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KSA METAL & MINING SECTOR REPORT

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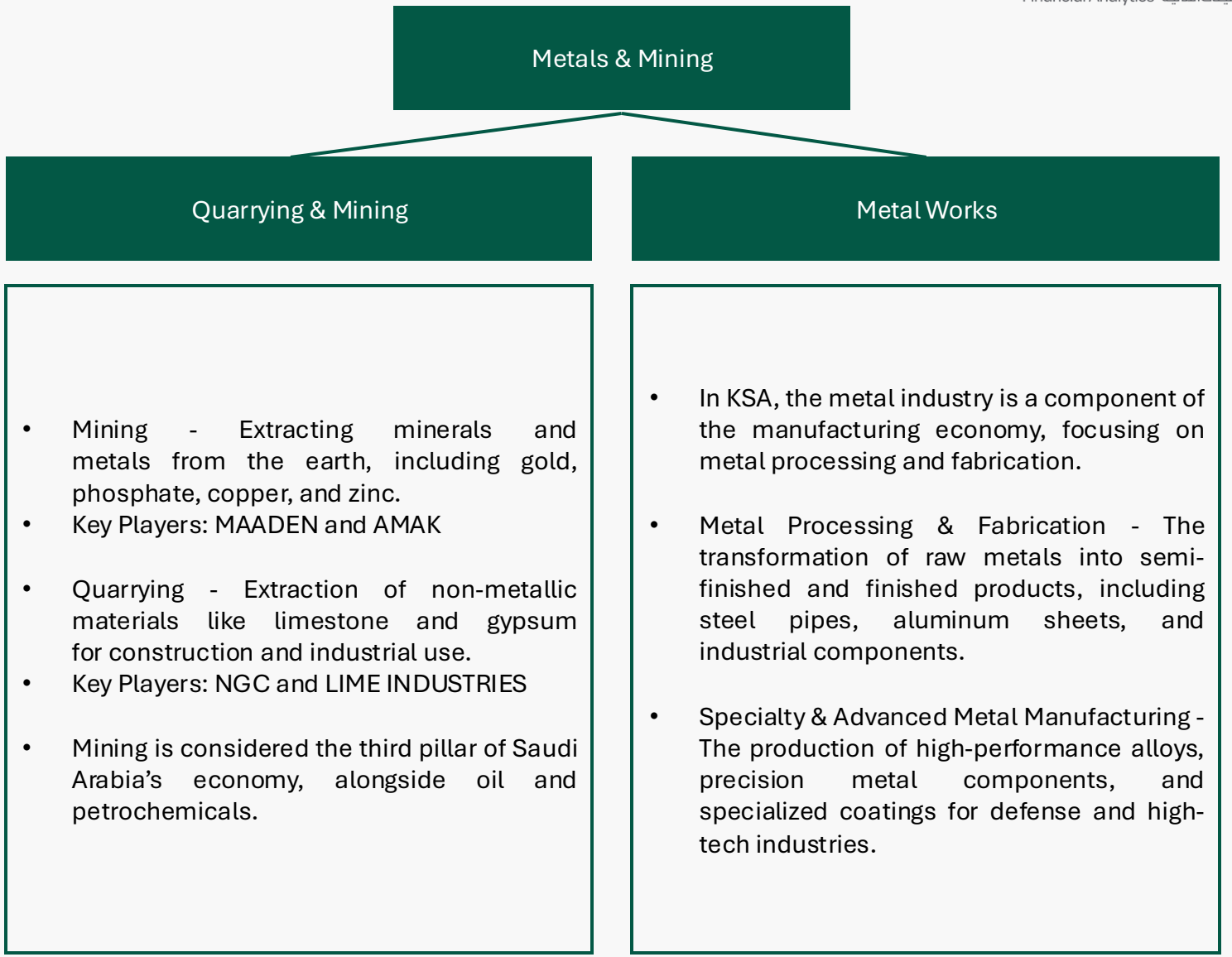
AN INTRODUCTION TO THE METALS & MINING SECTOR

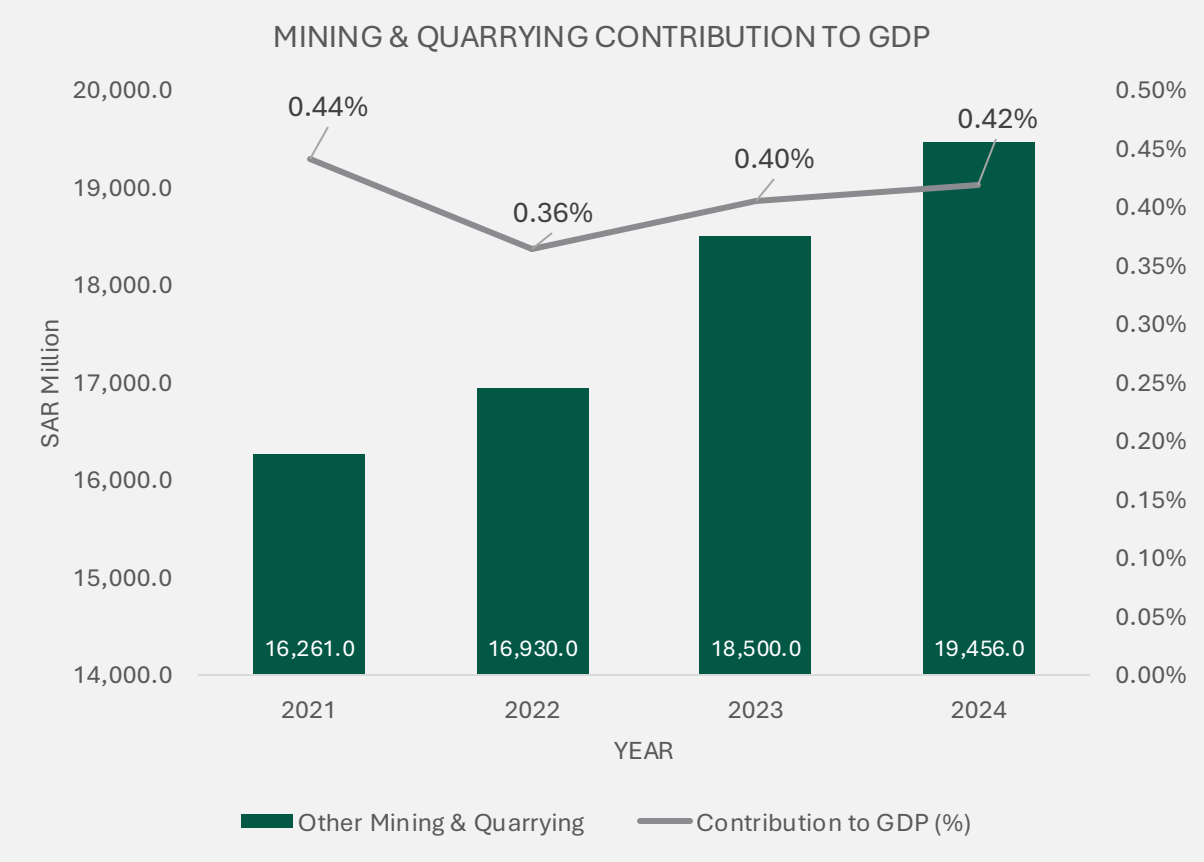
An overview of the metal & mining sector, its contribution to the economy, and its regulatory environment.

AN INTRODUCTION TO METALS & MINING

- As of 2024, the Kingdom has approximately USD 2.5 trillion (SAR 9.4 trillion) in metal & mineral deposits. The metals include gold, copper, zinc, lead, aluminum, and iron. The non-metallic minerals include phosphate, gypsum, limestone, silica sand, and rare earth minerals (tantalum, niobium, zirconium, et cetera).
- The Saudi Arabian metals & mining sector comprises eighteen listed entities with varying sector specific roles, primarily split between i) Quarrying & Mining and ii) Metal Works.
- Quarrying & Mining includes vertically integrated entities specialized in particular resources (gypsum, limestone, et cetera).
- Metal Works refers to metal fabrication and industrial scale manufacturing (steel rolling, sheet manufacturing, metal pipe manufacturing, et cetera).
- Note that quarrying & mining overlaps with vertically integrated manufacturers in the cement industry, that have been excluded for the purpose of this study.

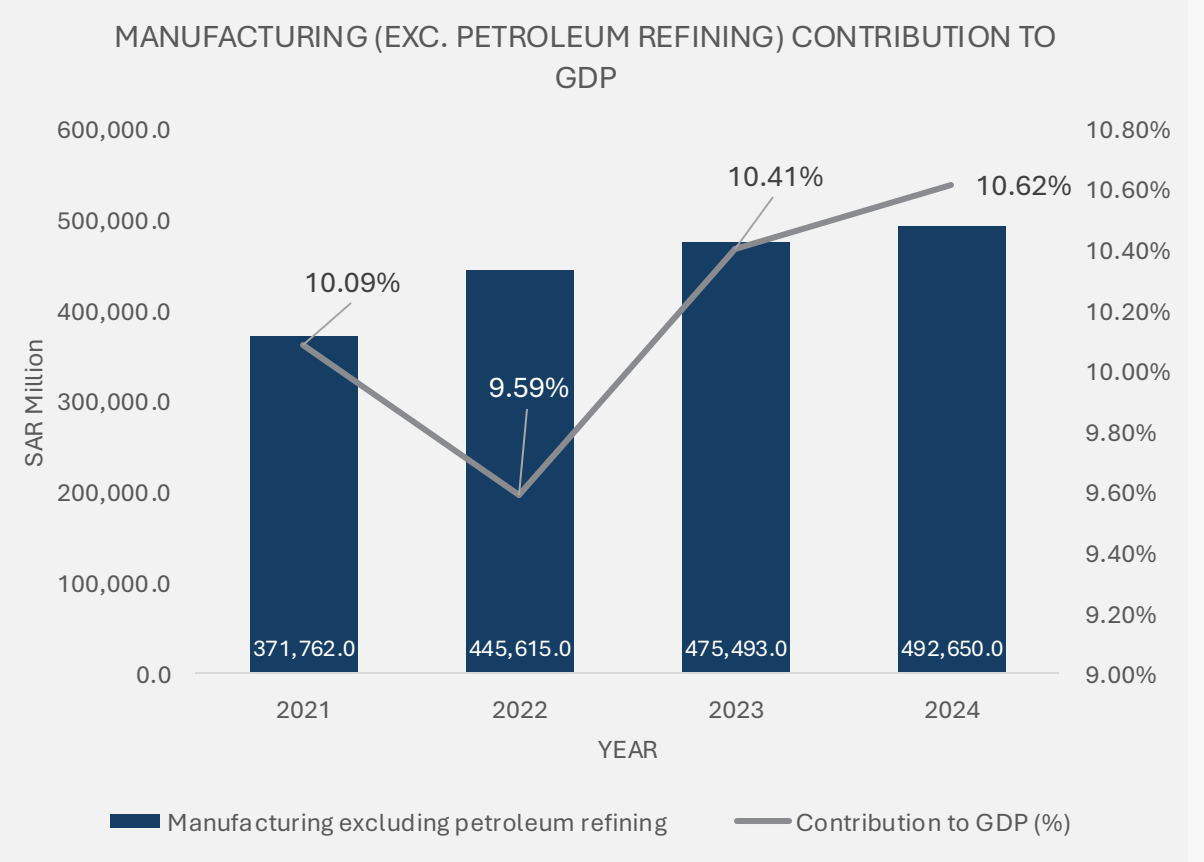


MINING & QUARRYING MAINTAINS A STEADY CONTRIBUTION TO GDP



SOURCE | General Authority for Statistics

- In 2024, Saudi Arabia's nominal GDP equaled SAR 4,640,737 million. Of this, the "Other Mining & Quarrying" activities segment contributed SAR 19,456 million to the overall GDP, which amounts to 0.4%. Note, "Other Mining & Quarrying" excludes "Crude Petroleum & Natural Gas".
- The sector's contribution to GDP remains relatively consistent at 0.4% on a rounded basis across the periods under review. Note that there is considerable leeway for growth in this domain given that the Kingdom intends to transform the sector into the third pillar of its economy.



SOURCE | General Authority for Statistics

- Note: "Manufacturing excluding Petroleum Refining" includes a variety of industries ranging from metallurgical works to pharmaceuticals.
- In 2024, Saudi Arabia's nominal GDP equaled SAR 4,640,737 million. Of this, the "Manufacturing excluding Petroleum Refining" activities segment contributed SAR 492,650 million to the overall GDP, which amounts to 10.6%.
- The slight dip to 9.6% of GDP in 2022 represents relative decrease given post-pandemic recovery of GDP during this period.

SAUDI MINING INVESTMENT LAW

- In June 2020, Royal Decree No. M/140 established the Saudi Mining Investment Law. The law took effect in 2021 and was intended to create a more attractive and predictable investment environment for the mining sector. Overseen by the Ministry of Industry and Mineral Resources, it exhibits the following key features.

I. Licensing System: Inculcates a structured licensing system to ensure responsible mining activities and encourage private sector participation, including that by foreign investors.
II. Introduces five types of licenses: i) reconnaissance, ii) exploration, iii) exploitation, iv) building materials quarry, and v) small-scale mining.
III. Streamlines investment incentives through the allowance of i) 100% foreign ownership for mining projects, ii) tax exemptions and royalty reductions for strategic mineral investments, and iii) government-backed financing for startups.
IV. Mandates environmental impact assessments for all mining projects coupled with strict ESG (Environmental, Social, and Governance) compliance.
V. Introduces three mineral categories: i) Class A for precious metals (gold, silver, etc.), ii) Class B for industrial minerals (gypsum, limestone, etc.), and iii) Class C for construction materials (granite, gravel, etc.).
VI. Results in the maintenance of a publicly accessible mining register for tracking licenses and applications. The Esnad platform and National Geological Database are byproducts of the Saudi Mining Investment Law.

Esnad Platform

- Purpose: A digital mining licensing system that streamlines permit applications, renewals, and compliance tracking.
- Impact: Reduces bureaucracy, speeds up approvals, and improves investor access to Saudi Arabia's mineral resources.
- Integration: Linked to the Ministry of Industry and Mineral Resources for real-time regulatory oversight.

National Geological Database

- Purpose: A centralized geological data repository providing detailed surveys, mineral maps, and exploration records.
- Impact: Helps investors and researchers assess Saudi Arabia's mineral wealth and identify viable mining opportunities.
- Accessibility: Offers public access to geological reports, supporting scientific research and industry growth.

TYPES OF MINING LICENSES IN THE KINGDOM

LICENSE TYPE	DESCRIPTION
Reconnaissance License	• Purpose: Allows preliminary geological surveys to identify potential mineral deposits. • Activities Permitted: Surface mapping, aerial surveys, and remote sensing. • Duration: Typically, up to 2 years, non-renewable.
Exploration License	• Purpose: Grants rights to conduct detailed exploration for mineral deposits. • Activities Permitted: Drilling, sampling, geophysical studies, and feasibility assessments. • Duration: Up to 5 years, with possible extensions.
Exploitation License	• Purpose: Authorizes full-scale mining operations for commercial extraction. • Activities Permitted: Excavation, processing, refining, and mineral sales. • Duration: Up to 30 years, renewable for another 30 years.
Building Materials Quarry License	• Purpose: Covers the extraction of non-metallic materials like limestone, gypsum, and sand for construction. • Activities Permitted: Quarrying, crushing, and transportation of materials. • Duration: Up to 10 years, renewable.
Small-scale Mining License	• Purpose: Designed for low-impact mining operations, often for artisanal or localized mineral extraction. • Activities Permitted: Limited excavation, processing, and mineral sales. • Duration: Up to 20 years, renewable.

SOURCE | Saudi Mining investment Law

AN OVERVIEW OF MINERALS IN THE KINGDOM

An overview of the Kingdom’s mineral resources including their utility, global market outlook, and relevant statistics.

AN OVERVIEW OF MINERALS FOUND IN THE KINGDOM

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METALLIC MINERALS

- Pertains to minerals that contain metal elements in their composition and can be melted to extract metals.
- Characteristics: i) metallic luster, ii) conductors of heat & electricity, iii) malleable & ductile.

Gold | Aurum (Au)

Iron | Ferrum (Fe)

Titanium (Ti)

Copper (Cu)

Uranium (U)

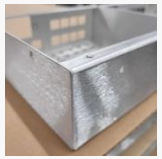
Rare Earths

Zinc (Zn)

Nickel (Ni)

Lead | Plumbum (Pb)

Cobalt (Co)



Aluminum (Al)

Magnesium (Mg)

NON-METALLIC MINERALS

- Pertains to minerals that do not contain metal elements and are used for industrial, construction, and chemical applications.
- Characteristics: i) lack metallic luster, ii) poor conductors of heat & electricity, iii) brittle & non-malleable.

Phosphate (PO_4^{3-})

Gypsum ($CaSO_4$)

Limestone ($CaCO_3$)

Silica (SiO_2)

GOLD PRICES MAY INCREASE DUE TO INVESTMENT DEMAND

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ELEMENTAL PROPERTIES

- Highly Malleable & Ductile: Can be hammered into thin sheets or drawn into wires.
- Corrosion-Resistant: Does not tarnish or oxidize, making it ideal for long-term applications.

RESOURCE LOCATIONS IN SAUDI ARABIA

- There are six active gold mines in the Kingdom.
- Mansourah - Massarah Mine – Located in Al Khurmah governorate, Makkah Region. As of 2023, it reports gold resources of nearly seven million ounces and a production capacity of 250,000 ounces per year.
- Ad-Duwayhi Mine – Located in Makkah Province.
- Mahd Adh-Dhahab Mine – Located in Medina Province.
- Al-Amar Mine – Produces gold, copper, and zinc. Located in Medina Province.
- Bulghah & Al-Sukhaybarat Mines – Open-pit mines in Medina and Qassim Provinces.
- As-Suq Mine – Located in Makkah Province.

SOURCE | Saudipedia, World Gold Council, MAADEN,

GLOBAL UTILITY & DEMAND DRIVERS

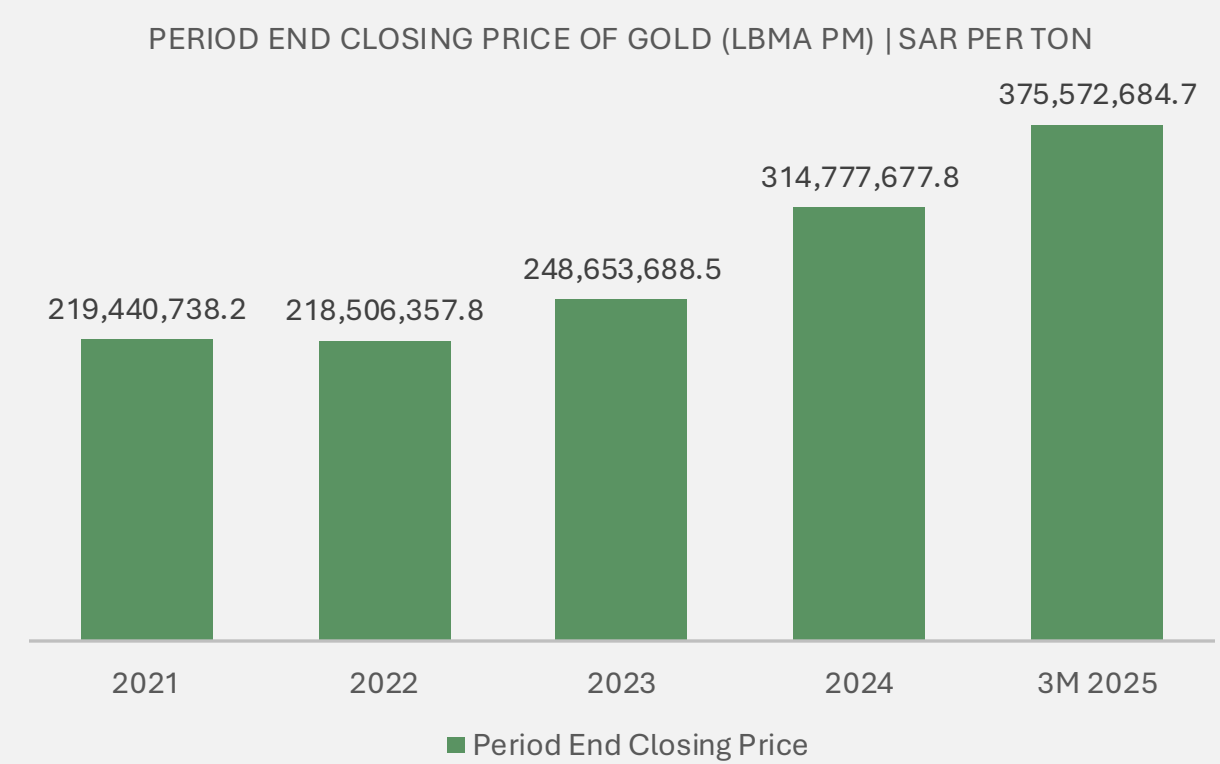
- Jewelry & Ornaments - 50.7% of the gold mined in Q1 2025 was used for the production of jewelry.
- Electronics & Aerospace – Used in circuit boards, satellites, and high-tech components due to its excellent conductivity.
- Medicine & Dentistry – Gold compounds are used in arthritis treatments, and gold alloys are used in dental fillings.
- Investment & Currency – Held by central banks as a reserve asset and used in bullion and coinage.

GLOBAL NEAR-TERM OUTLOOK (2025)

- Investments in gold may continue to gather pace due to near-term stagflation risks, medium-term recession risks, and continued geopolitical tensions.
- Demand for jewelry to stagnate due to higher than anticipated prices.
- Bar and coin buying to stay resilient rather than strong as geopolitical risk motives are tempered by sensitivity to surging prices.
- The demand for gold from central banks is expected to remain consistent. Central banks collectively purchased 1045 tons of gold in 2024, marking the third consecutive year in which demand exceeded 1000 tons.
- All in all, investment demand is expected to drive gold prices higher, while consumer demand for jewelry may decline due to high prices and partially offset the increase in prices.

