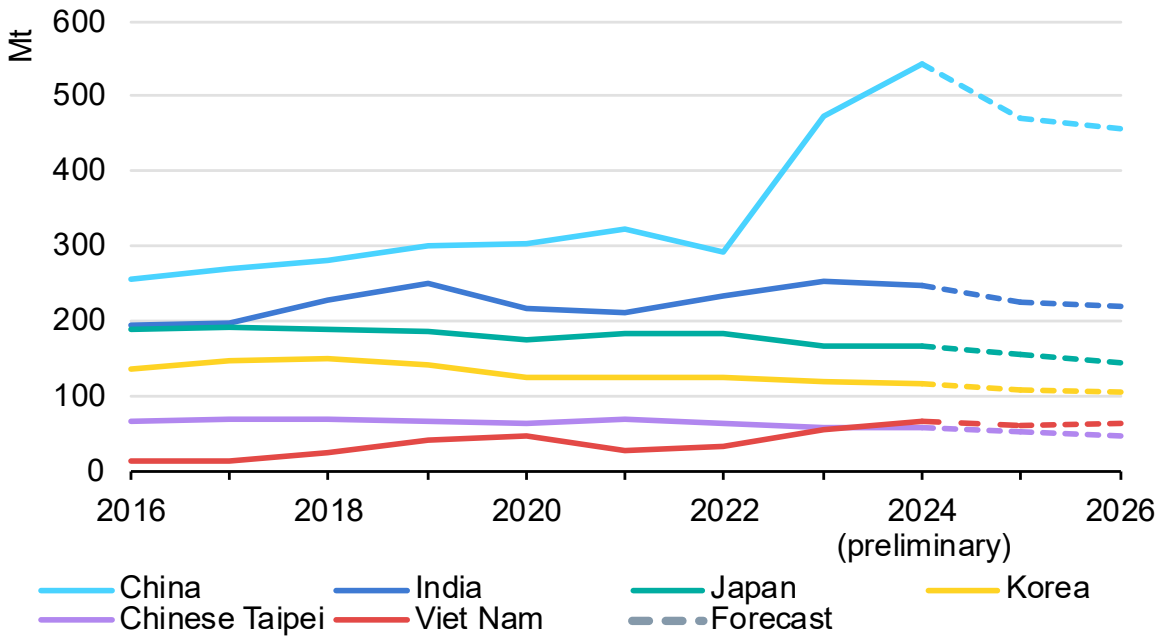


Trade

Global coal trade reached an all-time high in 2024

Global coal trade reached a new all-time high in 2024, with total volumes estimated to be 1.55 Bt, surpassing the 1.5 Bt mark for the first time. Thermal coal trade rose by 28 Mt to reach 1 180 Mt. This growth was primarily driven by strong import demand in Asia, especially from China. The country experienced growth in imports, with coal imports reaching new highs. Imports increased by 14% up to 548 Mt, resulting in total annual imports surpassing 500 Mt for the first time. This volume is more than double that of India, the second-largest importer. Viet Nam also emerged as a key importer in 2024, surpassing Chinese Taipei to join the top five. Imports into Viet Nam are estimated to have increased by 16%, supported by strong demand and stable domestic production.

Coal imports of select countries, 2016-2026



In 2024, Indonesia's thermal coal exports grew by 6%, reaching 549 Mt, largely driven by strong demand from China. Australia also recorded a modest increase, with exports rising by 3% to 209 Mt. Colombia's thermal coal exports grew by 8%,

reaching 59 Mt. In contrast, Russia's thermal coal trade faced headwinds. Western sanctions, logistical disruptions, and declining profitability contributed to a significant decline in Russian thermal coal exports.