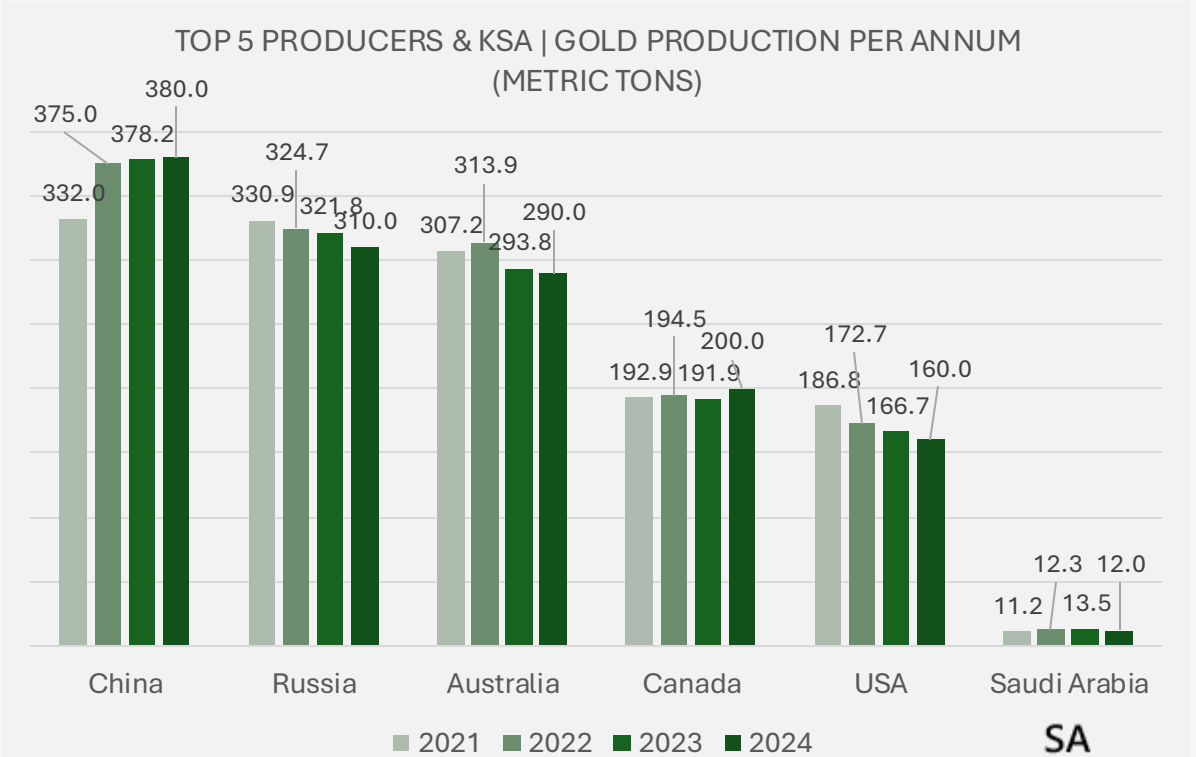
SOURCE | World Gold Council, Saudipedia

KSA PRODUCED LESS THAN 1% OF THE WORLD'S GOLD IN 2024



SOURCE | LBMA

- The price of gold has grown at a CAGR of 12.8% from 2021 to 2024.
- Gold prices tend to increase during periods of heightened economic, social, and geo-political risks, all of which are encapsulated in the periods under review.



SOURCE | World Gold Council, Investing News Network, World Population Review, Argaam, Mining Technology, USGS

- Barring China, the remainder of the top 5 producers experienced a slight decrease in production volumes in 2023. This represents relatively minor fluctuation because the demand for gold has generally grown over the periods under review.
- Note further that "easy gold," or easily accessible gold, has already been mined. Gold is now more challenging to mine, and that coupled with periodic lower ore grades impacts output.
- In 2024, KSA produced 0.4% of the world's global output of 3,300 metric tons.

COPPER DEMAND LIKELY TO SURGE DUE TO GREEN TECH

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ELEMENTAL PROPERTIES

- Excellent Conductivity: Second only to silver in electrical and thermal conductivity.
- Corrosion-Resistant: Forms a protective patina, preventing further oxidation.

RESOURCE LOCATIONS IN SAUDI ARABIA

- Jabal Sayid Mine – Kingdom's largest copper mine, operated as a joint venture between Barrick Gold and MAADEN. Located in Medina Province.
- Al Masane Mine – Located in Najran Province. It is a multi-metal mine for extracting copper, zinc, and silver, currently operated by AMAK.
- Al Amar Mine – Located west of Riyadh. Operated by MAADEN and produces copper, gold, and zinc.
- Prospective sites includes Al Bahah and Hail (active exploration).

SOURCE | Industrial Metal Service, Copper Development Association, Invest Saudi, J.P. Morgan, Britannica, Saudi Geological Survey, MAADEN, AMAK, Barrick Gold Corporation, Saudi Ministry of Industry and Mineral Resources

GLOBAL UTILITY & DEMAND DRIVERS

- Electrical & Power Infrastructure – Used in power grids, transmission lines, and renewable energy projects.
- Electronics & Wiring – Found in circuit boards, semiconductors, and electrical cables.
- Industrial Manufacturing – Essential for machinery, electronics, and automotive components.
- Renewable Energy – Used in solar panels, wind turbines, and battery storage systems.
- Construction & HVAC Systems – Copper tubes are widely used in air conditioning and plumbing
- Healthcare & Antimicrobial Applications – Copper surfaces help reduce bacterial growth in hospitals

GLOBAL NEAR-TERM OUTLOOK (2025)

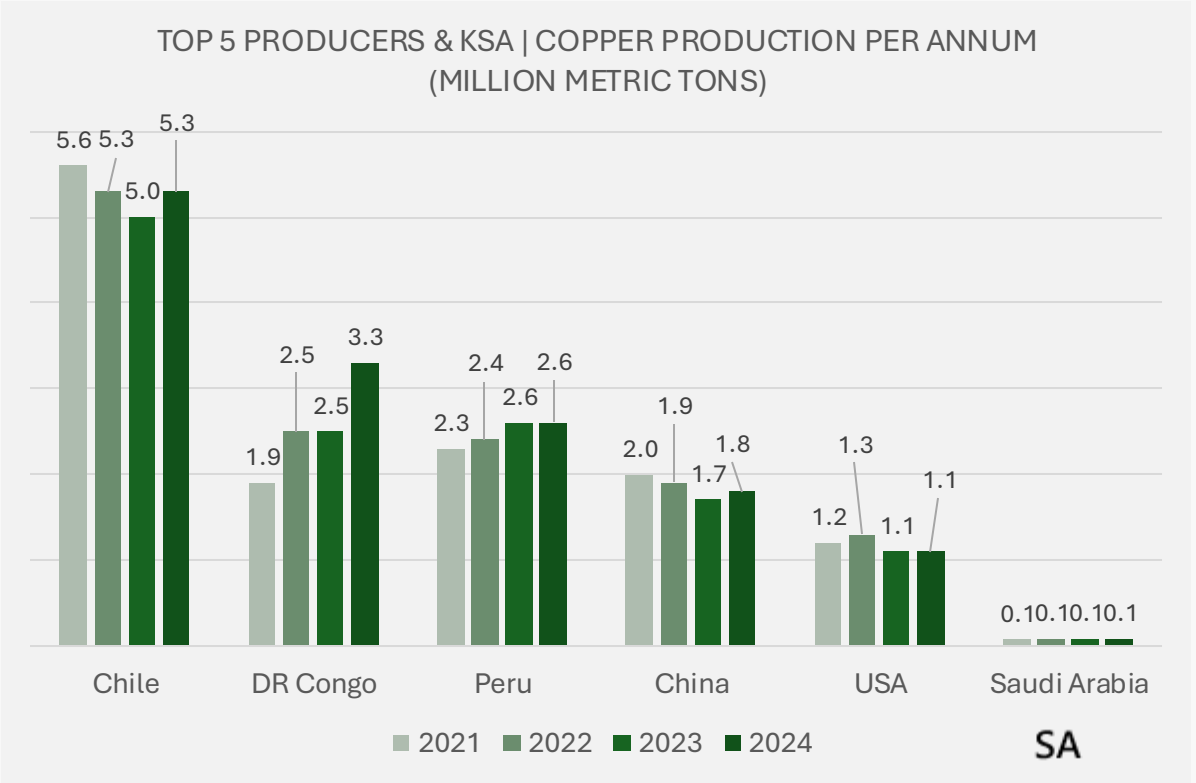
- Copper's role in Green Technologies – Electrical Vehicles (EVs) use 4x the copper of vehicles with an internal combustion engine. This will contribute to a surge in demand in 2025 of 1.2 million tons, which represents approximately 5.0% of the demand for the period.
- Infrastructure construction & development – Global infrastructure spending is expected to grow by 4.0% in 2025. Copper, as a key component for wiring, plumbing, heating & ventilation, is employed during infrastructural development, which should drive up demand. One exception to this is China's property development slowdown prolonging sufficiently to dampen demand.
- Inflationary pressure and rising costs of production - The shift towards cleaner production technologies and the inflationary pressure being experienced in 2025 will apply upward pressure to the price of copper.
- All in all, the price of copper is experiencing upward pressure. The overall trend suggests that demand due to green transition (EVs & renewable energy) coupled with potential supply constraints, will support higher prices.

SOURCE | Shanghai Metal Market, Market Index, Barrick Gold Corporation, Saudi Ministry of Industry and Mineral Resources , Britannica, Saudi Geological Survey, Industrial Metal Service, Copper Development Association

CHILE LEADS THE WORLD IN COPPER PRODUCTION

SOURCE | Daily Metal Prices

- Copper price fell by 14.7% by the end of 2022 due to restricted industrial activity as a result of China's zero-COVID policy, increased ore production in South America, and weak demand from major importers like Germany.



SOURCE | World Population Review, NASDAQ, Index Mundi

- Chile is the largest producer of copper by far due to the country's unique tectonic setting, being the point where two tectonic plates converge, which has resulted in the creation of mineral-rich zones.
- In 2024, Indonesia overtook the USA as the 5th largest copper producer by raising its output to 1.1 million metric tons. The raise was the result of recovery in the country's overall output following the weather-based disruption of 2023.
- The Kingdom's copper output in 2024 equaled 80,000 metric tons, which is 0.4% of the global output of 22.6 million metric tons.

DOWNWARD PRESSURE ON IRON PRICE LIKELY TO PERSIST IN 2025

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ELEMENTAL PROPERTIES

- Magnetic Properties: Iron is ferromagnetic, making it essential for electromagnetic applications.
- Corrosion Resistance: Iron oxidizes easily, forming rust unless alloyed with other elements.

RESOURCE LOCATIONS IN SAUDI ARABIA

- Wadi Sawawin Site – Located in Tabuk province.
- Wadi Fatima Site – Located near Makkah, Saudi Arabia.

SOURCE | Arab News, Arab Iron & Steel Union, Market Index, Mindat, Science Direct, World Steel Association, Hadish Steel Production & Trade Development Company

GLOBAL UTILITY & DEMAND DRIVERS

- Steelmaking: Over 90.0% of global iron ore is used in steel production.
- Construction & Infrastructure: Used in reinforced concrete, bridges, and high-rise buildings.
- Manufacturing & Machinery: Essential for automotive, industrial equipment, and shipbuilding.
- Energy Sector: Used in oil rigs, pipelines, and refinery structures.
- Automotive Industry: Found in engine blocks, chassis, and structural components.
- Electronics & Appliances: Used in magnetic storage devices, transformers, and electrical wiring.

GLOBAL NEAR-TERM OUTLOOK (2025)

- Iron ore prices declined by 24.2% in 2024, falling from $136.7 per metric ton (SAR 512.6 per metric ton) at the end of 2023 to $103.6 (SAR 388.5 per metric ton) by the end of 2024.
- China's property crisis has contributed to the decrease in the price during the recent period given that it imports over 70.0% of global seaborne iron ore.
- An expectation of worsening trade tensions with the US is weighing down the outlook for Chinese iron demand.
- Iron ore production and exports were expected to be weaker in Q1 2025 due to cyclones in Australia and heavy rains in Brazil, the top two global suppliers (56% of global output). This did not result in a speculated price increase during the period possibly due to a release of built-up Chinese iron ore port inventory and the overall dwindled demand for steel.
- All in all, iron ore prices are expected to remain under pressure in 2025, driven by oversupply, weak steel demand, and economic uncertainty.

SOURCE | Investing News Network, Fastmarkets, Arab Iron & Steel Union, Market Index, Mindat, Science Direct, World Steel Association, Hadish Steel Production & Trade Development Company

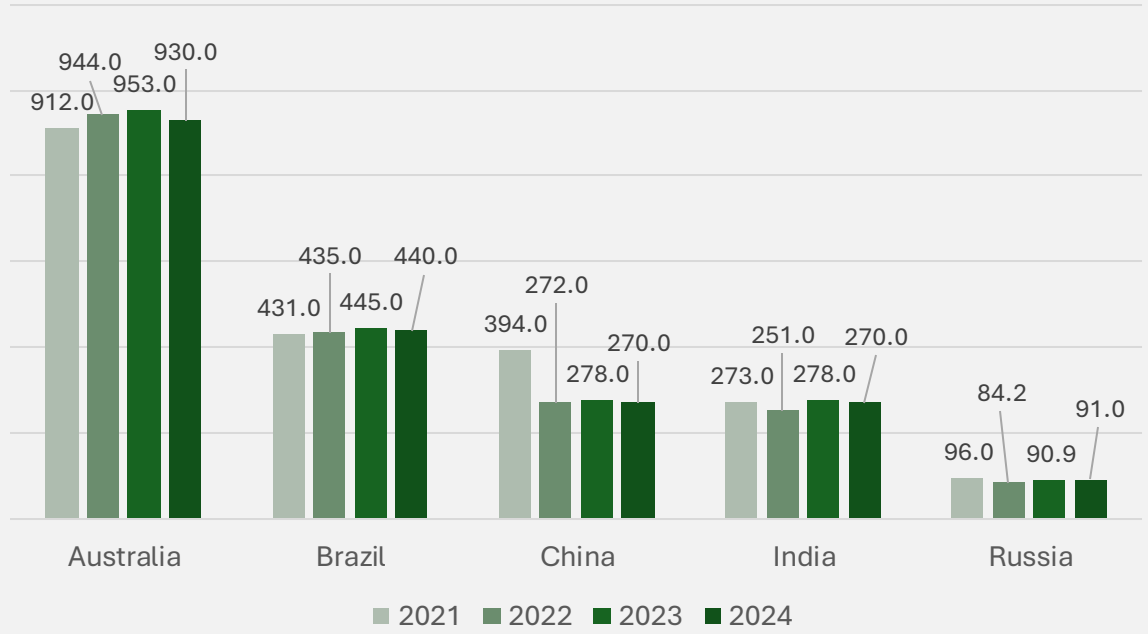
AUSTRALIA LEADS THE WORLD IN USABLE IRON ORE PRODUCTION

YEAR END CLOSING PRICE OF IRON ORE | SAR PER TON

SOURCE | Daily Metal Prices

- The price of iron ore rose in 2023 by 21.4% due to supply disruptions in Australia and Brazil on account of weather-related events.
- The price returned to levels exhibited prior to 2023 in 2024 on account of an overall decrease in demand as a result of China's property crisis.

TOP 5 PRODUCERS | USABLE IRON ORE PRODUCTION PER ANNUM (MILLION METRIC TONS)



SOURCE | World Population Review, US Geological Survey, Global Newswire, Arab Iron & Steel Union

- Note: Information regarding the Kingdom's usable iron ore production could not be obtained. It is however known that the Kingdom's steel production capacity is estimated at 11.3 million metric tons as per Arab Iron & Steel Union.
- Total iron ore produced globally equaled 2,605.3 million metric tons in 2024. Australia leads the world in the production of iron ore (market share of 35.7% in 2024), and it is notable that iron ore is the country's largest export. Australia's largest export market is China, which despite being a large producer, consumes over 80.0% of the former's iron ore export.

REDUCED STEEL PRICES IN THE NEAR-TERM MAY SUPPORT INFRASTRUCTURE PROJECTS IN THE KINGDOM

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DESCRIPTION & ELEMENTAL PROPERTIES

- Composition: Alloy of iron and carbon, with added elements for strength and durability.
- Properties: High tensile strength, corrosion resistance, and versatility.
- Applications: Used in construction, manufacturing, and transportation.
- Structural Uses: Essential for skyscrapers, bridges, and vehicles.

BENEFITS OVER IRON

- Strength & Durability: Steel is significantly stronger and more durable than iron, making it ideal for construction and heavy-duty applications.
- Corrosion Resistance: Unlike iron, which rusts easily, steel—especially stainless steel—has enhanced resistance to oxidation and environmental damage.
- Versatility: Steel can be alloyed with various elements like chromium, nickel, and molybdenum to enhance specific properties, making it suitable for diverse applications.
- Cost-Effectiveness: While steel could have a higher initial cost, its longevity and lower maintenance requirements make it more economical in the long run.
- Environmental Benefits: Steel is highly recyclable, reducing waste and environmental impact compared to iron

SOURCE | Otai, IMARC Group, Consultancy-me.com

GLOBAL UTILITY & DEMAND DRIVERS

- Construction Boom: Urbanization and infrastructure projects worldwide fuel steel demand.
- Automotive Industry: Steel remains a core material for vehicle manufacturing, despite competition from lightweight alternatives.
- Renewable Energy Expansion: Wind turbines, solar farms, and energy grids require specialized steel components.
- Manufacturing & Machinery: Industrial production relies on steel for equipment, tools, and heavy machinery.

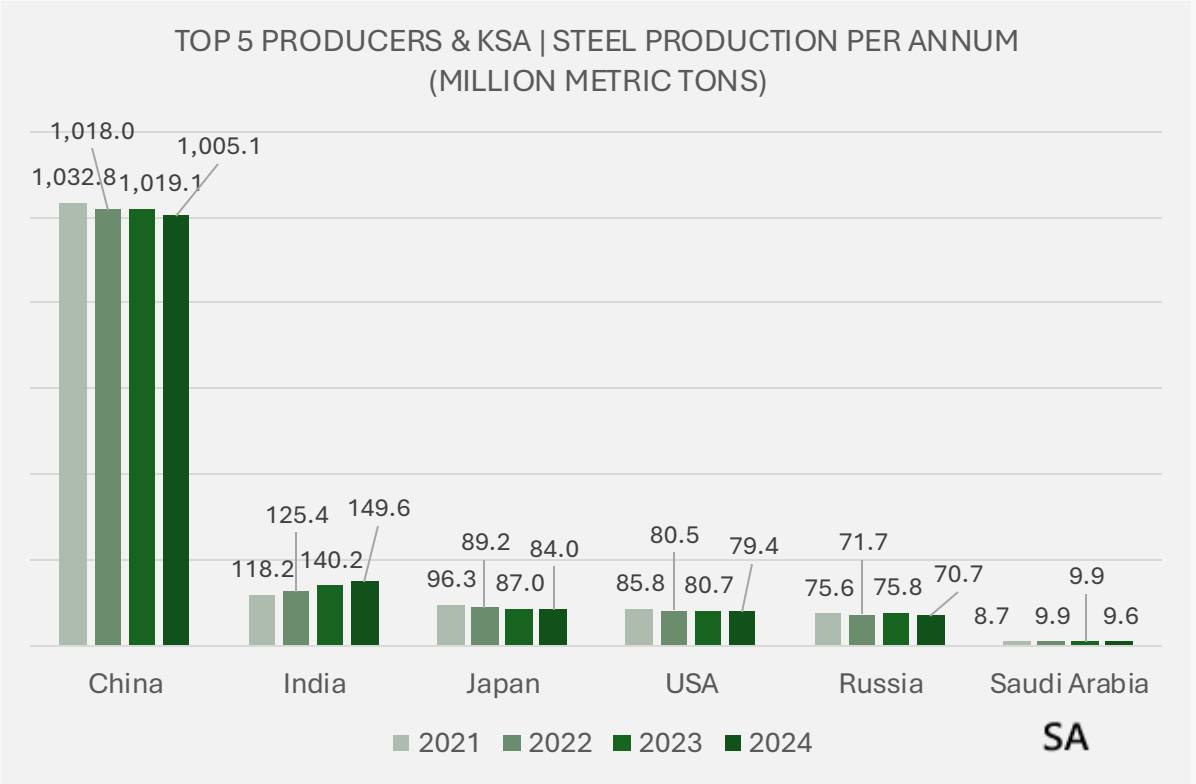
GLOBAL NEAR-TERM OUTLOOK (2025)

- Note that given 90.0% of iron ore is used for steel manufacturing, the global outlook for steel has a significant impact on the outlook for iron and vice versa.
- China's property crisis contributed to the decrease in the price of iron ore, which has impacted the demand for steel given that most iron ore is used to produce steel.
- Just as iron ore prices declined by 24.2% in 2024, so to did the price of steel rebar, which went from USD 554.6 per metric ton (SAR 2,079.7 per metric ton) in 2023 to USD 460.5 per ton (SAR 1,726.7 per ton) in 2024. This represents a decrease of 17.0%.
- As of 3M 2025, it is expected that steel prices shall continue to decline over the course of most of the year. Akin to iron ore demand, expectations of trade wars has resulted in a wait-and-see attitude among final consumers, which has had a trickle effect on demand.
- The price decrease has, likewise, been exacerbated by excess steel production, as producers adjust to revised demand patterns in 2024. Economies like China, for instance, relieved themselves of excess inventory through exports. The country exported 110.0 million tons of steel in 2024. The global steel capacity utilization rate has fallen from 77.3% at the end of Q4 2024 to 75.0% as of Q1 2025 and it remains to be seen as to when recovery sets in.
- All in all, there is an expectation that steel prices may recover towards the end of 2025. It is notable that the decrease in prices may be capitalized on by the Kingdom to reduce costs associated with its infrastructural projects.