Global trade in metallurgical coal reached an all-time high of 369 Mt in 2024, supported by strong demand from key steel-producing countries in Asia. Australia, the world's largest exporter of metallurgical coal, maintained stable export volumes at 153 Mt. Mongolia, the second-largest exporter, recorded a 5% increase, reaching 56 Mt, with all volumes directed to the Chinese market. The United States and Russia increased exports by 11% each to 52 Mt and to 49 Mt respectively. In contrast, Canada experienced a decline in export volumes during the year.

Global coal trade set to reverse course in 2025

Looking ahead to 2025, we expect global coal trade to decline, reversing the upward trend observed in 2024. This shift will be led by China, where a combination of sluggish coal demand, healthy domestic production and high stockpiles is expected to reduce coal import by around 76 Mt. In India, the continued expansion of domestic thermal coal production is expected to significantly outpace demand growth in 2025. As a result, India's reliance on thermal coal imports is projected to decline to just over 150 Mt. Japan and Korea are expected to see higher output from their nuclear fleets, and tempered demand due to economic uncertainty. Both factors reduce their combined demand for coal until April by 8 Mt and, for the full year, this figure is set to increase to 14 Mt. Among the biggest importers, only Viet Nam is likely to increase purchases this year by 4%.

Global trade of thermal coal is likely to decrease to 1.1 Bt, which is a decline of 7%. Following the demand of its main markets, Indonesian exports, which have served as a swing thermal coal supply source for Asian markets, are projected to decline by at least 10%. Colombian exports are also expected to fall by 11 Mt due to sustained low prices, making production less economically viable. Conversely, South African exports are forecast to increase slightly. This growth is driven by rising European demand, as low wind power generation in the first half of the year led to greater reliance on coal-fired power generation.

Additionally, 2025 is set to mark a reversal in metallurgical coal export growth, with global volumes projected to decline by 7% to 345 Mt. This contraction reflects broader economic uncertainty, which is dampening steel demand and, consequently, the consumption of metallurgical coal. The decline is primarily driven by weakening demand from China, the world's largest steel producer. As China remains the sole destination for Mongolian metallurgical coal exports, Mongolia's shipments are expected to fall in response to reduced import

requirements. Australia is also forecast to see a decline of 5 Mt, due to repeated weather-related disruptions. Russian and United States exports are projected to decrease by around 4 and 6 Mt, respectively.

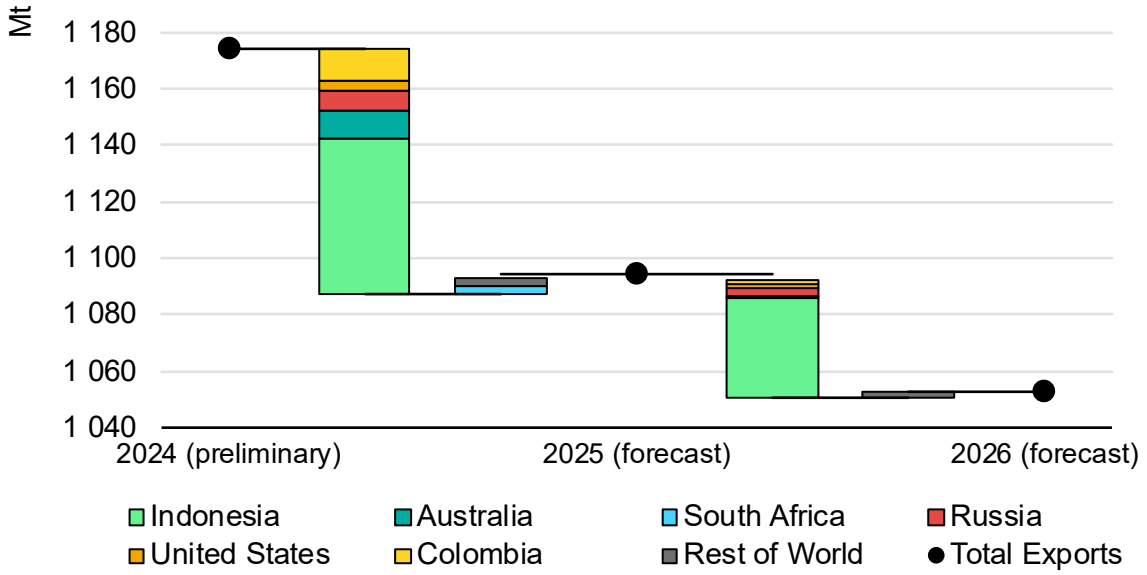
Decline in global coal trade is expected to continue in 2026

We forecast the global coal trade to decrease for a second consecutive year in 2026, marking an unprecedented occurrence in this century according to IEA statistics. The main driver of the expected downturn is an ongoing reduction in China's import demand. Chinese coal imports are forecast to fall by an additional 14 Mt, exerting significant downward pressure on global trade volumes, which are expected to decline to 1.42 Bt. The expected oversupply in 2025 is likely to further weigh on global coal import demand. India's imports are set to decrease down to around 219 Mt, as domestic production continues to expand and displace imported volumes. Coal demand continues to decline structurally across Europe and in Japan, Korea and Chinese Taipei, leading to a sustained reduction in import requirements. Once again, among the world's six largest coal importers, only Viet Nam is expected to register an increase in imports. Viet Nam's coal imports are projected to rise to around 64 Mt in 2026, supported by sustained demand growth from the power sector.

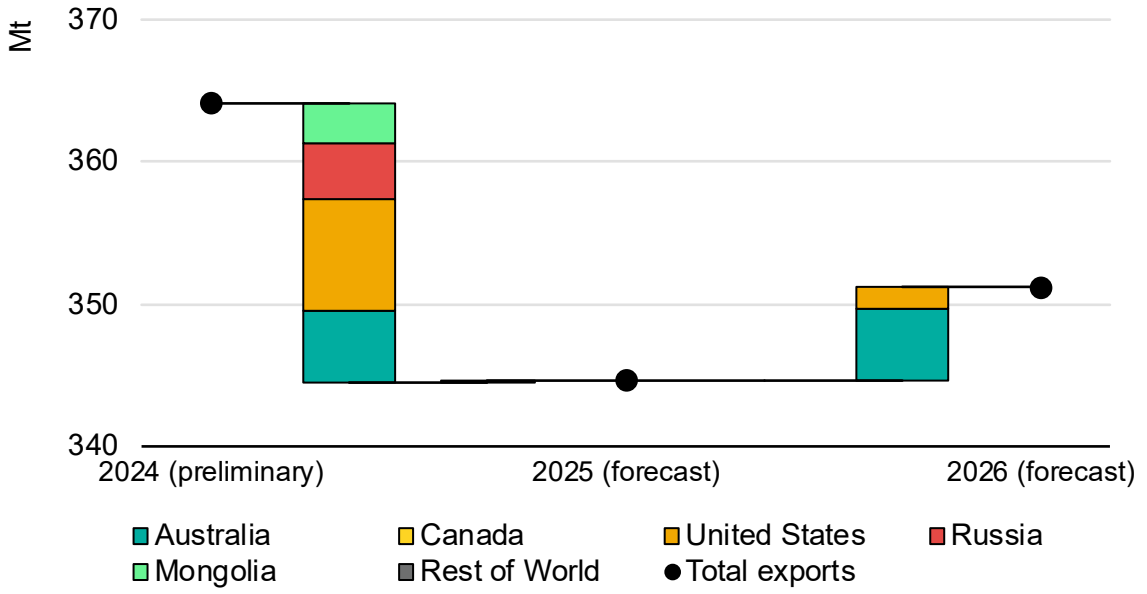
The most significant decrease in export volumes is projected for Indonesia, where thermal coal exports are forecast to fall by 35 Mt compared to 2025 levels. Russian exports are also expected to decline, with a reduction of 3 Mt year-on-year. However, the outlook remains highly uncertain due to the evolving impact of international sanctions and government support. Australian thermal coal exports are projected to decrease by a further 1 Mt in 2026. As a result, total global thermal coal exports are expected to decline by 4% to 1 053 Mt, marking a continued contraction in international coal trade.