SOURCE | Daily Metal Prices, World Steel Association, Steelonthenet.com, IMARC Group, Consultancy-me.com

THE KINGDOM UTILIZED 85% OF ITS STEEL PRODUCTION CAPACITY IN 2024

SOURCE | Daily Metal Prices, Market Place

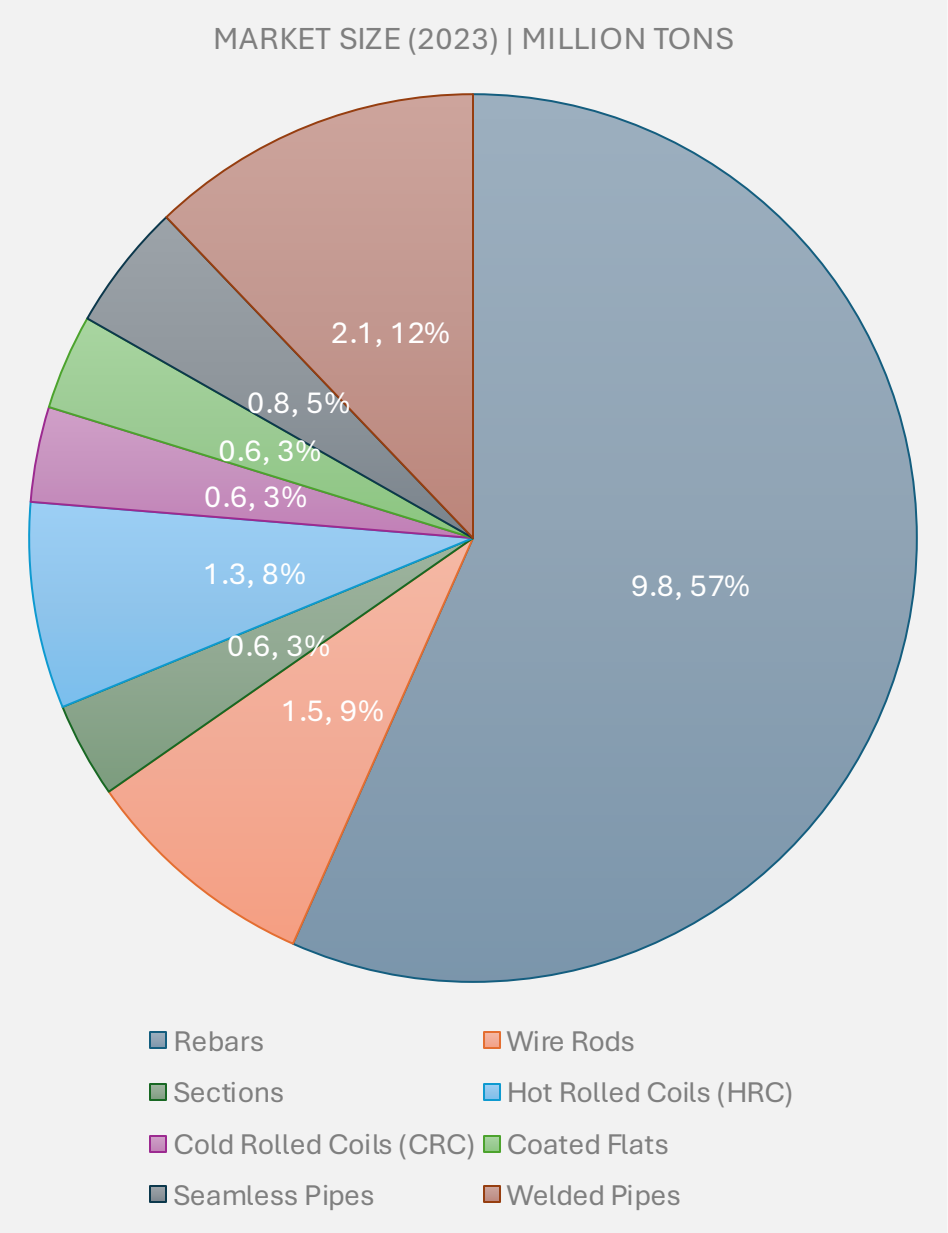


SOURCE | Wikipedia

- The price of steel rebar, being employed as a proxy for steel decreased at a CAGR of 13.6% from 2021 to 2024.
- The greatest percentage decrease in price over the periods under review took place in 2022 and 2024, representing a decrease of 19.1% & 17.0%, respectively. The decrease in 2022 has been associated with China's Zero-COVID policies and the Ukraine war, which temporarily disrupted supply chains. The decrease in 2024 is associated with China's real estate crisis, and over capacity issues as a result of new plants coming online in USA.

- China is the largest producer of steel in the world despite not being the largest producer of iron ore. That is to assist it in meeting its local demand, which is roughly estimated at around 90.0% to 95.0% of steel produced.
- Saudi Arabia produced 9.6 million metric tons of steel in 2024, which equates to 0.5% of the global total for the period (1,881.4 million tons).
- It is notable that the Kingdom is utilizing 85.0% of its steel production capacity out of a total of 11.3 million metric tons.

AN OVERVIEW OF THE KINGDOM'S STEEL PRODUCTS



- The Kingdom's steel industry is vital to national economic growth, largely serving the construction sector. Driven by major projects like Neom and Qiddiya, demand for finished steel products is expected to grow at a 3.9% CAGR from 2023 to 2026.

- Rebars — steel reinforcement bars — make up over half of the Kingdom's total steel demand, reflecting their critical use in both residential and non-residential building projects. These long steel products are essential for structural integrity and are heavily consumed in mega-projects like Neom, Red Sea, and Qiddiya.
- Welded pipes — steel tubes with a welded seam — are vital for transporting water, waste, and oil & gas in Saudi Arabia. Their demand is rising due to major infrastructure projects focused on improving utility systems, making them a key component of the Kingdom's industrial growth.
- Wire rods — thin, coiled steel products—are mainly used in construction, industrial fasteners, and wire mesh.
- Hot rolled coils are flat steel sheets processed at high temperatures, making them easy to shape and weld. They are used for structural frameworks, pipelines, storage tanks, and machinery. In the Kingdom, demand for them is driven by construction, industrial expansion, and manufacturing.
- Seamless pipes are solid steel tubes without any welded seams, offering high strength and pressure resistance. In Saudi Arabia, they are essential for demanding applications in the oil & gas, petrochemical, and power generation sectors. Their reliability under extreme conditions makes them critical to the Kingdom's energy infrastructure and industrial growth.

- By 2030, the Kingdom aims to achieve near self-sufficiency in steel production, increasing the domestic supply from 67.0% in 2019 to 99.3% by 2030.

SOURCE | Consultancy-me

THE DEMAND FOR PHOSPHATES, FUELED BY AGRICULTURE NEEDS, IS TO CONTINUE GROWING IN THE NEAR TERM

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DESCRIPTION

- Phosphate is a chemical compound derived from phosphoric acid (H_3PO_4), consisting of a phosphorus atom bonded to four oxygen atoms in a tetrahedral structure. It exists as the phosphate ion (PO_4^{3-}), which plays a crucial role in biological, industrial, and geological processes.
- Its primary source is phosphate rock, a non-renewable resource that has taken 10-15 million years to form from seabed to soil via tectonic uplift and weathering.

PROPERTIES

- Reactivity with Acids: Phosphate compounds react with strong acids, forming phosphoric acid (H_3PO_4) and soluble phosphate salts. This reaction is essential in fertilizer production and industrial processing.
- Strength & Durability: Phosphate minerals, such as apatite, exhibit high durability and are widely used in ceramics, biomaterials, and industrial coatings.
- Biological Role: Phosphate is essential for cellular energy transfer, forming ATP (adenosine triphosphate), which powers biochemical reactions.
- Complex Formation: Phosphate readily forms complexes with metals, influencing mineral solubility and biogeochemical cycles.

SOURCE | Wikipedia, Chemistry Stack Exchange, Springer Nature Link, Vedantu, Columbia Engineering Hub, Geeks for Geeks, Phosphorus Futures

GLOBAL UTILITY & DEMAND DRIVERS

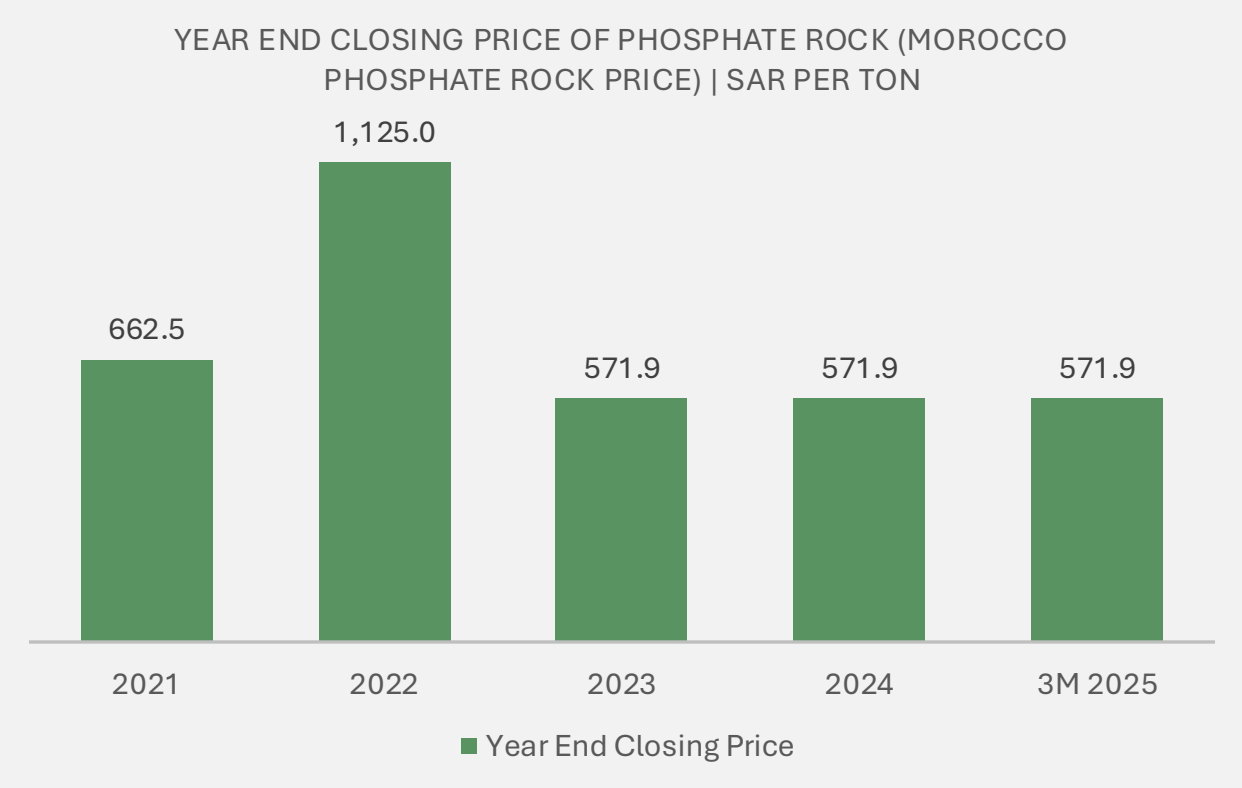
- Agricultural Demand (Fertilizers): 85% to 90% of global phosphate consumption is in fertilizers, essential for crop yields and food security. It is notable that there will be 9.0 billion mouths to feed by 2050.
- Energy Storage & Battery Technology: Lithium Iron Phosphate (LFP) batteries are replacing nickel-cobalt batteries in EVs and energy storage systems, boosting phosphate demand.
- Industrial & Food Applications: Used in detergents, food additives, and metal processing.
- Geopolitical & Trade Factors: Morocco controls ~70% of global phosphate reserves, making supply chains vulnerable to geopolitical shifts. Therefore, countries have taken it upon themselves to diversify suppliers and even reduce import dependency.

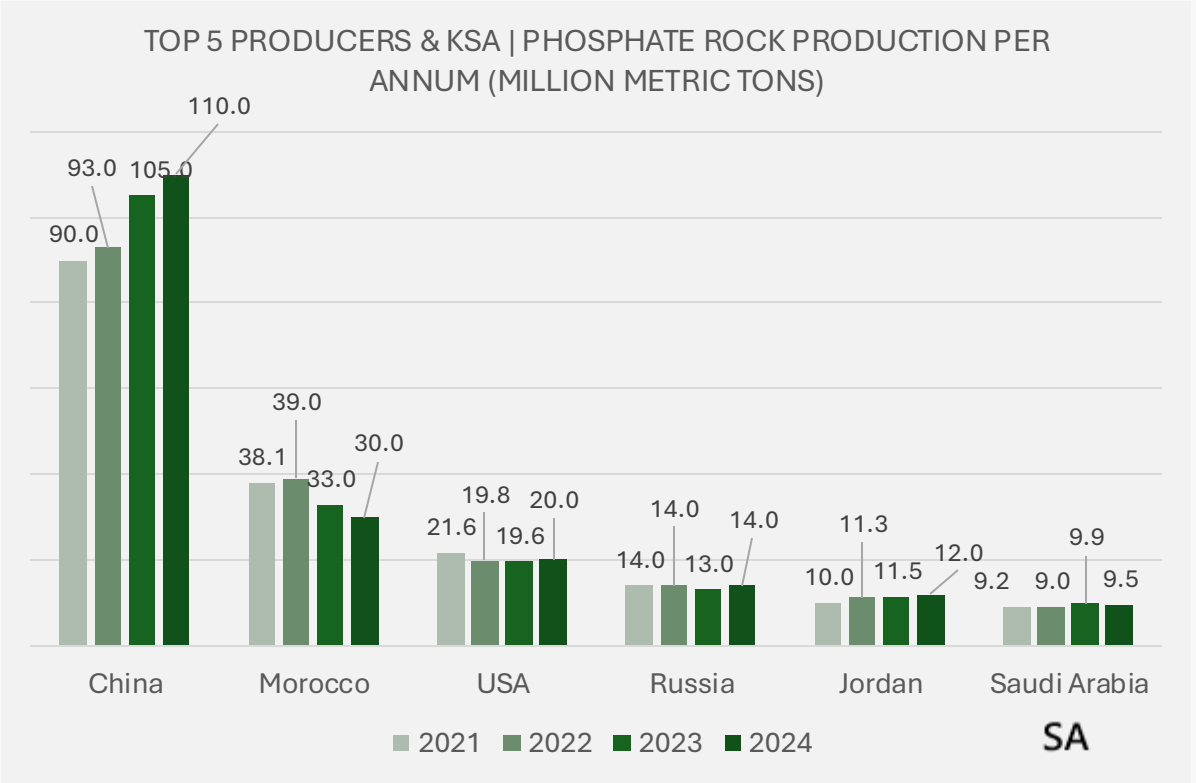
GLOBAL NEAR-TERM OUTLOOK (2025)

- The global phosphate market is projected to continue growing in the future because of fertilizer demand, LFP battery technology, and its utility in industrial processes.
- Note that according to the US Geological Survey of 2015, Morocco, China, Algeria, Syria & South Africa together control around 88% of the world's phosphate. That has considerable implications for agriculture in the rest of the world. For instance, China maintains export restrictions (as of 2024) on its phosphate supply, an act that results in inflationary pressure on prices in high-demand regions like India and Southeast Asia.
- It is probable that Morocco will amp up its phosphate production in the short term to ease global demand fluctuations, but high sulfur, ammonia, and natural gas prices will continue to burden the production cost for derivatives (fertilizers).

SOURCE | Phosphorus Futures, Benzinga, Discovery Alert, Future Market Insights, Discovery Alert, Phosphorus Futures, Green GUBRE Group

68% OF ALL GLOBAL PHOSPHATE RESERVES CONCENTRATED IN MOROCCO





SOURCE | Y Charts

- The price of phosphate rock remained stable over the course of 2023 and 2024.
- The only exception to the relative stability across the periods under review is 2022, when the price rose by 69.8%, only to decrease by 49.2% by the end of 2023.
- The 69.8% growth in 2022 resulted from China's export restrictions on phosphate fertilizers and the Russia-Ukraine war, which disrupted trade and ramped up the energy costs associated with phosphate quarrying & derivative production.
- The 49.2% decrease in 2023 occurred due to the easing of China's export restrictions, and the reduction of US import duties on Moroccan phosphate from 20.0% to 2.1%.

SOURCE | USGS

- China is the largest producer of phosphate in the world despite not possessing the greatest phosphate reserves.
- The top 3 countries with respect to phosphate reserves include: i) Morocco (50,000 million tons), ii) China (3,700 million tons), and iii) Egypt (2,800 million tons).
- Saudi Arabia's total reserves equal 1,000 million tons, which is 1.4% of the world's total.

ALTERNATIVE USES FOR LIMESTONE REINFORCING ITS DEMAND

RATING Financial Analytics التحليلات المالية

DESCRIPTION

- Limestone is a sedimentary rock primarily composed of calcium carbonate ($CaCO_3$). It forms over millions of years through the accumulation of marine fossils, coral, and shell fragments, compacted by natural forces.

PROPERTIES

- Reactivity with Acids: Limestone reacts with acids, producing carbon dioxide (CO_2) and forming soluble calcium salts. This reaction is crucial in soil treatment and water purification.
- Heat Decomposition: When heated to above 900°C, limestone undergoes thermal decomposition, breaking down into quicklime (CaO) and CO_2—a key process in cement production.
- Strength & Durability: Limestone is strong yet workable, making it ideal for construction materials.

SOURCE | Britannica

GLOBAL UTILITY & DEMAND DRIVERS

- Construction: Used in cement, concrete, and building materials.
- Industrial Applications: Essential for steelmaking, water purification, and glass production.
- Agriculture: Helps regulate soil acidity when ground into lime powder.
- Decorative Stone: Used for flooring, monuments, and sculptures.

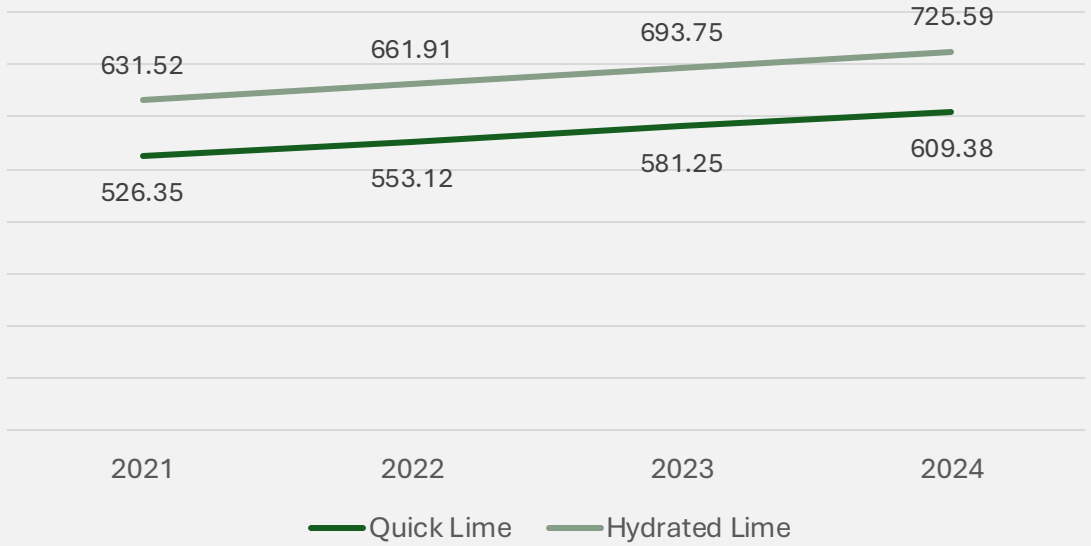
GLOBAL NEAR-TERM OUTLOOK (2025)

- The global limestone market is, by some estimates, expected to grow at a CAGR of over 3.0% from 2025 to 2030, driven by construction, steel manufacturing, and environmental applications. A condition for this growth is that China's property crisis does not worsen.
- Note that global infrastructure spending is expected to grow by 4.0% in 2025. If that expectation comes to fruition, it will cause upward pressure on the price of limestone due to it being a primary ingredient for the production of cement,
- Growing awareness of the need to reduce pollution has led to the adoption of limestone-based solutions for flue gas desulfurization, water treatment, and waste management.
- The agricultural sector's need for sustainable soil management practices has boosted limestone demand. Acidic environments limit crop production, and limestone is an effective and affordable solution for neutralizing acidity.
- All in all, given that limestone's demand is driven primarily by infrastructure development, it remains important that the global infrastructure development industry achieve its growth objectives.

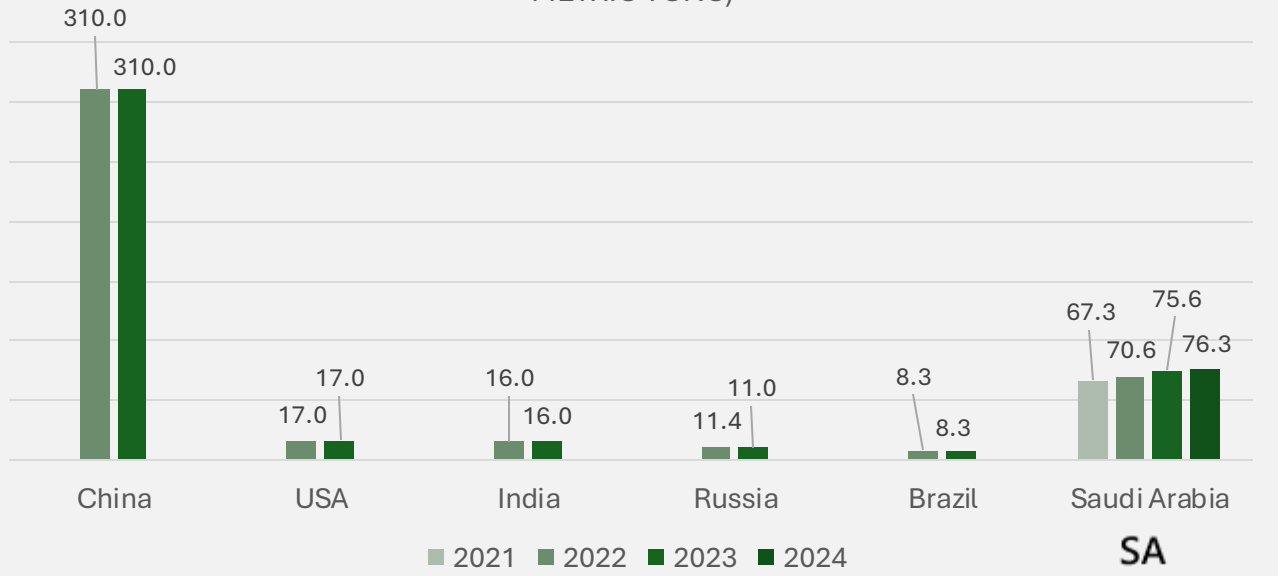
SOURCE | GMK Center, Market Reports Insights, Science Direct, Britannica

CHINA HAS AN EXPONENTIAL LEAD IN LIMESTONE PRODUCTION

CAGR PRICE PROJECTION FOR LIMESTONE BASED ON PRICES IN US | SAR PER TON



TOP 5 PRODUCERS | LIMESTONE PRODUCTION PER ANNUM (MILLION METRIC TONS)



SOURCE | Electro IQ

- Note that the price trends constitute a CAGR projection using known prices for 2019 & 2023 in USA.
- Quick lime (CaO) is limestone heated to remove CO_2, while hydrated lime ($Ca(OH)_2$) forms when quick lime reacts with water.
- In KSA, limestone prices range between SAR 17 and SAR 22 per ton. This represents around 27.0% maximum for end products that do not require several production stages and 10.0% minimum for end products that go through multiple production stages.
- Note that the pricing structure in the Kingdom exhibits a difference between the price of limestone in the Kingdom relative to USA. This difference is not overcome by arbitrage because limestone is too heavy & bulky to economically transport to other parts of the world.

SOURCE | Electro IQ, Beijing Stars Stone, USGS

- Note: Data for 2021 or 2024 could not be obtained or verified. Moreover, global limestone production approximates to 430.0 million metric tons in 2023.
- China dominates limestone production, but its precise reserves remains unsubstantiated. Its high production levels are caused by the demand from its steel and cement industry. Note for instance that China is the world's largest cement producer.
- The Kingdom's limestone production has grown over the periods under review. The figures in the table above for the Kingdom include limestone blocks and that quarried for cement manufacture.

THE MARKET FOR GYPSUM EXHIBITS A POSITIVE NEAR-TERM OUTLOOK

DESCRIPTION

- Gypsum is a soft sulfate mineral composed of calcium sulfate dihydrate ($CaSO_4 \cdot 2H_2O$), widely used in construction, agriculture, and industry. Gypsum forms through evaporation in shallow sea basins, lagoons, and coastal areas, where calcium sulfate crystallizes as water evaporates. It may also form as a by-product of industrial processes, such as scrubbing sulfur from fossil fuels.
- The Kingdom produces gypsum through quarrying works, and it is postulated that it, likewise, produces gypsum, through sulfur scrubbing. That has been postulated because the Kingdom was to commission a wastewater-free flue gas scrubbing plant in Jazan, Saudi Arabia in 1Q 2018.