Global metallurgical coal exports are projected to stabilise, reaching 351 Mt. Australia is anticipated to gain 5 Mt, while United States exports are expected to rise by 1 Mt. For other countries, however, we do not expect changes.

Changes in thermal coal exports, 2024-2026



Changes in metallurgical coal exports, 2024-2026



Prices

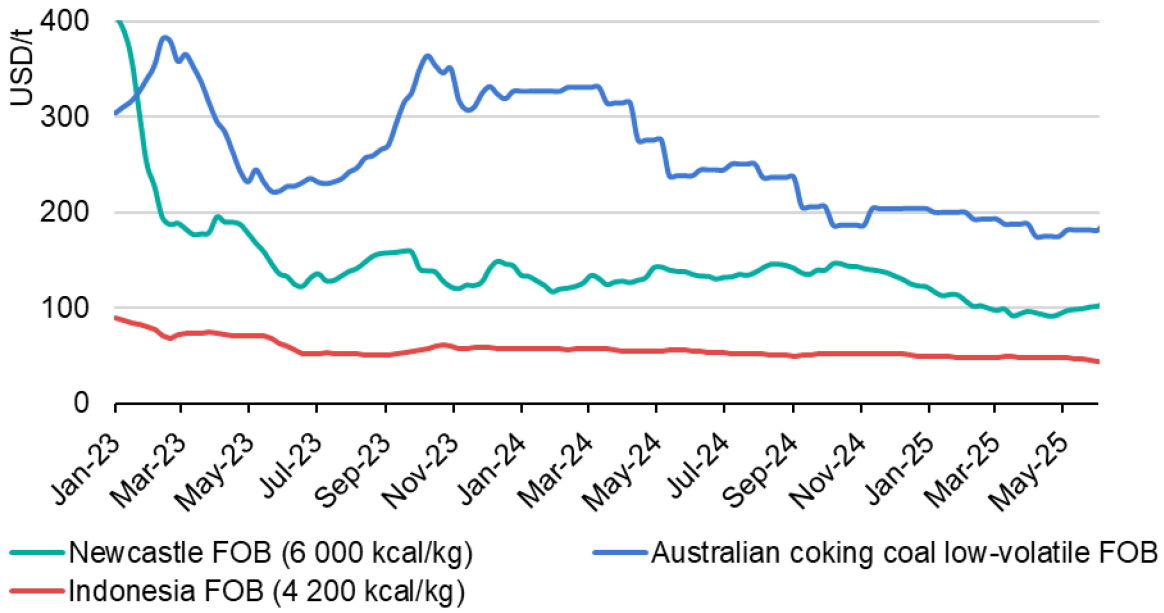
In the last 12 months, all major coal price indices declined

The global coal market has undergone a gradual normalisation since the peak of the 2022 energy crisis, when thermal coal prices soared above USD 400 per tonne across multiple benchmarks. This extraordinary price spike briefly saw thermal coal trading at a premium to coking coal.

By 2023, as energy markets broadly recalibrated, coal prices began to ease. The traditional pricing hierarchy reasserted itself, with coking coal once again priced above thermal coal. This shift reflected a normalisation of market conditions, improving supply-demand balances. Notably, tight coking coal supply from Australia between September 2023 and March 2024 supported elevated prices during that period. Throughout 2024, however, coal prices continued to ease. By year-end, Australian low-volatile coking coal (FOB) had declined to below USD 200 per tonne. Thermal coal benchmarks also fell: Newcastle 6 000 kcal/kg FOB went down to USD 125 per tonne, while Indonesian 4 200 kcal/kg FOB hovered around USD 50 per tonne.

In Spring 2025, coal markets exhibited greater stability, with more muted movements compared to the volatility of previous years. Thermal coal prices declined due to ongoing stock surpluses in China and India and falling demand in Europe. However, first-quarter 2025 European demand exceeded expectations as coal offset low wind and hydro power generation. The metallurgical coal market experienced a moderate decline in prices over the same period. Although adverse weather conditions and logistical disruptions in Queensland constrained Australian export volumes, demand from Asian steelmakers remained insufficient to provide sustained upward pressure on Australian Premium Hard Coking Coal prices. As a result, prices remained below USD 200 per tonne, a level that has placed increasing pressure on the profitability of several coking coal producers.

Marker prices for different qualities of coal, 2023-2025



Note: FOB = free on board.

Source: IEA analysis based on data from Argus Media group. All rights reserved.

International thermal coal prices fall amid reduced demand from China

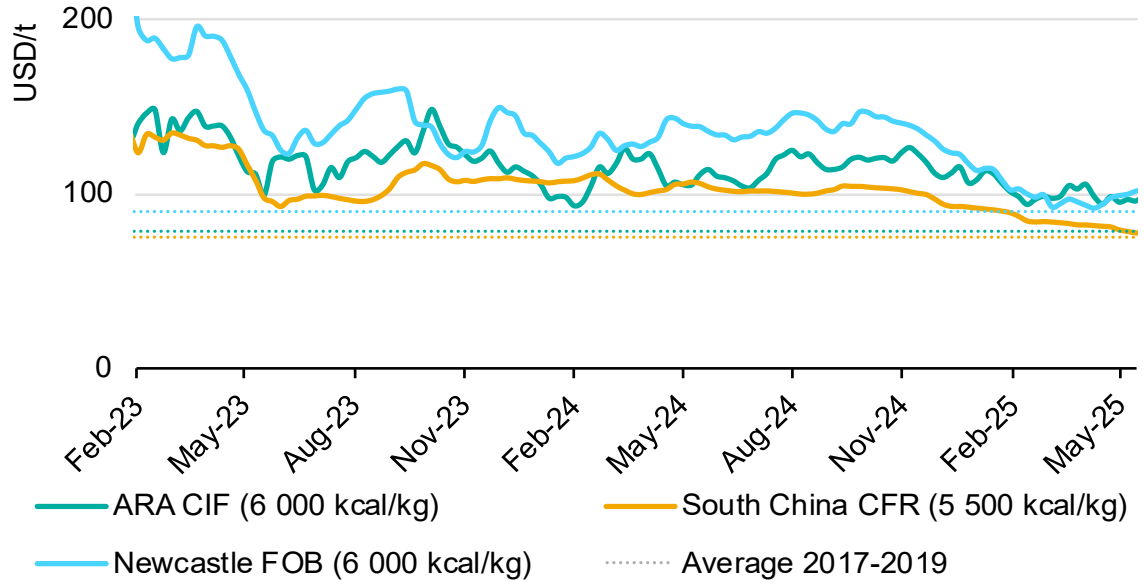
After the historic price spikes and extreme volatility of 2022, global thermal coal markets entered a phase of significant correction in 2023. This shift was driven by a combination of expanding supply, softening natural gas prices, reduced concerns over energy security, and the realignment of trade flows in response to sanctions on Russian coal exports. The ARA and Newcastle FOB price benchmarks began to decline from late 2022, reflecting a broader rebalancing of market fundamentals.

In 2023 and 2024, thermal coal prices peaked at European ports, reaching approximately USD 152 per tonne. Australian ports followed with peak prices around USD 121 per tonne. The average price for mid-calorific value coal delivered to South China, with a calorific value of 5 500 kcal per kilogram, stood at USD 109 per tonne. Since 2022, China's production has outpaced domestic demand, leading to rising stockpiles and putting additional downward pressure on prices.