PROPERTIES

- Reactivity with Acids: Gypsum is chemically stable in weak to moderate acidic environments.
- Heat Decomposition: When heated to 150°C–180°C, gypsum loses water and converts into Plaster of Paris.
- Strength & Durability: Gypsum is soft but highly workable, making it ideal for plaster, drywall, and molds.

SOURCE | Geology Science, PermuTrade, Steuler, Geology

GLOBAL UTILITY & DEMAND DRIVERS

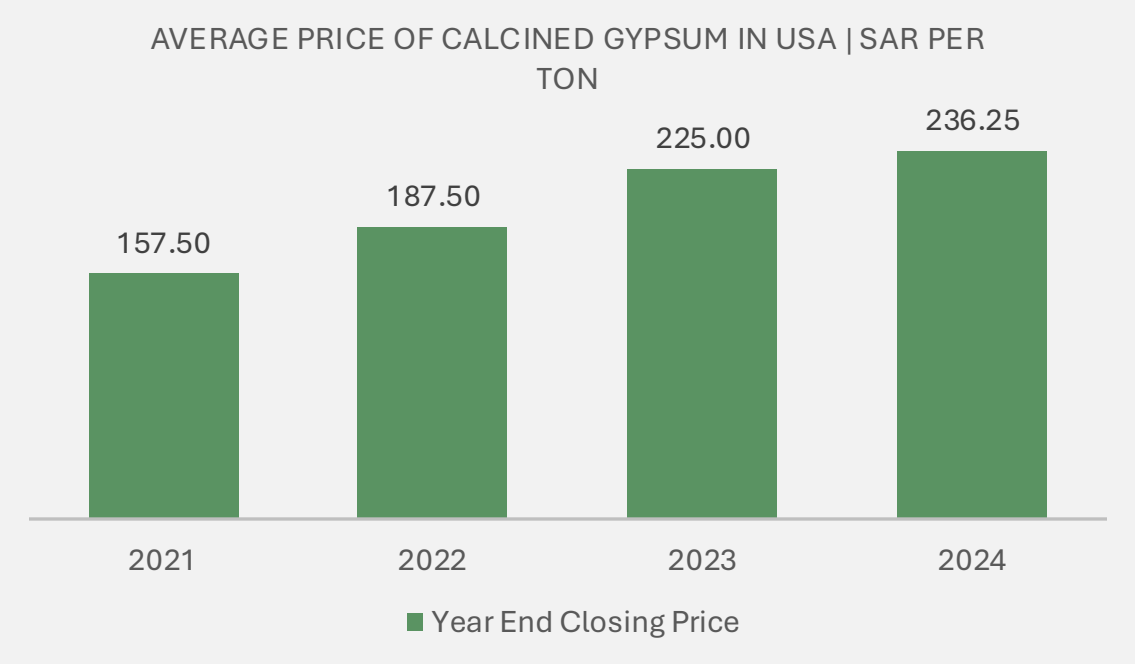
- Construction & Building Materials: Used in drywall (gypsum board) for walls and ceilings. Essential in Plaster of Paris (PoP) for decorative molding and finishes.
- Industrial Application: Acts as a cement additive to control setting time. Used in ceramics, paper, and textiles as a filler.
- Agriculture & Environmental Uses: Improves soil structure and reduces compaction. Helps neutralize saline and sodic soils, enhancing crop growth.
- Consumer & Everyday Products: Found in toothpaste and cosmetics as a binding agent. Used in medical applications, including orthopedic casts.

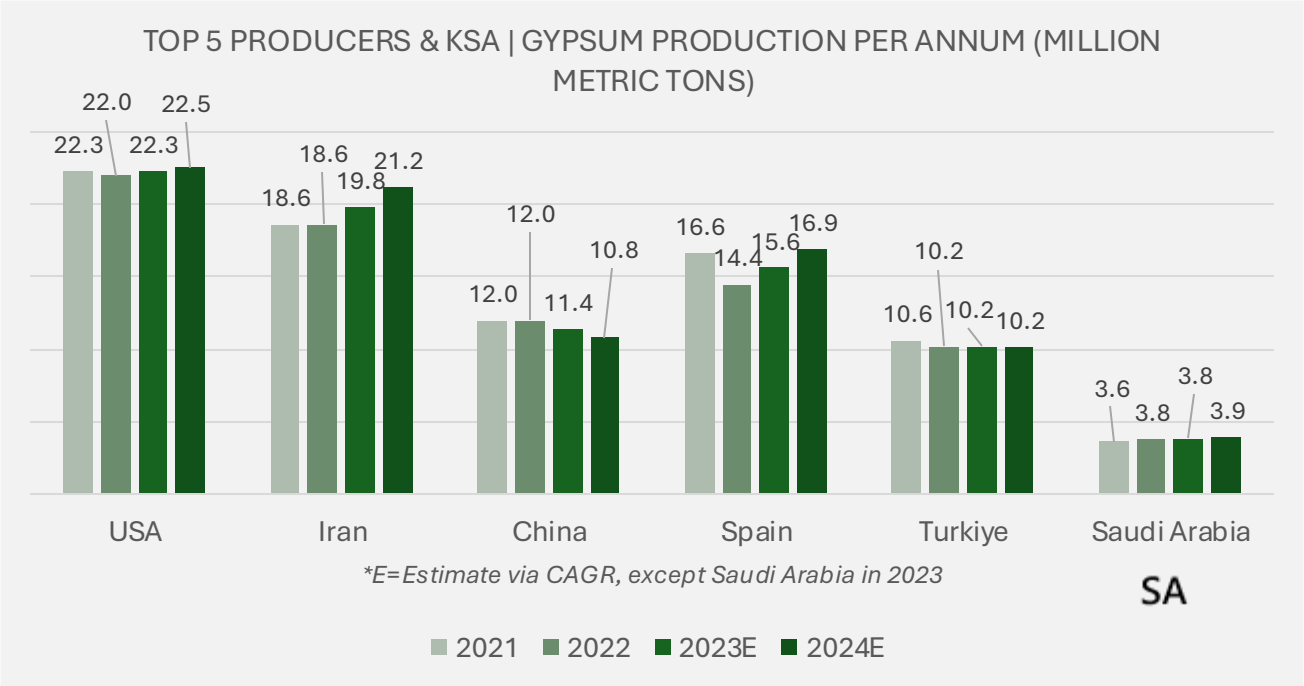
GLOBAL NEAR-TERM OUTLOOK (2025)

- The demand for gypsum from 2025 to 2035 is expected to be driven by the infrastructure & construction, agricultural, industrial, pharmaceutical, and medical sectors.
- Drywall is the largest end-use segment for gypsum. Its consumption is led by USA, where more than 80.0% of homes utilize gypsum for its fire-resistant properties.
- Gypsum is a key regulator for setting time in the production of Portland cement. While urbanization continues to fuel the demand for gypsum in this market, it is noteworthy that the outlook for gypsum in this context is akin to the outlook for limestone.
- The demand for gypsum-based PoP remains on the rise with extensive usage in architectural finishes. Its demand is, likewise, fueled by orthopedic use in the medical industry.
- Gypsum is gaining traction as a soil conditioner. North American farmers are infusing soil with gypsum to improve the soil structure, increase water absorption, and avoid run-off nutrients.
- All in all, there are a myriad number of factors driving the demand for gypsum and that is expected to continue for the remainder of the decade.

SOURCE | Future Market Insights, PermuTrade, Steuler, Geology

THE KINGDOM PRODUCES ROUGHLY 3% OF THE WORLD'S GYPSUM IN 2024





SOURCE | Statista, CEIC

- Note that the pricing structure in the Kingdom exhibits a difference between the price of gypsum in the Kingdom relative to USA. This difference is not overcome by arbitrage because gypsum, like limestone, is too bulky to economically transport to other parts of the world.
- Calcined gypsum, as noted above, differs from ordinary gypsum in that it has been heated to remove its water content. The procedure allows for greater utility in the construction industry.
- In January 2025, the price of gypsum in the Kingdom hovered at SAR 400.0 per ton, which is higher than the average price of SAR 236.3 per ton in USA for 2024. This is postulated as resulting from both a demand-supply gap and a higher supplier concentration within the Kingdom.

SOURCE | KAPSARC, USGS

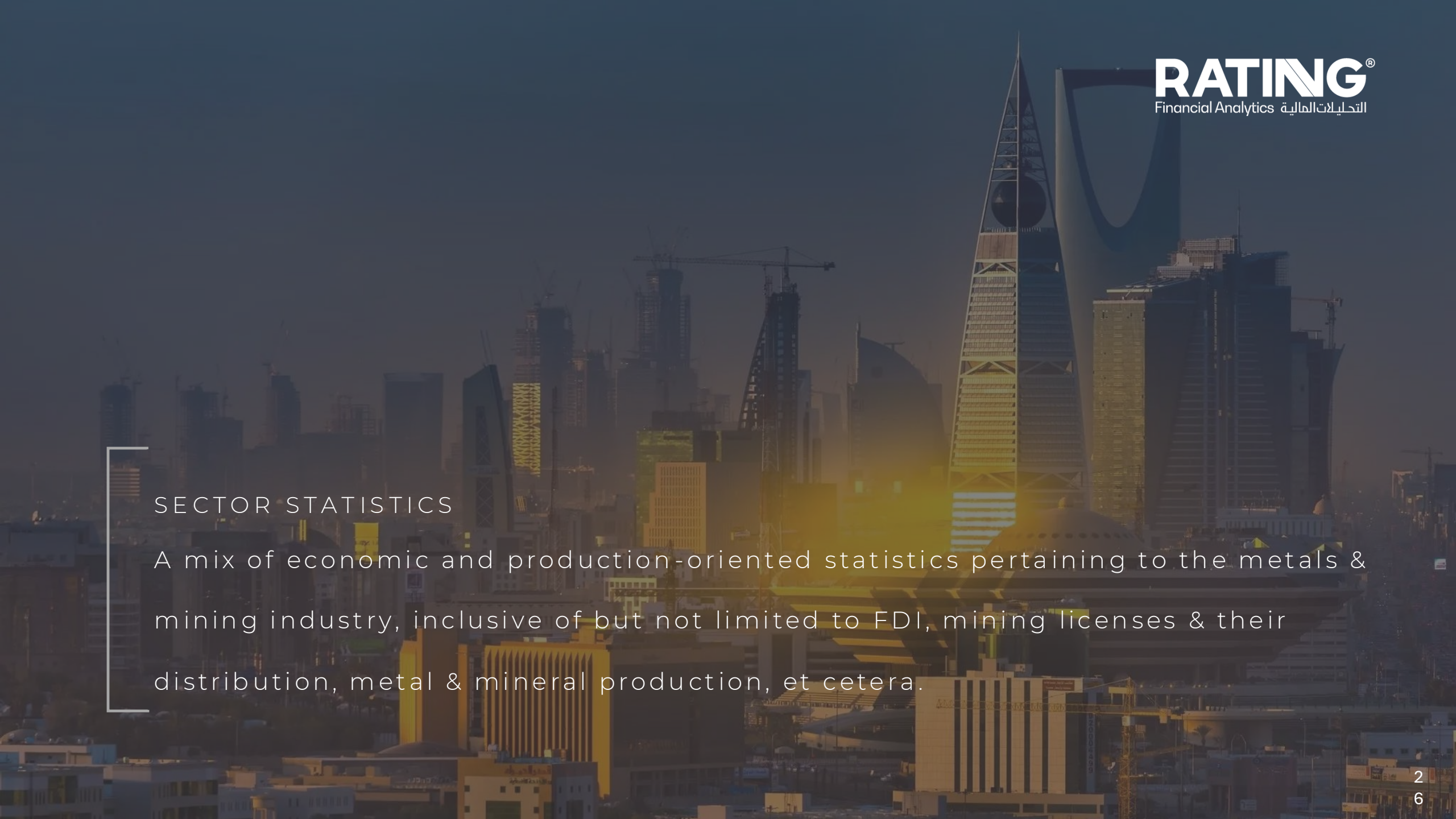
- Note: The production figures for 2023 and 2024 are CAGR estimates using data points spanning five-years from 2017 to 2022.
- As in the case of gold, the magnitude of the discrepancy between the top five gypsum producers is limited. Case in point: the largest producer (USA) exceeded the 5th largest producer (Türkiye) by only 2.2x in 2024 (CAGR estimate). That stands in contrast to copper, for instance, where the difference between the largest and 5th largest in 2024 is 4.8x.
- National Gypsum Company (NGC) is the only listed gypsum producer in the Kingdom.
- In 2022, global gypsum production equaled 170.1 million metric tons. Of this, the Kingdom's contribution equaled 2.2% or 3.8 million metric tons.

THE KINGDOM CONTAINS A BREADTH OF RARE EARTH ELEMENTS

Rare Earth Elements in KSA	Properties	Utility	Global Demand Drivers	Generalized Global Near-Term Outlook (2025)
Neodymium (Nd)	Magnetic, ductile, silvery-white	Used in permanent magnets for EV motors, wind turbines	EV growth, renewable energy expansion	High demand due to EV and wind energy
Dysprosium (Dy)	High-temperature magnetism	Enhances heat resistance in magnets	EVs, defense tech, robotics	Increasing demand for high-performance magnets
Lanthanum (La)	Soft, malleable, reactive	Used in catalysts, optics, and batteries	Petrochemical refining (catalysis), hybrid vehicles	Steady demand from oil refining and battery tech
Yttrium (Y)	High melting point, corrosion-resistant	Used in lasers, ceramics, and superconductors	Aerospace, medical imaging	Growing demand for high-tech applications
Praseodymium (Pr)	Strong magnetic properties	Used in magnets, alloys, and aircraft engines	Aerospace, EVs	Rising demand for lightweight alloys
Gadolinium (Gd)	Neutron absorption, paramagnetic	Used in MRI contrast agents, nuclear reactors	Medical imaging, nuclear energy	Expanding demand in healthcare and energy
Niobium (Nb)	High strength, superconducting	Used in steel alloys, aerospace, and superconductors	Steel industry, quantum computing	Steady demand for high-strength alloys
Tantalum (Ta)	Corrosion-resistant, high melting point, biocompatibility	Used in medical implants, electronics, capacitors, and aerospace	Semiconductor growth, defense applications, medical utility	Increasing demand for high-performance electronics
Cerium (Ce)	Oxidation-resistant (oxide compounds), catalytic	Used in glass polishing, catalysts, and alloys	Automotive catalytic converters, glass industry	Stable demand for industrial applications
Europium (Eu)	Phosphorescent, luminescent	Used in LEDs, fluorescent lamps, and nuclear reactors	Display technology, nuclear shielding	Rising demand for high-efficiency lighting
Terbium (Tb)	Strong magnetic properties	Used in magnets, lasers, and phosphors	EV motors, defense optics	Increasing demand for high-performance magnets

SOURCE | 6W Research, IMARC, Discovery Alert, Invest Saudi, MEED, Rare Earth Exchanges

- Rare earth elements (REEs) are a group of 17 metallic elements that, despite being relatively abundant, are challenging to extract in commercially viable concentrations. Their strategic significance spans national security, technological innovation, and clean energy, making them essential to modern industries. REEs power defense systems like precision-guided missiles and radar, enable miniaturization in electronics, and drive economic competitiveness in sectors like consumer tech and medical devices. They are also critical for renewable energy, with wind turbines and electric vehicles relying on neodymium and dysprosium in motors and magnets.
- Saudi Arabia is positioning itself as a key player in the rare earth supply chain, leveraging its strategic location between Eastern and Western markets to become a processing hub. The Kingdom's low-cost energy and abundant natural gas make rare earth refining economically competitive, with costs potentially approaching Chinese levels. Geological surveys indicate significant rare earth deposits in the Arabian Shield, perhaps comparable to major global producers. The 2020 mining law overhaul streamlined regulations, attracting foreign investment into strategic mineral extraction. Under Vision 2030, Saudi Arabia prioritizes mining and mineral processing to diversify its economy, aiming to establish itself in high-value industries like magnet manufacturing, which China currently dominates.

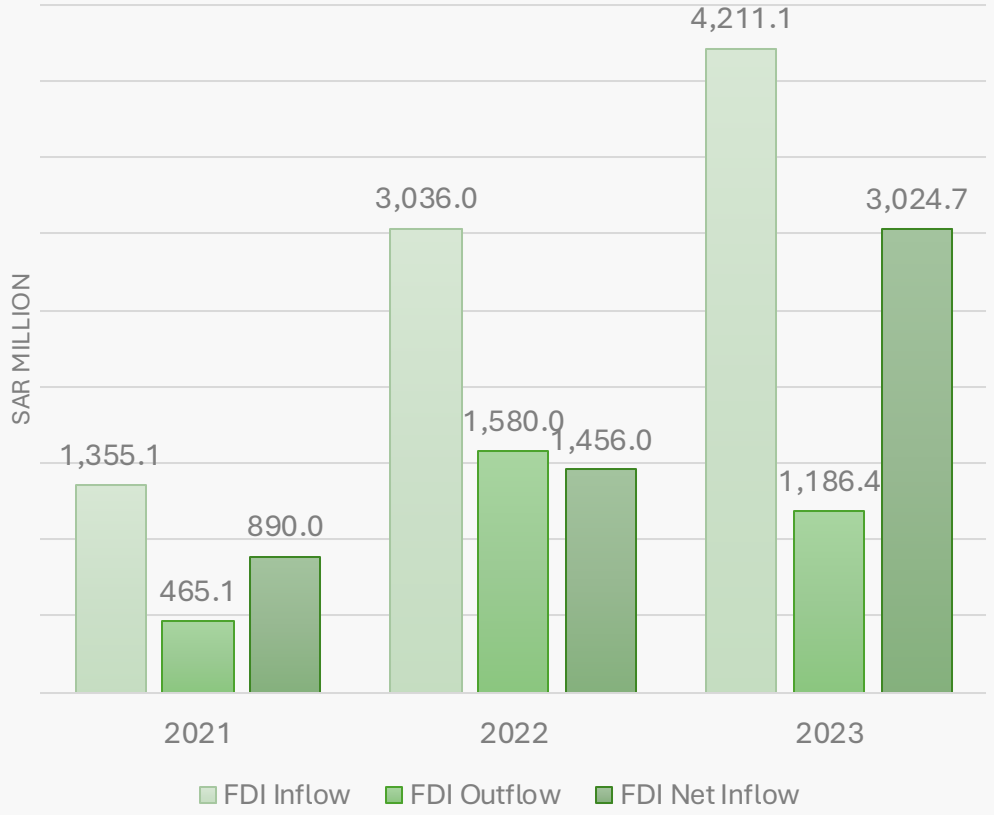


SECTOR STATISTICS

A mix of economic and production-oriented statistics pertaining to the metals & mining industry, inclusive of but not limited to FDI, mining licenses & their distribution, metal & mineral production, et cetera.

NET FDI INFLOW INTO THE MINING & QUARRYING SECTOR CONTINUES TO GROW

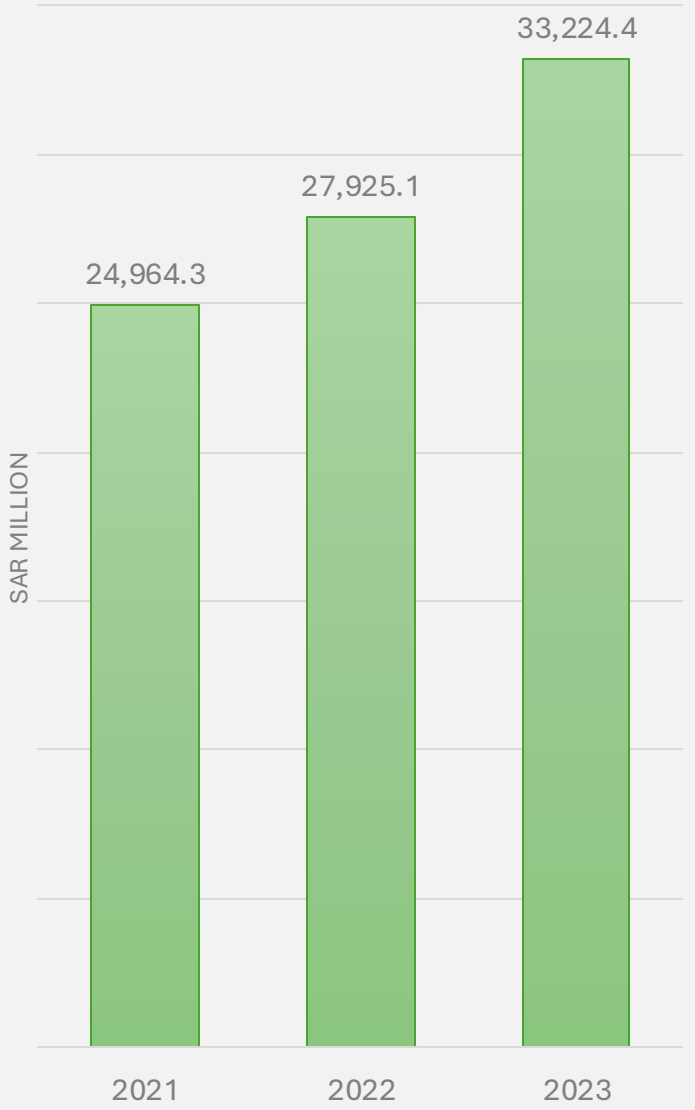
MINING & QUARRYING | FDI BREAK-UP



SOURCE | Ministry of Investments

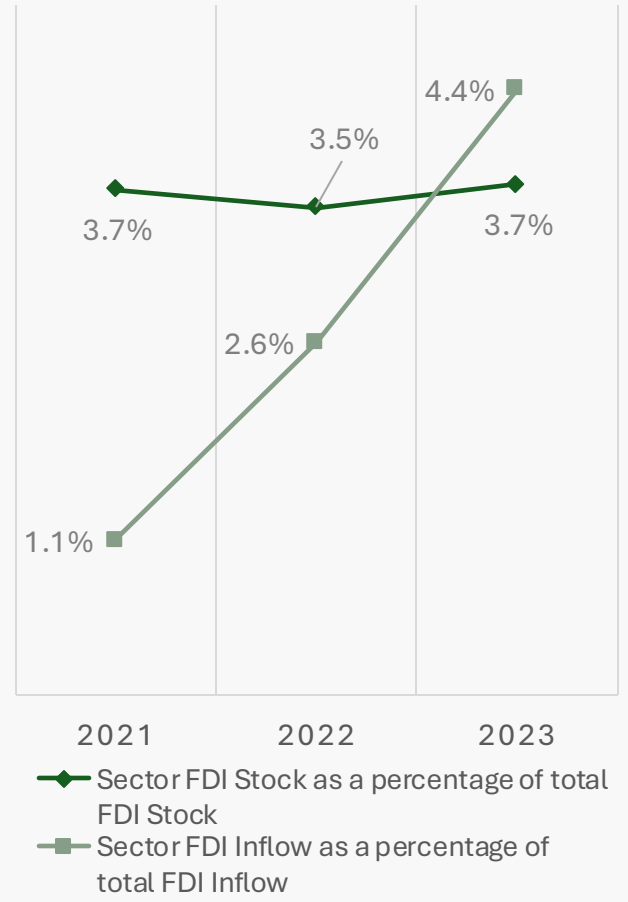
- FDI inflow into the mining & quarrying sector has grown across the periods under review and so has the gap between inflows and outflows as represented by FDI Net Inflow.
- The growth in FDI Net Inflow is indicative of international interest in this sector of the Kingdom's economy.