By February 2025, prices for high-calorific value thermal coal had declined to levels last seen between 2017 and 2019. Demand in China and India was less than expected. Newcastle FOB and ARA CIF, both with a calorific value of 6 000 kcal per kilogram, were trading near USD 100 per tonne. The South China CFR price for 5 500 kcal per kilogram coal fell further to USD 76 per tonne by June 2025. Although prices moderated, volatility remained elevated. The standard deviation of prices in 2024 and the first half of 2025 was significantly higher than

during the 2017–2019 period. This indicates that while price levels have normalised, uncertainty in the market has not yet fully dissipated, amid geopolitical tensions and more weather-dependent electricity systems across the world.

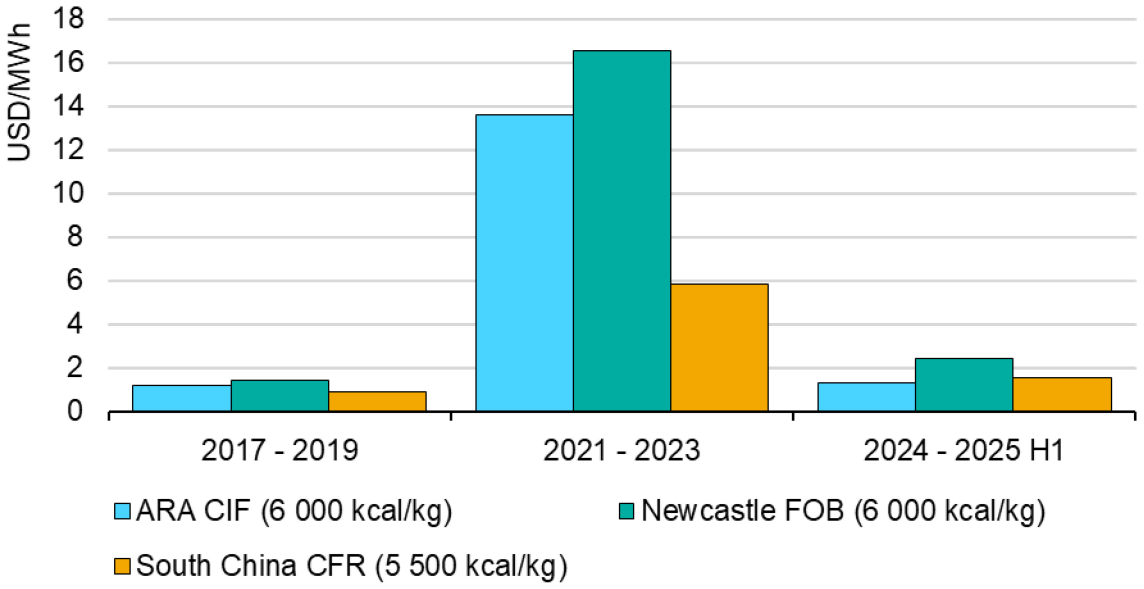
Thermal coal price markers, 2023-2025



Note: ARA = Amsterdam Rotterdam Antwerp. FOB = free on board. CIF = cost, insurance and freight. CFR = cost and freight.

Source: IEA analysis based on data from Argus Media group. All rights reserved.

Weekly standard deviation of select coal price markers, 2017-2024



Notes: ARA = Amsterdam Rotterdam Antwerp. FOB = free on board. CIF = cost, insurance and freight. CFR = cost and freight. Standard deviation has been computed based on weekly average prices. For 2017-2019 average annual standard deviations have been used.

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With prices reaching the cost of production, the Russian coal discount vanished

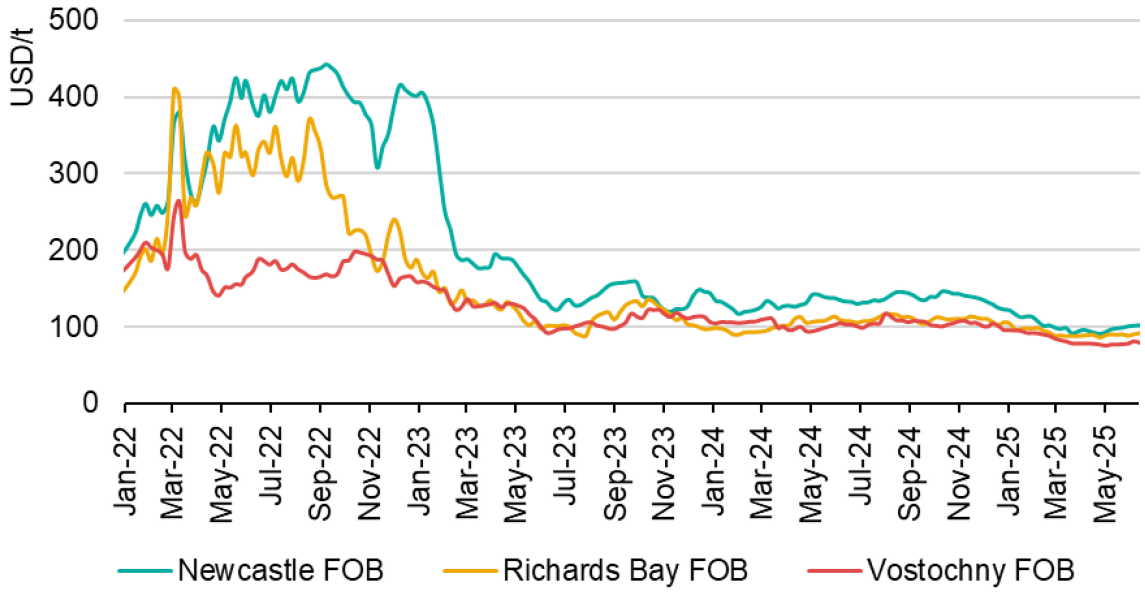
Thermal coal prices from Australia and South Africa have historically moved in close alignment with Russian export prices. This correlation was disrupted following Russia's full-scale invasion of Ukraine, as a wave of sanctions imposed by Western countries altered global trade dynamics. In response, coal markets began applying a risk premium to Russian-origin coal, which led to substantial price discounts relative to other major exporters.

As global coal prices began to recover towards levels closer to historical trends in late 2022, the price differentials narrowed. Discounts on Russian coal shipped from eastern ports such as Vostochny declined, supported redirection of volumes from traditional buyers like Japan to alternative markets within the region. This shift contributed to a stabilisation of prices in Russia's eastern export corridors. However, despite this partial recovery, Russian producers continued to face profitability challenges. These were driven by persistent price discounts, lower overall price levels, and the temporary imposition of an export duty by the Russian government. Ruble appreciation versus dollar in 2025 does not help producers either.

Russian coal exported through Black Sea ports performed even worse. In 2023 and 2024, prices at these ports averaged USD 77 per tonne below Newcastle FOB and USD 37 per tonne below Richards Bay FOB, reflecting more limited market access.

At the start of 2025, coal prices across all major regions fell below USD 100 per tonne. Against this backdrop of declining prices, maintaining steep discounts on Russian exports became increasingly unsustainable, further straining the financial viability of producers.

High-calorific value thermal coal price markers for select origins, 2021-2024



Note: FOB = free on board.