FDI STOCK (CUMULATIVE NET INFLOW)



SOURCE | Ministry of Investments

MINING & QUARRYING



SOURCE | Ministry of Investments

- FDI Inflow as a percentage of total FDI inflow into the Kingdom has grown period-on-period, thereby emphasizing the growing relative interest in the domain.

NET FDI INFLOW INTO THE MANUFACTURING SECTOR RECOVERED IN 2023

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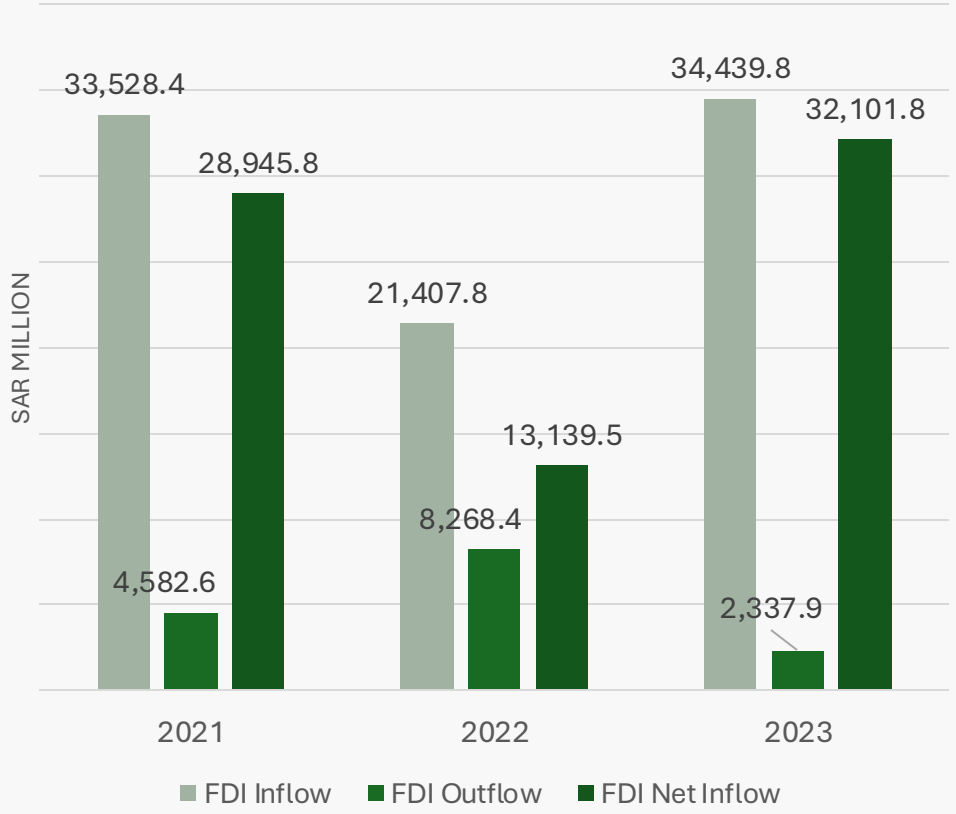
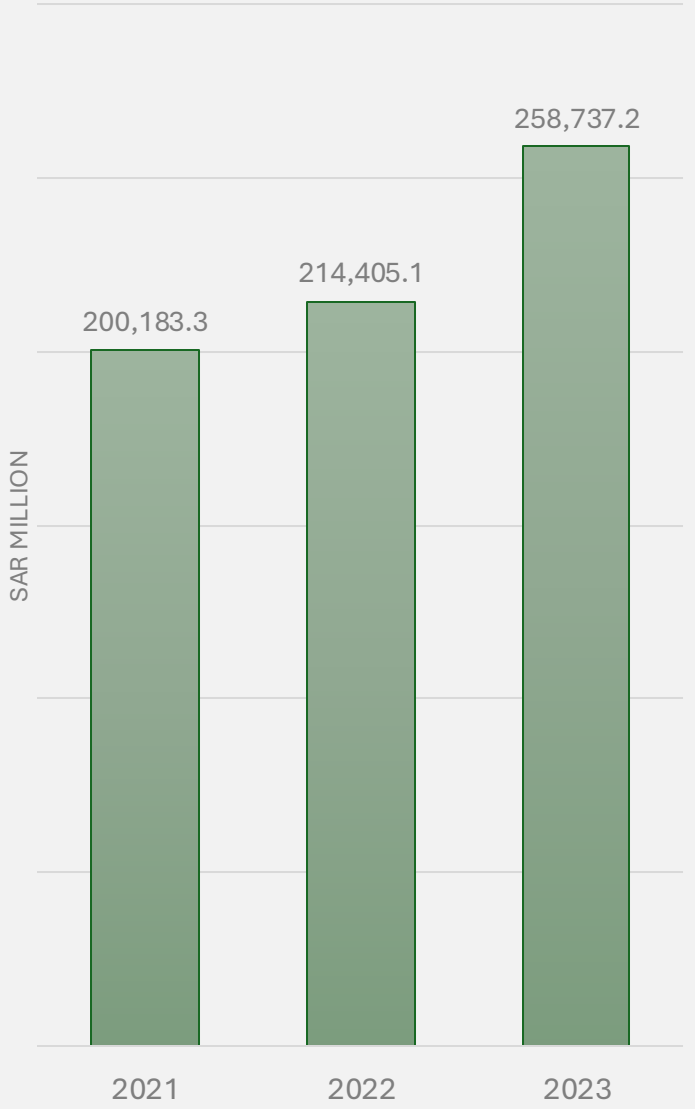
MANUFACTURING | FDI BREAK-UP



SOURCE | Ministry of Investments

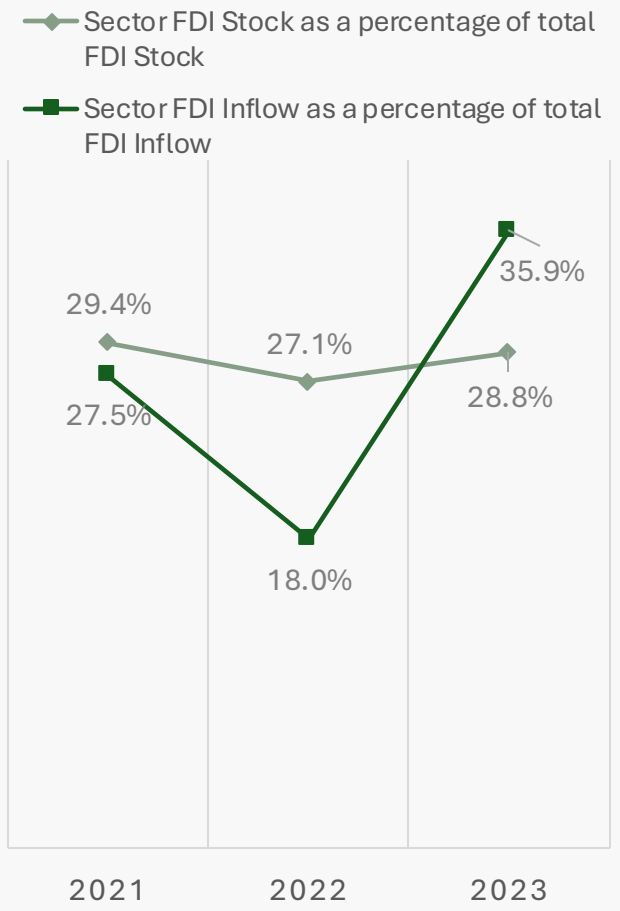
- Note: "Manufacturing" as noted above does not exclude "Petroleum Refining" but continues to include a variety of industries ranging from metallurgical works to pharmaceuticals.
- FDI inflow into the manufacturing sector deteriorated in 2022 due to the growth in geopolitical risks during the period.

FDI STOCK (CUMULATIVE NET INFLOW)



SOURCE | Ministry of Investments

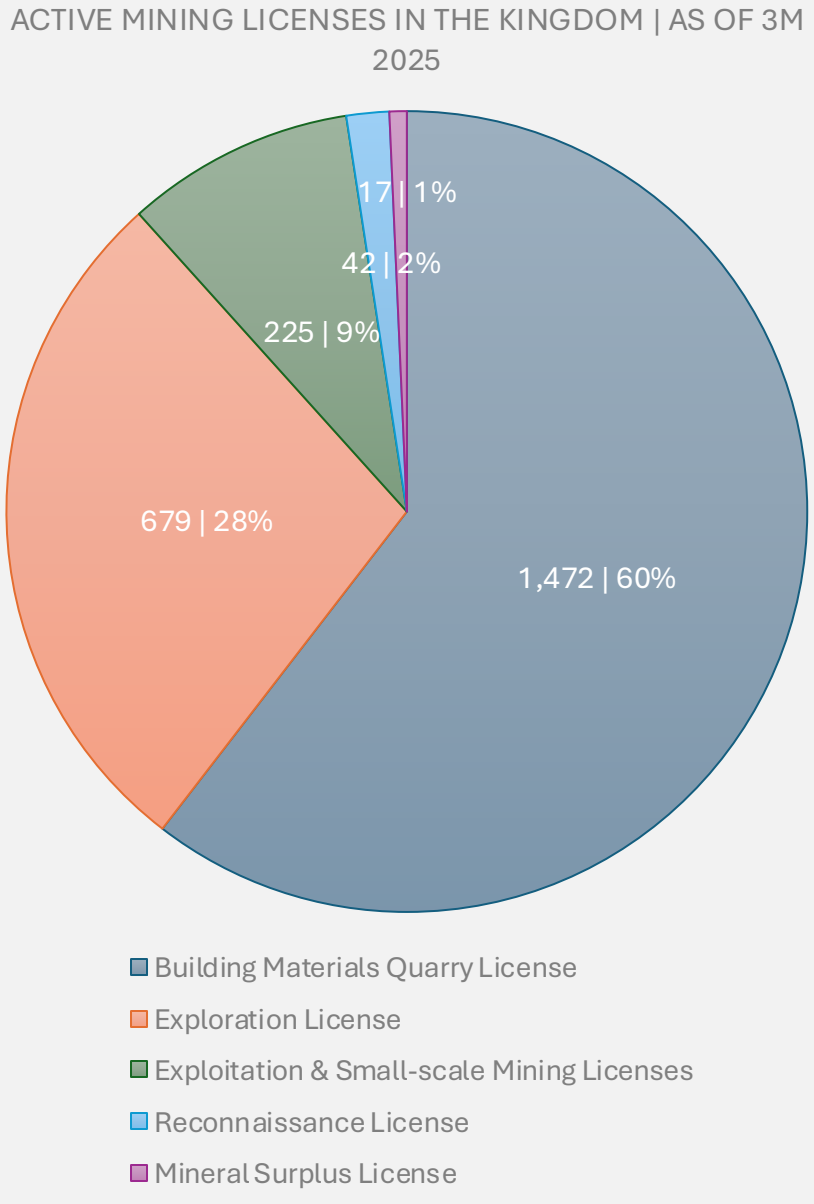
MANUFACTURING



SOURCE | Ministry of Investments

- FDI Inflow as a percentage of total FDI inflow into the Kingdom diminished in 2022 in line with FDI inflow but has since then recovered.

2435 ACTIVE MINING LICENSES IN THE KINGDOM (MARCH 2025)



- As of March 2025, the Kingdom has 2,435 active mining licenses.
- Of the above total, 1,472 or 60% are building materials quarry licenses. This license is intended to cover the extraction of non-metallic materials like limestone, gypsum, and sand. The dominance of this license is indicative of the strength of the Kingdom's construction sector.
- 28% or 679 of the total licenses are exploration licenses. They grant the right to conduct detailed exploration for mineral deposits.
- Exploitation & small-scale mining licenses number just 225 or 9% of the total. Note that this license type represents a significantly smaller proportion than the Building Materials Quarry License, thereby indicating considerable room for future growth and development in the mining of the Class A mineral category.
- Reconnaissance licenses, which permit preliminary geological surveys to identify potential mineral deposits are limited to 42 or just 2% of the total. Given that this license type eventually leads to greater exploitation licenses, it is imperative that the pursuit of the former be incentivized.
- To this effect, the Kingdom launched a new incentive package in Q1 2025 to encourage FDI into the mining sector. The Saudi Minister of Industry and Mineral Resources has stated that the nation seeks to promote exploration opportunities across 5,000 sq. km of mineralized belts in 2025.
- The Kingdom is projected to invest SAR 120.0 million (USD 32.0 million) in 2025 as mining incentives aimed at supporting companies with the right technical expertise. Note that FDI into mining & quarrying was SAR 4.2 billion in 2023, which is 4.4% of the total.

SOURCE | Arabic Trader, Arab News

REGIONAL DISTRIBUTION OF MINING LICENSES AS OF NOVEMBER 2023

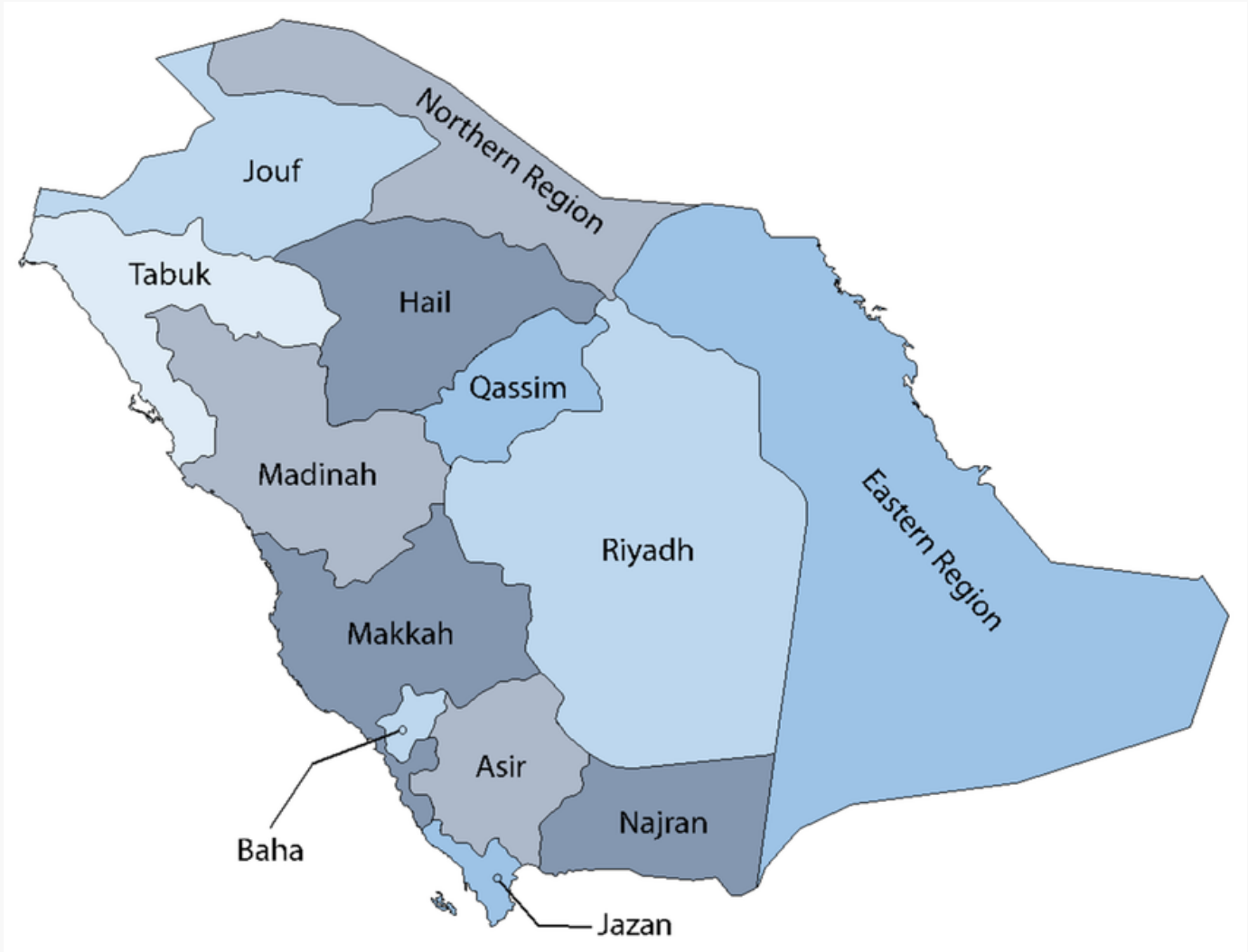
Administrative Region	Reconnaisance	Exploration	Exploitation & Small-scale Mining	Building Materials Quarry	Mineral Surplus	Total
Riyadh	4	152	33	391	0	580
Baha	0	14	0	16	0	30
Najran	1	10	3	44	0	58
Jazan	0	0	2	67	1	70
Jouf	1	4	1	19	0	25
Hail	2	15	5	33	0	55
Makkah	4	181	38	168	2	393
Tabuk	2	47	19	66	0	134
Asir	3	44	8	122	0	177
Eastern	0	5	31	353	9	398
Qassim	1	6	8	48	7	70
Northern	0	0	13	14	0	27
Madinah	4	79	23	132	3	241
Total	22	557	184	1,473	22	2258

SOURCE | Open Data Forums

- In November 2023, the Kingdom had 2,258 active mining licenses.
- The top three regions with the greatest mining & quarrying activity include: i) Riyadh (25.7%), ii) Eastern (17.6%), and iii) Makkah (17.4%).

REGIONAL MINERAL DISTRIBUTION

Administrative Region	Minerals
Riyadh	Limestone, gypsum, gold, iron ore, granite.
Baha	Gold, copper, zinc, marble, granite, feldspar.
Najran	Gold, copper, zinc, granite.
Jazan	Copper, gold, iron ore.
Jouf	Silica, limestone, gypsum, basalt, dolomite.
Hail	Gold, copper, iron ore, basalt.
Makkah	Gold, copper, silver, iron ore, granite, marble.
Tabuk	Phosphate, limestone, uranium.
Asir	Gold, silver, copper, zinc, marble.
Eastern	Phosphate, bauxite, limestone, sulfur.
Qassim	Limestone, gypsum.
Northern	Limestone, dolomite, uranium, Rare Earths
Madinah	Gold, copper, zinc, silver.



SOURCE | Saudipedia, National Geological Database, SMEDG, Saudi Geological Survey, and other references on the world wide web

PROMINENT MINES/QUARRIES/SITES IN THE KINGDOM

Mine/Quarry/Site	Major Element(s)	Administrative Region	Reserves	Annual Production Capacity	Operator
Ad-Duwayhi Mine	Gold	Makkah	53.9 tons (Element Estimate: 2015)	5.1 tons per annum (Element Estimate: 2016)	MAADEN
Mahd Adh-Dhahab Mine	Gold	Medina	-	0.8 tons per annum (Element Estimate: 2024)	MAADEN
Jabal Sayid Mine	Copper	Medina	280,000 tons (Element Estimate: 2024)	30,000 tons per annum (Element Estimate: 2024)	MAADEN and Barrick Gold Corporation
Al Masane Mine	Primary: Copper, Zinc Other: Gold, Silver	Najran	Overall ore reserves of 7.9 million tons	Copper: 30,000 tons per annum, Zinc: 70,000 tons per annum (Element Estimate: 2024)	AMAK
Wadi Sawawin Mine	Iron Ore (Iron: 40.0%)	Tabuk	Overall ore reserves of 429.0 million tons (Element Estimate: 2019)	5.0 million tons per annum (Outdated Preliminary Estimate: 2010)	-
Saudi Lime Quarry	Limestone, Dolomite	Riyadh	Strategic Stock: 11.0 million tons (Limestone), 7.0 million tons (Dolomite)	600,000 tons per annum (Limestone) and 360,000 tons per annum (Dolomite) (Estimate: 2023)	Saudi Lime Industries Company
Al Jalamid Mine	Phosphate Rock	Northern	Overall rock reserves of 262.7 million tons (Estimate: 2022)	3.2 million tons per annum of ammonium phosphate (Estimate: 2022)	MAADEN
Al Ba'itha Mine	Bauxite (Aluminum Source)	Qassim	Overall ore reserves of 183.0 million tons (40.0% aluminum content) (Estimate: 2023)	4.8 million tons (Mineral Estimate: 2022)	MAADEN and Alcoa Corporation
Ghurayyah Mine	Tantalum (Rare Earth)	Tabuk	Overall ore reserves of 385.0 million tons (Grading 0.025%) (Estimate: 2002)	-	Tertiary Minerals
Zarghat Mine	Magnesite	Hail	Overall ore reserves of 3.0 million tons (Grading 38%-48%) (Estimate: 1985)	-	-

SOURCE | Saudipedia, Mining Technology, Mining See, Barrick, Yieh Corp, Proactive Investors, Wikipedia, AMAK, Saudi Lime, Argaam, Mining Data Online, USGS, GSWA, MEED, The Diggings, Saudi Digital Library

THE KINGDOM'S METAL AND MINERAL OUTPUT

Metals	Unit (Default: Million Metric Tons)	2021	2022	2023	*2024
Aluminum:					
Bauxite		5.08	5.30	5.40	5.50
Alumina		1.92	1.75	1.83	1.84
Copper, mine, concentrates:					
Gross weight	Metric Tons	308,000	304,000	288,000	290,660
Cu content, 25% Cu	Metric Tons	77,000	76,000	72,000	73,036
Ferroalloys:					
Ferromanganese	Metric Tons	9,000	9,000	9,000	8,375
Silicomanganese	Metric Tons	48,000	40,000	56,000	54,375
Gold, mine, Au content	Metric Tons	11.00	12.00	13.00	13.00
Iron and steel:					
Direct-reduced iron		6.13	6.71	6.81	7.09
Raw steel		8.74	9.86	9.94	10.43
Lead, smelter, secondary	Metric Tons	75,600	75,600	78,000	80,722
Silver, mine, concentrate, Ag content	Metric Tons	9.00	9.00	10.00	10.93
Titanium, sponge	Metric Tons	5,700	9,700	12,000	39,717
Zinc, mine, concentrate, Zn content	Metric Tons	23,000	25,500	26,000	25,086

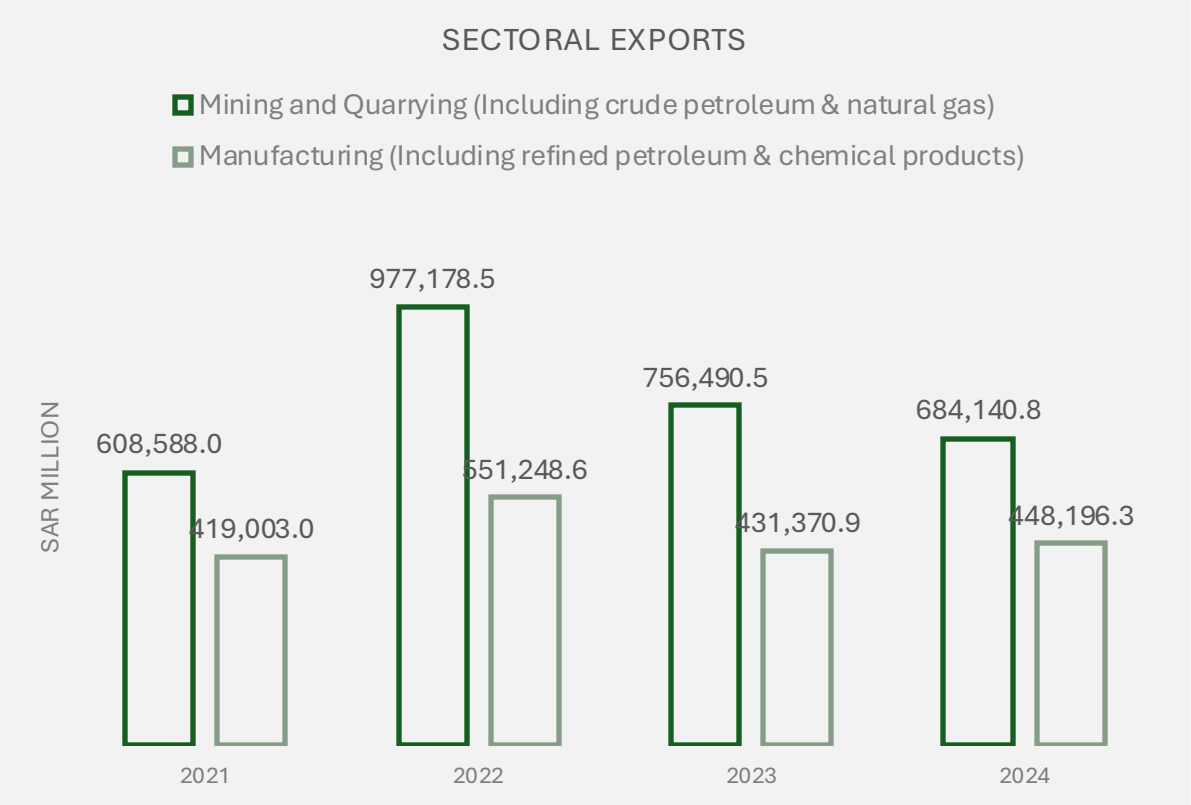
- Note that Titanium (sponge) production grew by 23.7% in 2023 relative to 2022. This is because the Kingdom is investing heavily in advanced materials to diversify its economy. Titanium sponge is essential for aircraft structures, jet engines, and military applications. Saudi Arabia's growing aviation and defense sectors require a stable supply of high-grade titanium.

Industrial Minerals (Unit: Million Metric Tons)	2021	2022	2023	*2024
Bauxite, low grade	0.57	0.60	0.60	0.71
Cement, hydraulic	53.70	52.37	49.19	50.48
Clay:				
Kaolin	0.27	0.28	0.28	0.29
Unspecified	9.16	8.57	9.00	8.62
Feldspar	0.62	0.65	0.65	0.85
Fertilizers, diammonium phosphate	5.20	5.15	5.90	6.08
Gypsum, mine	3.64	3.82	3.80	3.89
Magnesite	0.35	0.34	0.09	0.09
Nitrogen, N content:				
Ammonia	3.70	5.50	5.40	5.82
Urea	2.10	2.30	2.10	2.10
Phosphate rock:				
Gross weight	8.60	8.70	9.90	10.00
P_2O_5 content, 32% P_2O_5	2.73	2.80	3.20	3.48
Pumice and related materials, pozzolan	0.98	0.50	0.98	1.12
Salt	2.33	2.34	2.50	2.43
Sand and gravel, industrial, unspecified	1.98	2.08	2.10	2.28
Stone, sand, and gravel, construction:				
Sand and gravel:				
Common sand	36.14	37.95	40.00	44.99
Gravel	415.86	436.65	450.00	463.07
Iron sand	0.93	0.98	1.00	1.05
Stone:				
Crushed:				
Dolomite	0.67	0.70	0.75	0.56
Limestone, for cement	66.77	70.10	75.00	75.53
Marble, for industrial use	6.00	6.30	6.50	7.83
Schist	0.73	0.76	0.80	0.86
Dimension:				
Granite	2.44	2.56	2.60	3.14
Limestone, block	0.50	0.53	0.55	0.80
Marble, block	0.04	0.04	0.04	0.06
Sulfur, hydrocarbon processing, S content	7.00	7.50	7.50	7.77
Talc and related materials, pyrophyllite	0.17	0.18	0.17	0.23

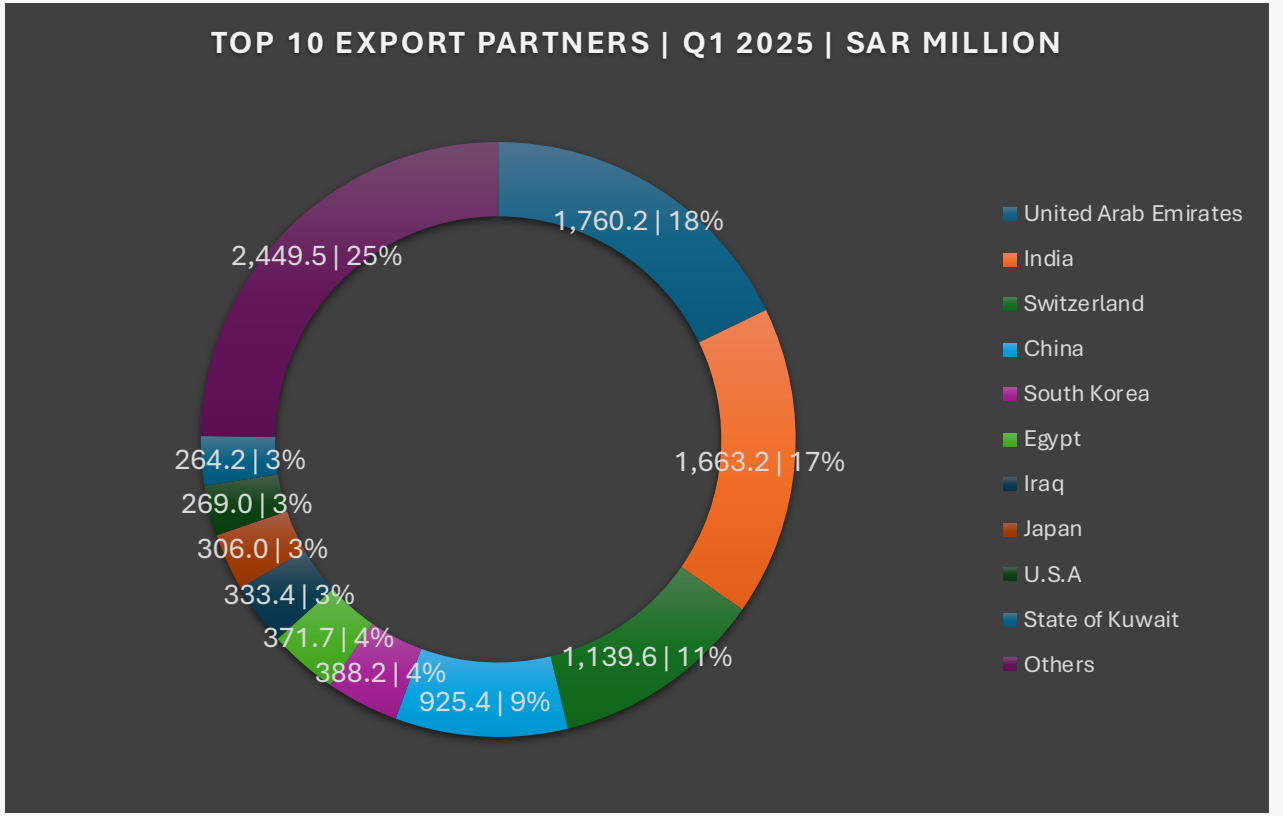
*NOTE | In both tables, "*2024" pertains to a CAGR estimate for the period using data points for 2019 to 2023.*

SOURCE | USGS (Both Tables), 6W Research

TOP 3 EXPORT PARTNERS REPRESENT ~46% OF TOTAL EXPORTS IN SELECT CATEGORIES



SOURCE | General Authority for Statistics



SOURCE | General Authority for Statistics

- The two export sectors have exhibited volatility across the periods under review, in line with the Kingdom's overall exports. The Kingdom's exports from 2021 to 2024 equaled SAR 1,035,671.6 million, SAR 1,541,940.9 million, SAR 1,200,069.1 million, and SAR 1,145,622.7 million. Exports in 3M 2025 equaled SAR 285,789.6 million.
- Note that ~70.0% of the Kingdom's exports are concentrated in crude oil & derivatives, a figure that would rise if chemicals were lumped into it. Regardless, it is notable that crude oil price fluctuations directly impact the value of the Kingdom's exports, which is reflected in both economic sectors above.

- The exports represented above include mineral products, precious stones & metals alongside their articles including jewelry, and base metals & their articles.
- The Kingdom's top 10 export partners equate to 75.0% of its total exports in the aforementioned categories in Q1 2025.
- With respect to concentration, the Kingdom's top 3 export partners represent ~46% of its total exports in Q1 2025, thereby exhibiting moderate concentration levels.

CONSIDERABLE LEEWAY FOR GROWTH IN THE NON-CRUDE PETROLEUM DOMAIN WITH RESPECT TO MINING & QUARRYING

Mining & Quarrying Activities' Exports	2021		2022		2023		2024	
SAR Million	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Mining of coal and lignite	1.0	0.00%	0.4	0.00%	2.1	0.00%	11.4	0.00%
Extraction of crude petroleum and natural gas	605,538.0	99.50%	973,560.3	99.63%	753,710.4	99.63%	680,689.1	99.50%
Mining of metal ores	2,727.0	0.45%	3,271.7	0.33%	2,407.2	0.32%	3,022.8	0.44%
Other mining and quarrying	322.0	0.05%	346.2	0.04%	370.8	0.05%	417.6	0.06%
Total	**608,588.0**	**100.00%**	**977,178.5**	**100.00%**	**756,490.5**	**100.00%**	**684,140.8**	**100.00%**

- Note that the activity: "extraction of crude petroleum and natural gas", consistently accounted for over 99.0% of the exports in this category.
- The "mining of metal ores" and "other mining and quarrying" activities represent around 0.5% of the total exports from mining & quarrying activities in 2024.
- The statistic, in the context of the metal & mining sector as a whole, serves to exemplify the potential for growth in this domain.

SOURCE | General Authority for Statistics

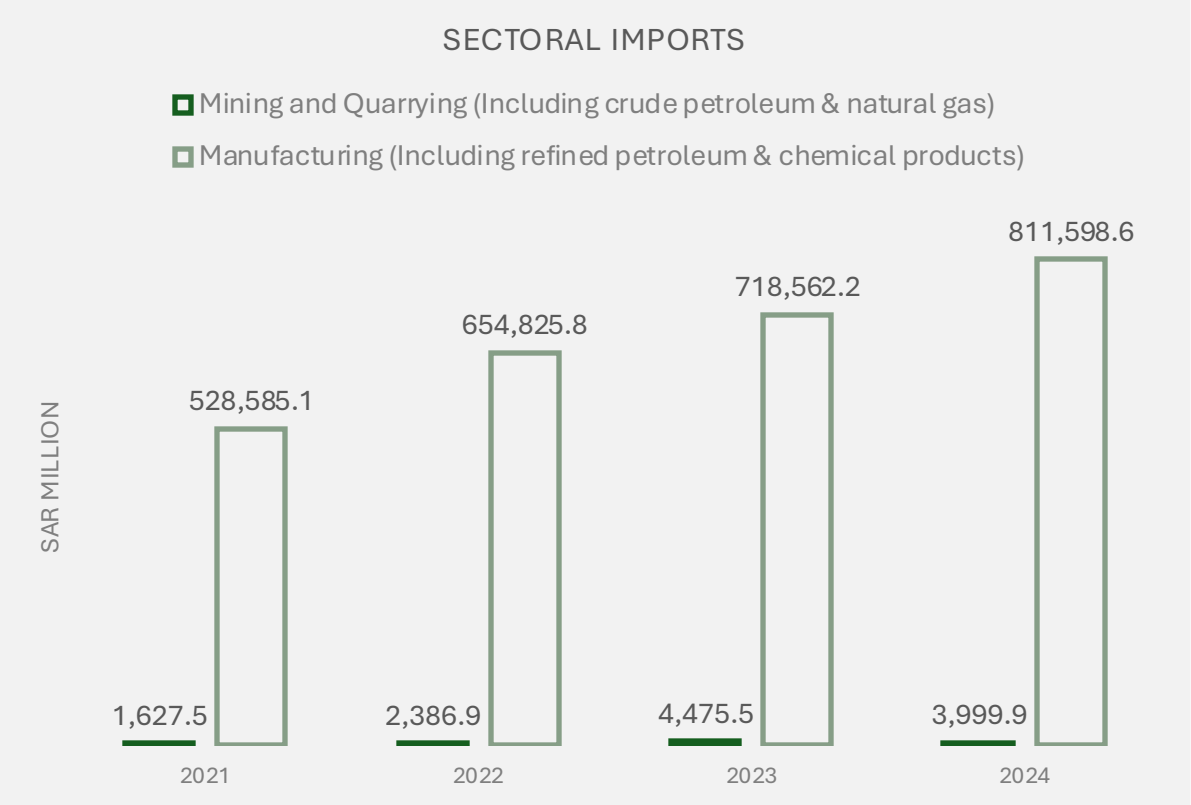
6% OF MANUFACTURING EXPORTS PERTAINED TO METAL & MINERAL RELATED PRODUCE

Manufacturing Activities' Exports	2021		2022		2023		2024	
SAR Million	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Manufacture of food products	12,744.0	3.04%	15,377.0	2.79%	16,194.9	3.75%	18,223.4	4.07%
Manufacture of beverages	382.0	0.09%	159.6	0.03%	244.4	0.06%	537.4	0.12%
Manufacture of tobacco products	13.0	0.00%	15.9	0.00%	13.6	0.00%	11.6	0.00%
Manufacture of textiles	1,721.0	0.41%	1,927.5	0.35%	1,441.9	0.33%	1,510.8	0.34%
Manufacture of wearing apparel	505.0	0.12%	513.2	0.09%	727.4	0.17%	705.8	0.16%
Manufacture of leather and related products	384.0	0.09%	365.8	0.07%	357.5	0.08%	298.3	0.07%
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	522.0	0.12%	466.3	0.08%	365.3	0.08%	396.9	0.09%
Manufacture of paper and paper products	2,612.0	0.62%	2,486.2	0.45%	2,341.0	0.54%	2,480.5	0.55%
Printing and reproduction of recorded media	2.0	0.00%	5.6	0.00%	2.0	0.00%	1.2	0.00%
Manufacture of coke and refined petroleum products	***150,262.0***	***35.86%***	***250,160.6***	***45.38%***	***169,710.3***	***39.34%***	***152,762.1***	***34.08%***
Manufacture of chemicals and chemical products	***171,655.0***	***40.97%***	***198,501.6***	***36.01%***	***146,016.8***	***33.85%***	***148,023.2***	***33.03%***
Manufacture of basic pharmaceutical products and pharmaceutical preparations	1,531.0	0.37%	1,891.3	0.34%	2,214.8	0.51%	2,191.9	0.49%
Manufacture of rubber and plastics products	4,777.0	1.14%	5,115.7	0.93%	4,585.9	1.06%	4,846.6	1.08%
Manufacture of other non-metallic mineral products	***3,613.0***	***0.86%***	***3,606.6***	***0.65%***	***3,991.5***	***0.93%***	***3,816.6***	***0.85%***
Manufacture of basic metals	***18,279.0***	***4.36%***	***18,417.5***	***3.34%***	***19,516.7***	***4.52%***	***18,524.0***	***4.13%***
Manufacture of fabricated metal products, except machinery and equipment	***4,062.0***	***0.97%***	***5,012.4***	***0.91%***	***4,043.8***	***0.94%***	***4,889.2***	***1.09%***
Manufacture of computer, electronic and optical products	6,201.0	1.48%	8,827.5	1.60%	13,873.3	3.22%	27,835.2	6.21%
Manufacture of electrical equipment	3,221.0	0.77%	3,645.3	0.66%	3,783.6	0.88%	4,623.7	1.03%
Manufacture of machinery and equipment n.e.c.	6,264.0	1.49%	7,644.8	1.39%	7,383.8	1.71%	9,746.8	2.17%
Manufacture of motor vehicles, trailers and semi-trailers	5,735.0	1.37%	5,288.3	0.96%	4,398.1	1.02%	5,700.8	1.27%
Manufacture of other transport equipment	19,676.0	4.70%	17,853.9	3.24%	23,825.7	5.52%	35,533.9	7.93%
Manufacture of furniture	166.0	0.04%	173.5	0.03%	185.3	0.04%	200.2	0.04%
Other manufacturing	4,676.0	1.12%	3,792.4	0.69%	6,153.3	1.43%	5,336.1	1.19%
Total	**419,003.0**	**100.00%**	**551,248.6**	**100.00%**	**431,370.9**	**100.00%**	**448,196.3**	**100.00%**

- Note that 67.1% of the exports related to manufacturing activities in 2024 consist of coke & refined petroleum products and chemical products.
- Only 6.1% of manufacturing activity exports in 2024 pertained to the manufacture of non-metallic mineral products, basic metals, and fabricated metal products excluding machinery.

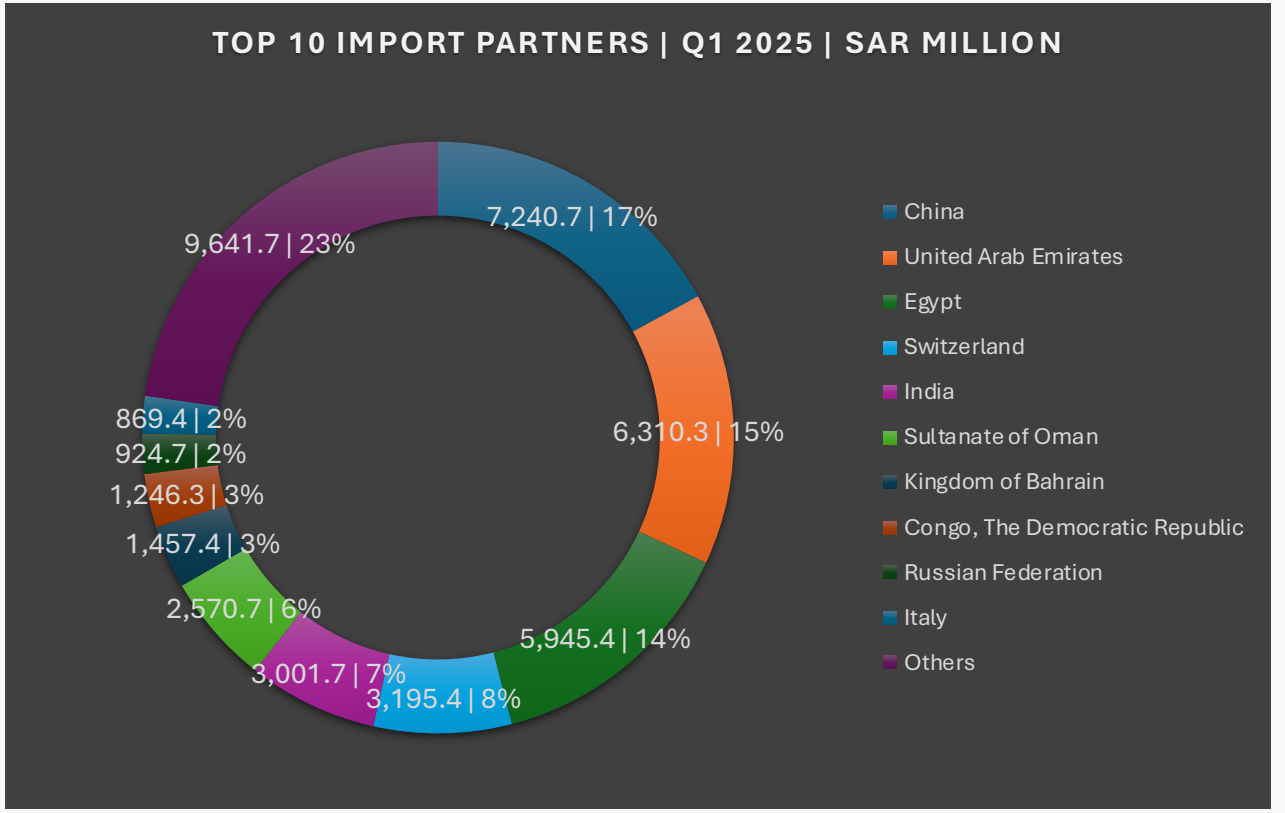
SOURCE | General Authority for Statistics

TOP 3 IMPORT PARTNERS REPRESENT ~46% OF TOTAL IMPORTS IN SELECT CATEGORIES



SOURCE | General Authority for Statistics

- Imports from both sectors have generally grown over the periods under review, except that there is one instance of a decrease in imports pertaining to the mining & quarrying sector in 2024. This was caused by a decrease in the import of metal ores of 26.4%.
- The Kingdom's imports from 2021 to 2024 equaled SAR 573,185.1 million, SAR 712,038.0 million, SAR 776,024.3 million, and SAR 873,023.5 million. Imports in 3M 2025 equaled SAR 222,738.6 million. The Kingdom held an overall trade surplus across the periods under review.



SOURCE | General Authority for Statistics

- The imports represented above include mineral products, precious stones & metals alongside their articles including jewelry, and base metals & their articles.
- The Kingdom's top 10 import partners equate to 77.0% of its total imports in the aforementioned categories in Q1 2025.
- With respect to concentration, the Kingdom's top 3 import partners represent ~46% of its total exports in Q1 2025, thereby exhibiting moderate concentration levels.