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Forward prices remain in a soft contango

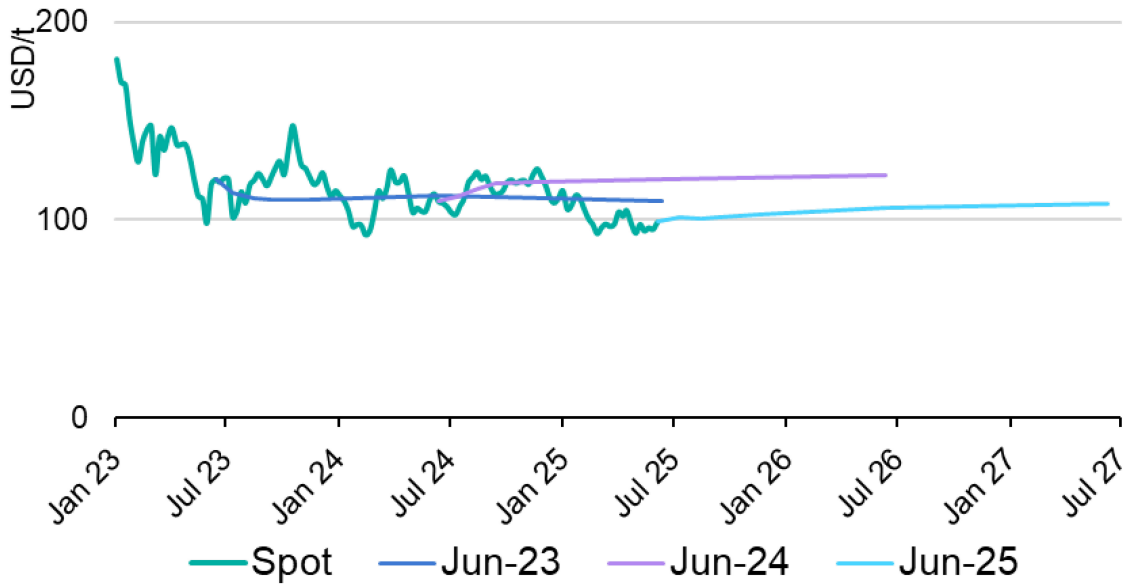
Throughout 2024, API2 spot prices, representing coal deliveries to Europe on a cost, insurance and freight (CIF) basis, showed a marked reduction in volatility, stabilising at levels more aligned with historical trends than in the preceding year. This moderation reflected a broader market sentiment anticipating a loosening of supply constraints, which had been exacerbated by geopolitical disruptions following Russia's full-scale invasion of Ukraine. By mid-2023, future markets had already begun to price in a normalisation of trade flows, with risk premiums gradually receding.

The forward curve during this period transitioned from a marginal backwardation, where spot prices exceeded futures, to a slight contango, indicating a return to structurally driven pricing. By June 2024, market expectations coalesced around a relatively flat trajectory for API2 futures, hovering above USD 120 per tonne. This configuration remained largely unchanged until mid-2025, when the curve still slopes gently upward, albeit from a lower base of approximately USD 100 per tonne, suggesting a modest recovery in forward valuations over the subsequent two years.

This evolution marks a departure from the heightened volatility and fears of a shortage observed in recent years. Both financial and physical coal markets now exhibit a degree of stability not seen since before the 2022 energy crisis period. The coal market is closely tied to the gas sector, as both serve as marginal

suppliers in electricity markets and are sometimes traded together. As a result, increased volatility in gas markets can quickly affect coal prices due to their interdependence.

API2 spot prices and forward curves, 2023-2027



Note: API = Argus/McCloskey's Coal Price Index

Source: IEA analysis based on data from Argus Media group. All rights reserved.

Annex

Abbreviations and Acronyms

API	Argus/McCloskey's Coal Price Index
ARA	Amsterdam, Rotterdam, and Antwerp
ASEAN	Association of Southeast Asian Nations
CFR	cost and freight
CIF	cost, insurance and freight
CIL	Coal India Limited
FOB	free on board
IEA	International Energy Agency
OECD	Organisation for Economic Co-operation and Development
SCCL	Singareni Collieries Company Limited
USD	United States dollar

Glossary

Bt	billion tonnes
kcal	kilocalorie
kg	kilogramme
Mt	million tonnes
TWh	terawatt hours

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