CRUDE PETROLEUM & NATURAL GAS RELATED IMPORTS ARE INSIGNIFICANT WITH RESPECT TO THE KINGDOM

Mining & Quarrying Activities' Imports	2021		2022		2023		2024	
SAR Million	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Mining of coal and lignite	82.1	5.05%	228.3	9.56%	193.4	4.32%	157.2	3.93%
Extraction of crude petroleum and natural gas	0.3	0.02%	0.2	0.01%	0.6	0.01%	1.0	0.03%
Mining of metal ores	699.0	42.95%	678.6	28.43%	2,549.5	56.97%	1,876.8	46.92%
Other mining and quarrying	846.1	51.99%	1,479.9	62.00%	1,732.0	38.70%	1,964.8	49.12%
Total	**1,627.5**	**100.00%**	**2,386.9**	**100.00%**	**4,475.5**	**100.00%**	**3,999.9**	**100.00%**

SOURCE | General Authority for Statistics

- Note that unlike in the case of exports, the activity: "extraction of crude petroleum and natural gas", did not amount to a significant proportion across the periods under review.
- The "mining of metal ores" and "other mining and quarrying" activities represent around 96.0% of the total imports from mining & quarrying activities in 2024.
- The "mining of metal ores" and "other mining and quarrying" activities experienced a trade deficit vis-à-vis their export counterparts of SAR 401.2 million in 2024.

16% OF MANUFACTURING IMPORTS PERTAINED TO METAL & MINERAL RELATED PRODUCE

Manufacturing Activities	2021		2022		2023		2024	
SAR Million	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Manufacture of food products	52,892.8	10.01%	67,634.9	10.33%	67,387.4	9.38%	75,463.0	9.30%
Manufacture of beverages	493.2	0.09%	171.0	0.03%	161.9	0.02%	180.6	0.02%
Manufacture of tobacco products	2,356.2	0.45%	2,331.8	0.36%	2,246.5	0.31%	2,719.3	0.34%
Manufacture of textiles	6,695.4	1.27%	7,985.3	1.22%	8,380.5	1.17%	8,627.3	1.06%
Manufacture of wearing apparel	15,703.4	2.97%	17,033.3	2.60%	16,692.8	2.32%	16,195.7	2.00%
Manufacture of leather and related products	4,965.6	0.94%	6,103.3	0.93%	6,467.3	0.90%	6,769.6	0.83%
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	5,424.5	1.03%	6,878.4	1.05%	5,958.8	0.83%	6,356.2	0.78%
Manufacture of paper and paper products	6,378.1	1.21%	8,951.4	1.37%	7,375.4	1.03%	7,801.6	0.96%
Printing and reproduction of recorded media	52.4	0.01%	72.6	0.01%	68.0	0.01%	55.1	0.01%
Manufacture of coke and refined petroleum products	***27,269.6***	***5.16%***	***52,754.3***	***8.06%***	***56,423.8***	***7.85%***	***48,501.0***	***5.98%***
Manufacture of chemicals and chemical products	***41,161.4***	***7.79%***	***52,668.3***	***8.04%***	***49,689.9***	***6.92%***	***52,597.1***	***6.48%***
Manufacture of basic pharmaceutical products and pharmaceutical preparations	25,882.9	4.90%	27,498.1	4.20%	29,403.8	4.09%	34,708.2	4.28%
Manufacture of rubber and plastics products	15,186.7	2.87%	18,690.2	2.85%	21,771.8	3.03%	23,709.4	2.92%
Manufacture of other non-metallic mineral products	***7,848.2***	***1.48%***	***9,022.1***	***1.38%***	***8,271.0***	***1.15%***	***10,662.7***	***1.31%***
Manufacture of basic metals	***53,795.4***	***10.18%***	***70,651.5***	***10.79%***	***76,148.9***	***10.60%***	***89,122.5***	***10.98%***
Manufacture of fabricated metal products, except machinery and equipment	***25,879.8***	***4.90%***	***25,890.5***	***3.95%***	***26,854.1***	***3.74%***	***33,725.5***	***4.16%***
Manufacture of computer, electronic and optical products	53,328.4	10.09%	57,874.0	8.84%	71,201.6	9.91%	86,156.3	10.62%
Manufacture of electrical equipment	23,704.7	4.48%	28,412.8	4.34%	34,157.5	4.75%	47,658.2	5.87%
Manufacture of machinery and equipment n.e.c.	46,657.2	8.83%	63,344.3	9.67%	79,543.8	11.07%	103,549.9	12.76%
Manufacture of motor vehicles, trailers and semi-trailers	58,488.5	11.07%	72,873.5	11.13%	95,755.7	13.33%	99,998.0	12.32%
Manufacture of other transport equipment	32,226.1	6.10%	34,301.4	5.24%	29,402.7	4.09%	29,441.9	3.63%
Manufacture of furniture	5,881.5	1.11%	5,600.3	0.86%	5,812.3	0.81%	6,645.5	0.82%
Other manufacturing	16,313.3	3.09%	18,082.5	2.76%	19,386.5	2.70%	20,953.9	2.58%
Total	**528,585.1**	**100.00%**	**654,825.8**	**100.00%**	**718,562.2**	**100.00%**	**811,598.6**	**100.00%**

- Note that coke & refined petroleum products and chemical products account for just 12.5% of manufacturing imports in 2024.
- 16.5% of manufacturing imports in 2024 pertained to the manufacture of non-metallic mineral products, basic metals, and fabricated metal products excluding machinery.
- The top 3 manufacturing import categories in 2024 include manufacture of machinery & equipment, motor vehicles, trailers, & semi-trailers, and basic metals at 12.8%, 12.3%, and 11.0%, respectively.

SOURCE | General Authority for Statistics

FINANCIAL PROFILE

A profile of a unique mining company that functions as an integrated industrial operator spanning both upstream mining and downstream mineral processing.

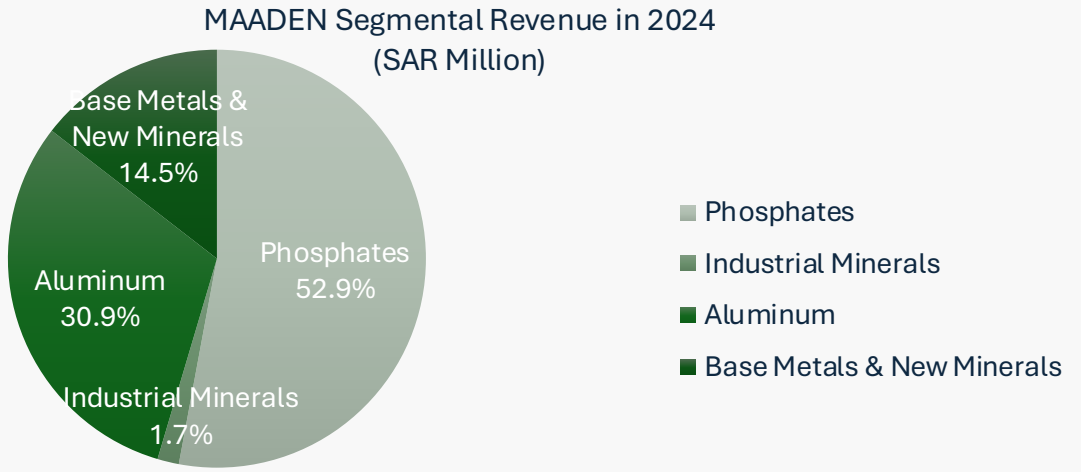
COMPANY PROFILE

- The Saudi Arabian Mining Company or "MAADEN" is the Kingdom's largest mining company and a key driver of the Kingdom's Vision 2030 strategy to diversify its economy beyond oil. In fact, 65.2% of its shareholdings are held by the Kingdom's Public investment Fund. Established in 1997, MAADEN has grown into a multi-commodity mining and metals powerhouse, operating over 11 mines and sites across Saudi Arabia and exporting products to multiple countries.
- MAADEN's principal mining activities are at the Mansourah - Massarah, Mahd Adh-Dhahab, Bulghah, Al Amar, Al-Sukhaybarat, As-Suq, Ad Duwayhi, Al-Jalamid, Al-Khabra, Az Zabirah, Al-Ghazallah and Al-Ba'itha mines. MAADEN mainly mines gold, phosphate rock, bauxite, low-grade bauxite, kaolin and magnesite.

BUSINESS UNITS

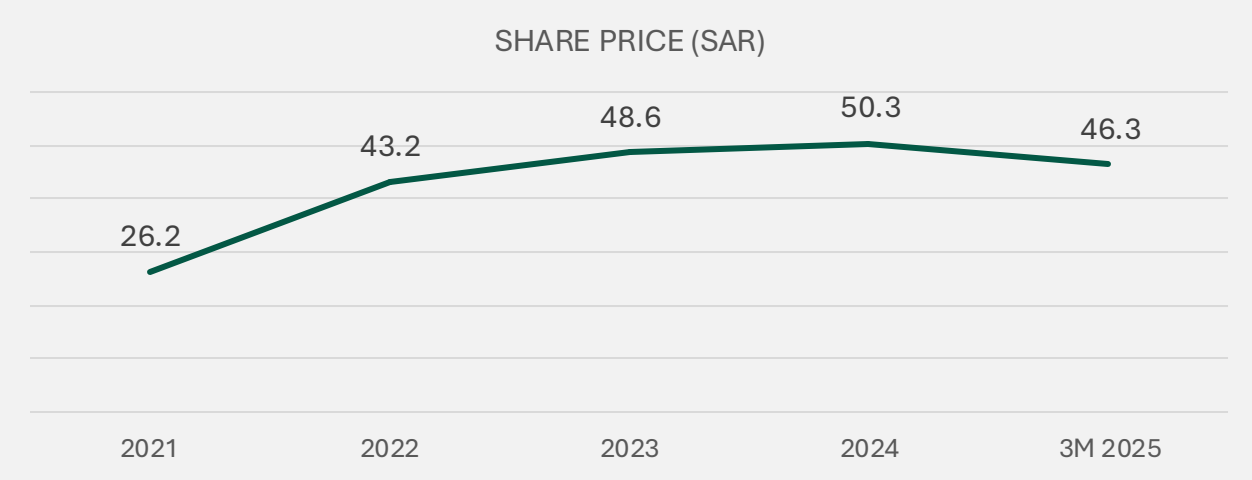
- Phosphates: In 2024, MAADEN's Phosphate BU achieved record-high phosphate fertilizer production of 6.2 million tons, reinforcing its standing as one of the world's leading exporters.
- Aluminum: As of 2024, MAADEN continues to strengthen its position as a global leader in aluminum, with a diverse customer base across key international markets. Despite that, the Kingdom remains the largest market for both primary and flat-rolled products, reflecting strong domestic demand.
- Base Metals & New Minerals (BMNM): BMNM is strategically focused on gold, while exploring opportunities to expand into critical minerals essential for global energy transition, including copper, nickel and lithium.
- Other Industrial Minerals: Produces low-grade bauxite, kaolin, magnesite, and silica for various industries.

SOURCE | Annual Report - 2024 and Financial Statement - 3M 2025



SOURCE | Annual Report - 2024

Note: The phosphate segment includes ammonia phosphate fertilizers. Aluminum includes flat rolled products and BMNM includes the sale of gold worth SAR 4,474.9 million in 2024.

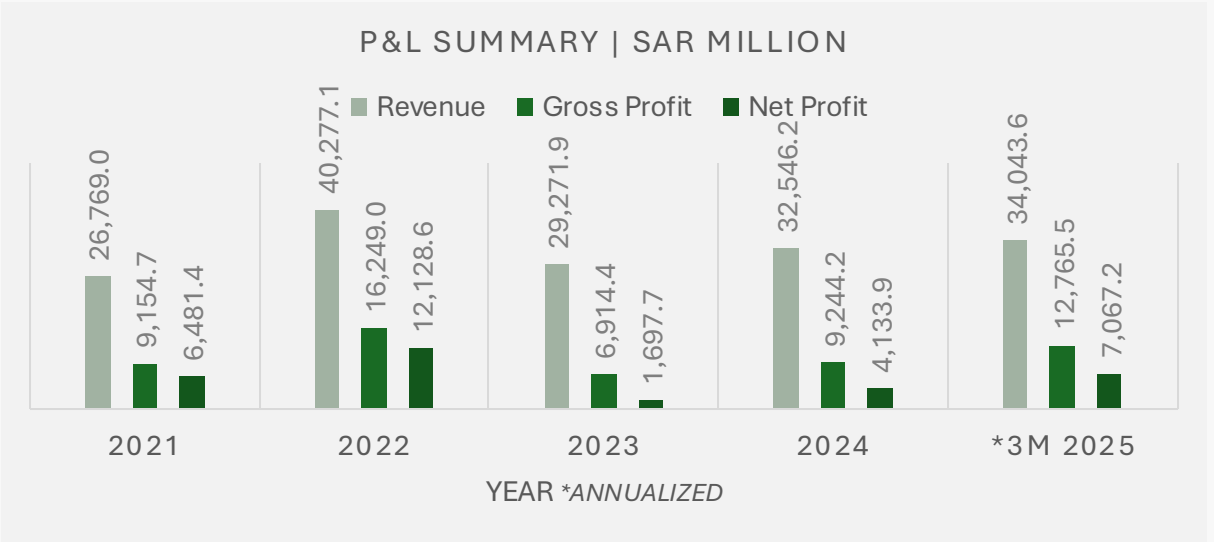


SOURCE | Saudi Exchange

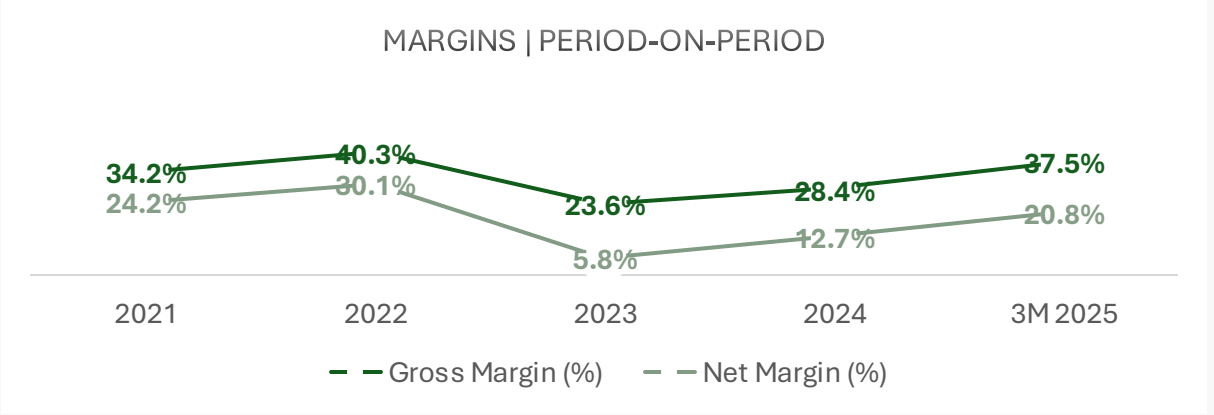
MAADEN – FINANCIAL SUMMARY HIGHLIGHTS

MAADEN (SAR Million)	2021	2022	2023	2024	3M 2025
Revenue	26,769.01	40,277.12	29,271.93	32,546.16	8,510.91
Gross Profit	9,154.67	16,248.95	6,914.41	9,244.16	3,191.37
Net Profit	6,481.36	12,128.56	1,697.73	4,133.89	1,766.79
Total Assets	103,337.69	111,586.27	111,873.62	115,089.37	117,721.79
Total Liabilities	59,369.12	55,546.42	55,058.36	54,933.14	56,317.64
Total Debt	48,087.97	43,034.74	39,042.30	37,549.40	38,538.06
Total Equity	43,968.57	56,039.86	56,815.27	60,156.23	61,404.15
Gross Profit Margin	34.20%	40.34%	23.62%	28.40%	37.50%
Net Profit Margin	24.21%	30.11%	5.80%	12.70%	20.76%
Leverage (Total Liabilities / Total Equity)	1.35	0.99	0.97	0.91	0.92
Gearing (Total Debt / Total Equity)	1.09	0.77	0.69	0.62	0.63
Debt Service Coverage Ratio	2.13	3.66	1.20	1.23	2.14
Net Working Capital Days	85	54	79	75	62

SOURCE | Financial Statements (Table & Charts)



- The jump in MAADEN's revenue of 50.5% in 2022 followed by a 27.3% decrease in 2023 is associated substantially with the volatility in phosphate prices across those periods given that the segment contributed over half the company's revenue as recently as 2024.



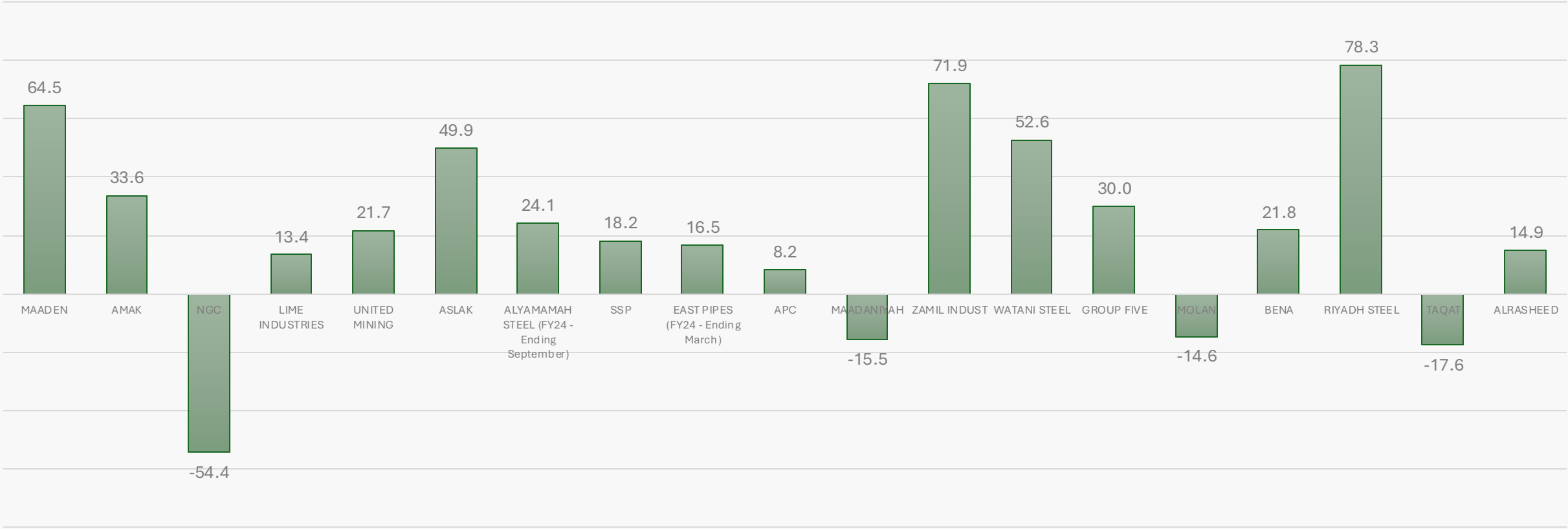
RATING®
Financial Analytics التحليلات المالية

FINANCIAL OVERVIEW

An overview of the financial performance of sector participants.

VARIED P/E RESULTS ACROSS THE METAL & MINING SECTOR

PRICE TO EARNINGS RATIO | 2024



SOURCE | Saudi Stock Exchange, Morningstar

- A high P/E ratio indicates that investors expect high returns or that the stock may be over valued pending correction. A low P/E ratio may indicate that a stock is under valued or that investors expect its performance to deteriorate.
- As of 3M 2025, the P/E ratio for select firms like MAADEN, AMAK, ZAMIL INDUST, and MAADANIYAH equals 28.2x, 23.3x, 22.7x, and -43.0x.

BREAK-UP OF SECTOR PARTICIPANTS

Company Segment	Mining & Quarrying of Metals & Industrial Minerals	Steel Solutions, Fabrications, & Casting	Miscellaneous
Total Participants	5	12	2
Listed in Main Market	3	7	-
Listed in NOMU	2	5	2
Largest Participant (Revenue-basis 2024)	Saudi Arabian Mining Company (MAADEN)	Zamil Industrial Investment Company (ZAMIL INDUST)	Mohammed Hadi Al Rasheed and Partners Company (ALRASHEED)
Smallest Participant (Revenue-basis 2024)	National Gypsum Company (NGC)	Molan Steel Company (MOLAN)	Taqat Mineral Trading Company (TAQAT)
Segment Share of Sector Revenue (2024)	72.92%	25.91%	1.17%

SOURCE | Morningstar, Financial Statements

- This study splits the sector into three segments: i) Mining & Quarrying of Metals & Industrial Minerals, ii) Steel Solutions, Fabrications, & Casting, and iii) Miscellaneous.
- Mining & Quarrying of Metals & Industrial Minerals includes all entities that are actively involved in the mining & transformation of metals into usable raw material for further processing. Entities in this segment are likewise involved in the quarrying and transformation of non-metallic minerals into usable end products. Entities in this segment may specialize in a variety of a metals or minerals or in one or the other. Alternatively, they may specialize in the quarrying & transformation of a non-metallic mineral type.
- Steel solutions, fabrications, & casting includes all entities that are not involved in primary metal production or mining. Instead, they are involved in the manufacture of steel products like industrial pipes, heavy metal fabrication, and the casting of metallic parts. While a variety of the entities in this segment concentrate on steel products, there are firms that employ a wider range of metals as raw material for their output.
- Miscellaneous includes entities not classifiable in the other major categories. Examples of operational segments pertaining to it include mineral trading entities and those for whom mining or quarrying does not constitute the primary scope of their operations.

MAADEN OVERWHELMINGLY DOMINATES THE MINING & INDUSTRIAL MINERAL SEGMENT

RATING Financial Analytics التحليلات المالية

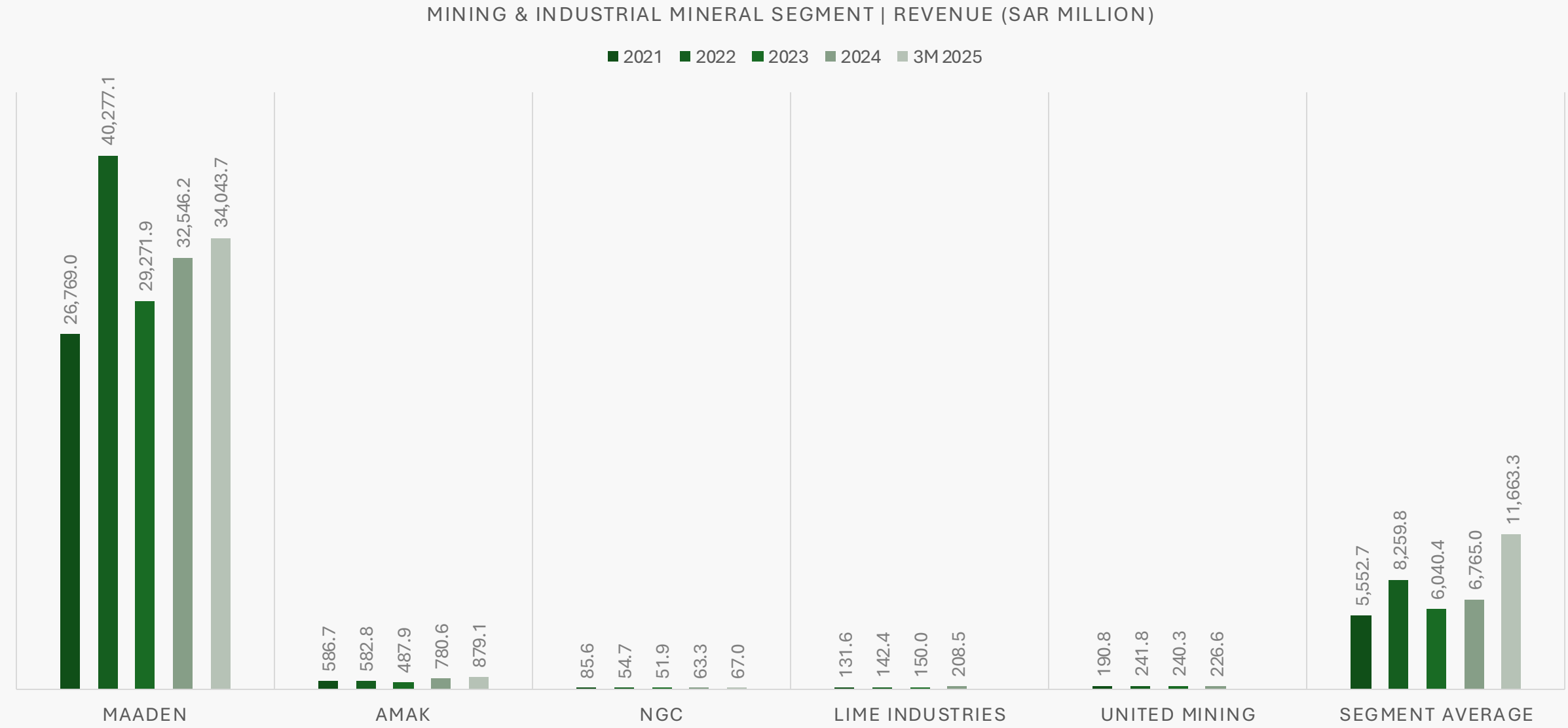
Amount in SAR Million

Companies [2024]	Market Share (MS)	Revenue (Rev)	Cost of Sales (COS)	Gross Profit (GP)	Net Profit (NP)	Total Assets (TA)	Total Liabilities (TL)	Short-term Debt (STD)	Current Maturity of Long-term Debt (CMLTD)	Long-term Debt (LTD)	Total Debt (TD)	Total Equity (TE)
MAADEN	96.22%	32,546.16	23,302.00	9,244.16	4,133.89	115,089.37	54,933.14	0.00	7,297.54	30,251.86	37,549.40	60,156.23
AMAK	2.31%	780.65	492.32	288.33	177.90	1,499.10	246.97	0.00	35.67	29.21	64.88	1,252.13
NGC	0.19%	63.32	56.04	7.28	-12.69	375.33	28.31	0.00	0.59	4.96	5.56	347.02
LIME INDUSTRIES	0.62%	208.48	149.97	58.51	21.39	492.46	195.12	0.00	2.52	132.97	135.49	297.35
UNITED MINING	0.67%	226.58	110.87	115.71	26.44	341.11	151.40	57.28	30.34	20.85	108.47	189.71
CATEGORY TOTAL	**100.00%**	**33,825.19**	**24,111.20**	**9,713.99**	**4,346.93**	**117,797.37**	**55,554.93**	**57.28**	**7,366.66**	**30,439.85**	**37,863.79**	**62,242.44**
Average Mining & Industrial Mineral Producer	20.00%	6,765.04	4,822.24	1,942.80	869.39	23,559.47	11,110.99	11.46	1,473.33	6,087.97	7,572.76	12,448.49

SOURCE | Morningstar, Financial Statements

- There is overwhelming discrepancy between the largest in this category relative to the remainder of the category in 2024. The implication is that MAADEN stands out as one of the foremost mining & industrial mineral producers within the Kingdom. Its market share among listed entities is 4.8x the average mining & industrial mineral producer. Note that the arithmetically average entity is itself significantly larger given that the combined residual market share of the remaining entities, which is a mere 3.8%.
- In 2024, mining & industrial mineral producers in the Kingdom generated SAR 33,825.2 million in revenue and SAR 4,346.9 million in net profits. The only entity to report a loss a net loss in 2024 is NGC. NGC's loss in 2024 is substantial on account of an unelaborated regulatory penalty from the General Authority of Competition of SAR 10.7 million. In the absence of the penalty, NGC's loss would been around SAR 2.0 million, stemming from an operational loss not compensated for by investment income.
- The total debt of the mining & industrial mineral segment in 2024 is SAR 7,572.8 million, which represents a gearing ratio of 0.6.

SEGMENT AVERAGE SKEWED BY MAADEN'S OPERATING REVENUE



SOURCE | Morningstar, Financial Statements

THE MINING & INDUSTRIAL MINERALS SEGMENT GENERALLY REPORTS POSITIVE MARGINS ACROSS THE PERIODS UNDER REVIEW

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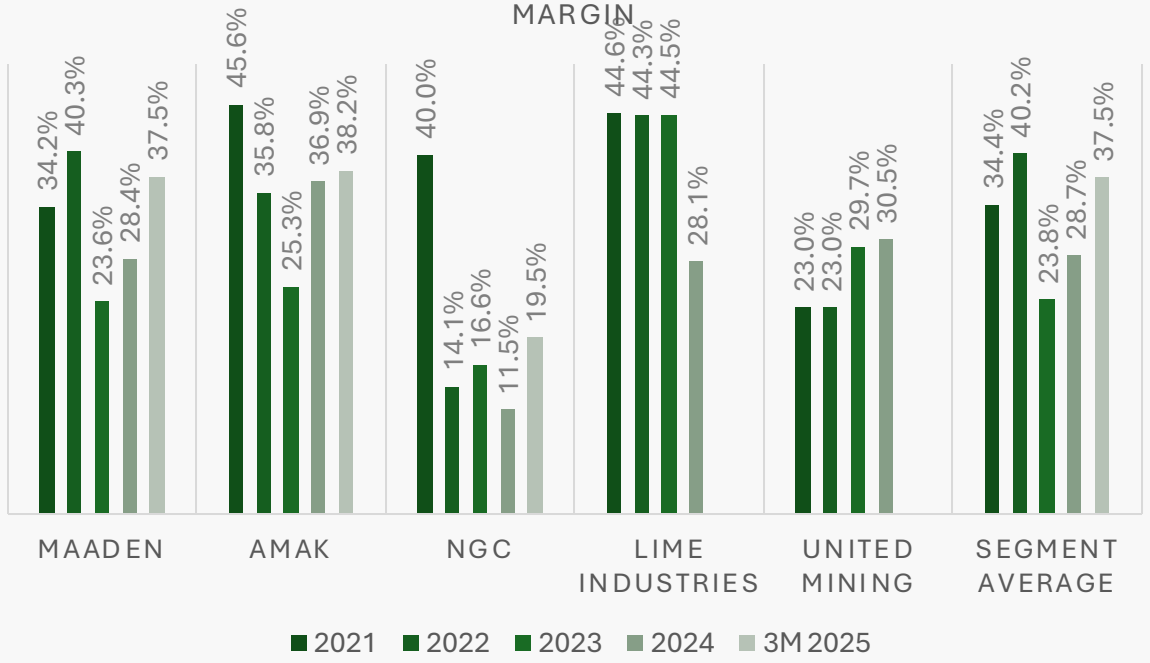
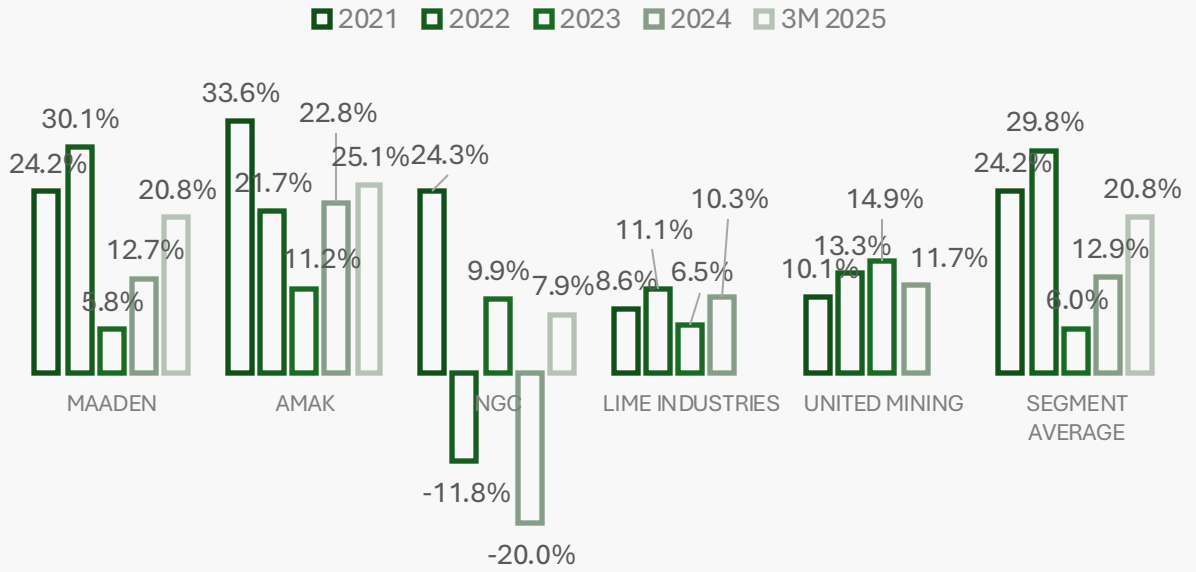
MINING & INDUSTRIAL MINERAL SEGMENT | GROSS PROFIT MARGIN



SOURCE | Morningstar, Financial Statements

- Note: The need to maintain output capacity results in constraining capacity related charges if element ore yields decline or if resource demand fluctuates in the short-term.
- AMAK's gross profit margin dipped to 25.3% in 2023 from 35.8% in 2022. The reason for the decline is a 16.3% decrease in sales revenue from copper and zinc.
- The decrease in NGC's gross profit margin is associated with a decrease in sales revenue in 2022. NGC, likewise, experienced relatively higher client concentration in 2022 because two clients equaled ~56% of sales.

MINING & INDUSTRIAL MINERAL SEGMENT | NET PROFIT MARGIN

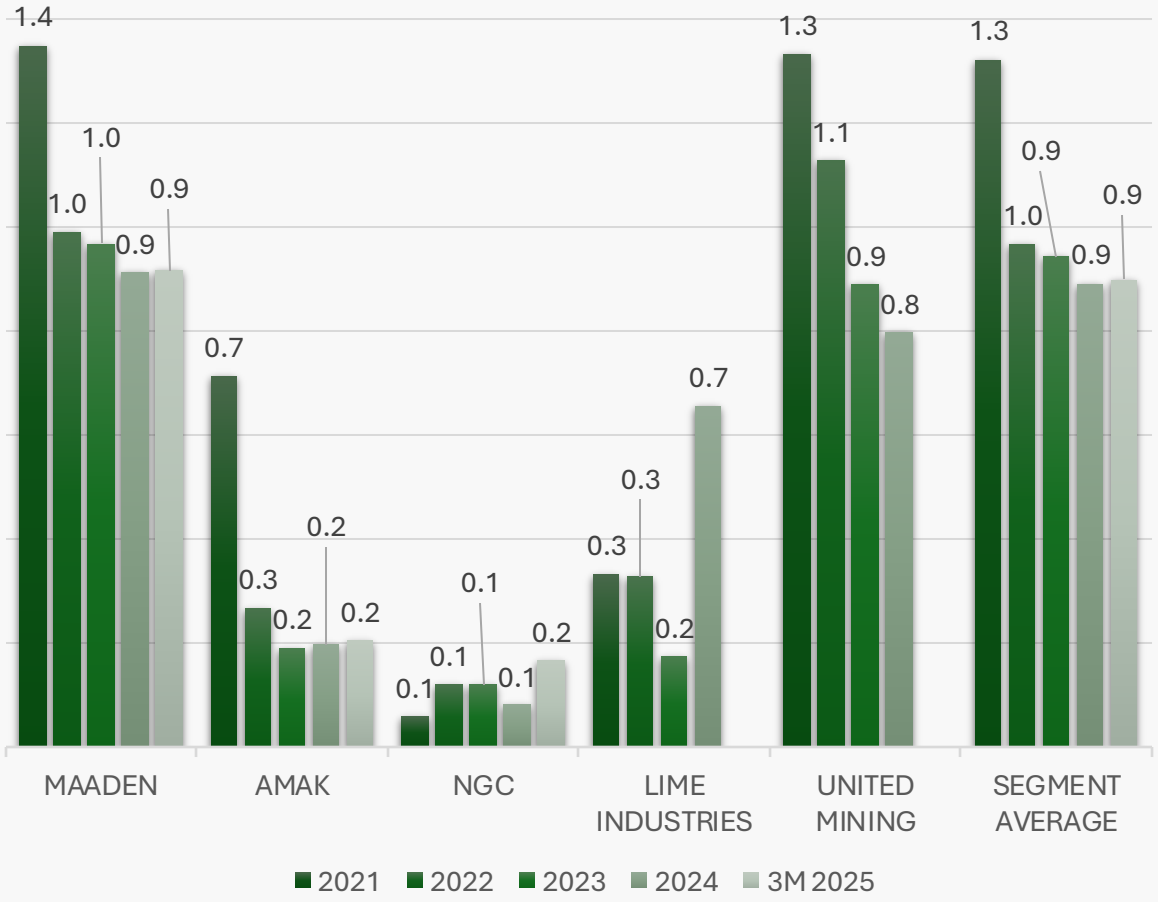


SOURCE | Morningstar, Financial Statements

- Excluding NGC, other participants in the segment exhibited net profit margins comparable with respect to the trend across the periods under review.
- NGC experienced an operational loss in 2024 which was worsened by an SAR 10.7 million penalty from the General Authority of Competition.

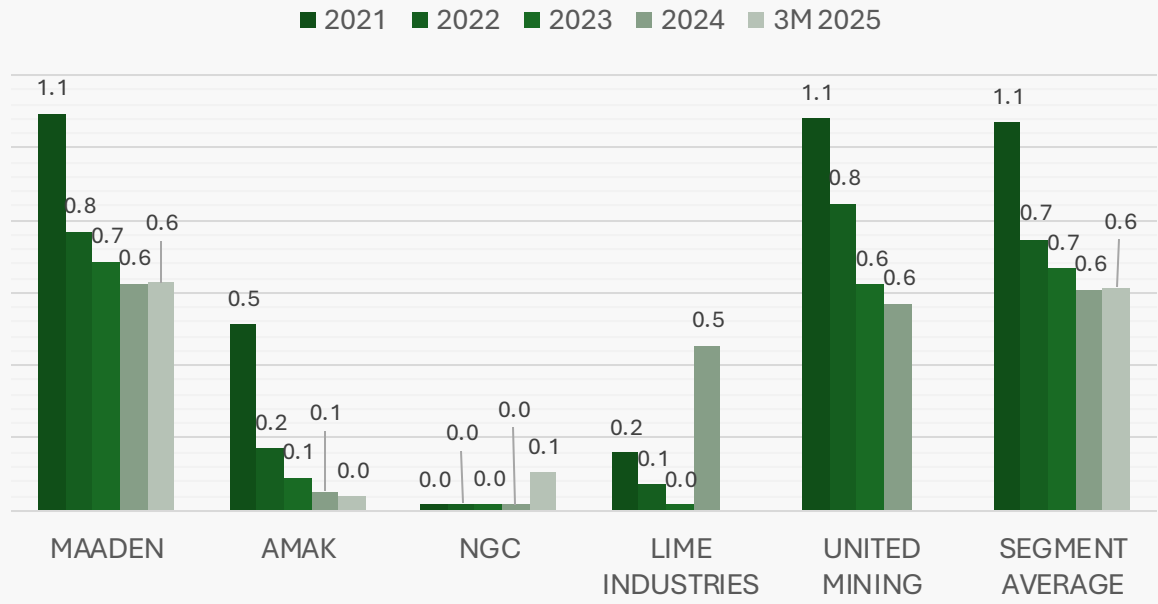
TOTAL DEBT CONSTITUTES THE PREDOMINANT LIABILITY AMONG THE MINING & INDUSTRIAL MINERAL SEGMENT BUT HAS DECLINED YOY

MINING & INDUSTRIAL MINERAL SEGMENT | LEVERAGE RATIO (TOTAL LIABILITIES TO TOTAL EQUITY)



SOURCE | Morningstar, Financial Statements

MINING & INDUSTRIAL MINERAL SEGMENT | GEARING RATIO (TOTAL DEBT TO TOTAL EQUITY)

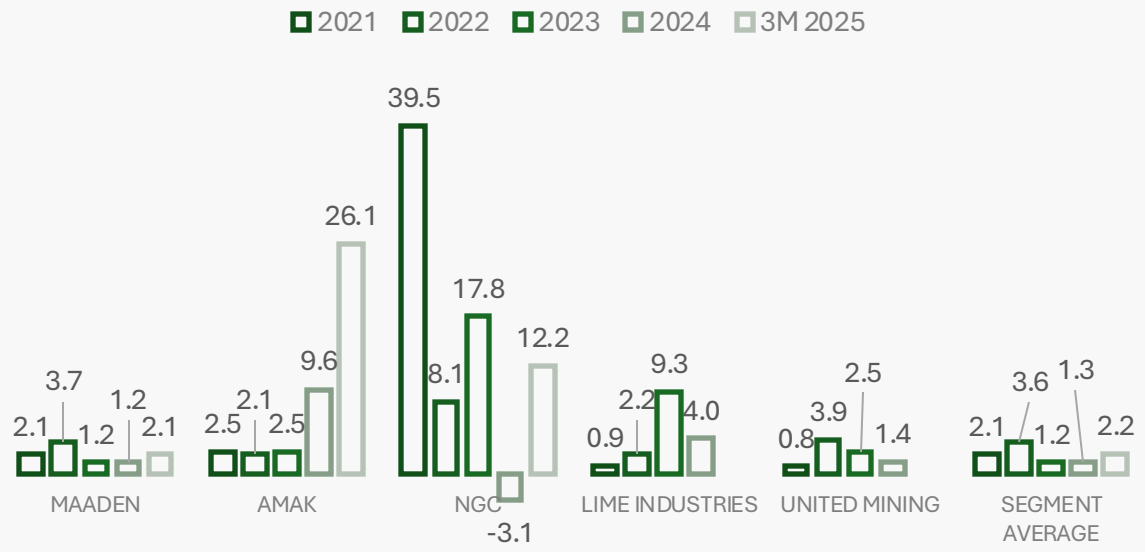


SOURCE | Morningstar, Financial Statements

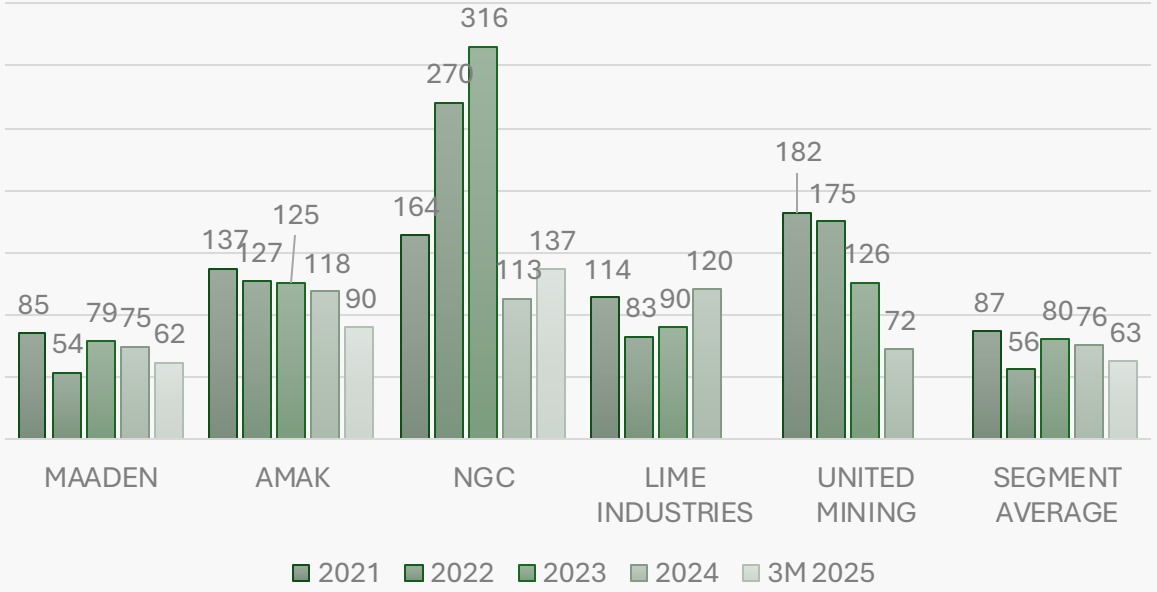
- When contrasting the two tables, it is observable that total debt moves in sync with total liabilities and that the former constitutes a predominant chunk of latter.
- It is likewise notable that debt has decreased on a period-on-period basis.
- With respect to MAADEN, the company has pursued a strategic deleveraging plan intended to lower immediate finance costs while at the same time positioning itself for future expansion by optimizing its debt absorption capacity.
- UNITED MINING has likewise reduced its gearing ratio to prudently manage their borrowing needs and overall cost of debt.

THE MINING & INDUSTRIAL MINERAL SEGMENT GENERALLY MAINTAINED A COMFORTABLE WORKING CAPITAL CYCLE

MINING & INDUSTRIAL MINERAL SEGMENT | DEBT SERVICE COVERAGE RATIO (FREE CASH FLOW FROM OPERATIONS/(CURRENT MATURITY OF LONG-TERM DEBT + FINANCE COSTS))



MINING & INDUSTRIAL MINERAL SEGMENT | NET WORKING CAPITAL DAYS



SOURCE | Morningstar, Financial Statements

- The Debt Service Coverage Ratio (DSCR) of entities constituting the mining & industrial mineral segment has generally, with exceptions, hovered over the peripheral limit of 1.0x across the periods under review.
- AMAK's DSCR grew from 2.5x in 2023 to 9.6x in 2024 and 26.1x in 3M 2025. The improvement within the coverage ratio experienced in 2024 stems from an overall increase in net profitability as a direct consequence of revenue growth. The company's net profit grew by 225.9% in 2024, while its revenue grew by 60.0%.

SOURCE | Morningstar, Financial Statements

- The mining & industrial mineral segment has generally, with some exception like NGC, exhibited a comfortable working capital cycle. To this effect, the Segment Average has remained within range of 90 days across the periods under review.
- In general, entities within this segment can experience volatility with respect to their working capital cycle. That may be on account of ore yield beyond demand within a period, volatility in buyer long-term contractual needs (bullwhip effect), and geo-political & economic considerations.

ZAMIL INDUST DOMINATES THE SEGMENT WITH A 51% MARKET SHARE

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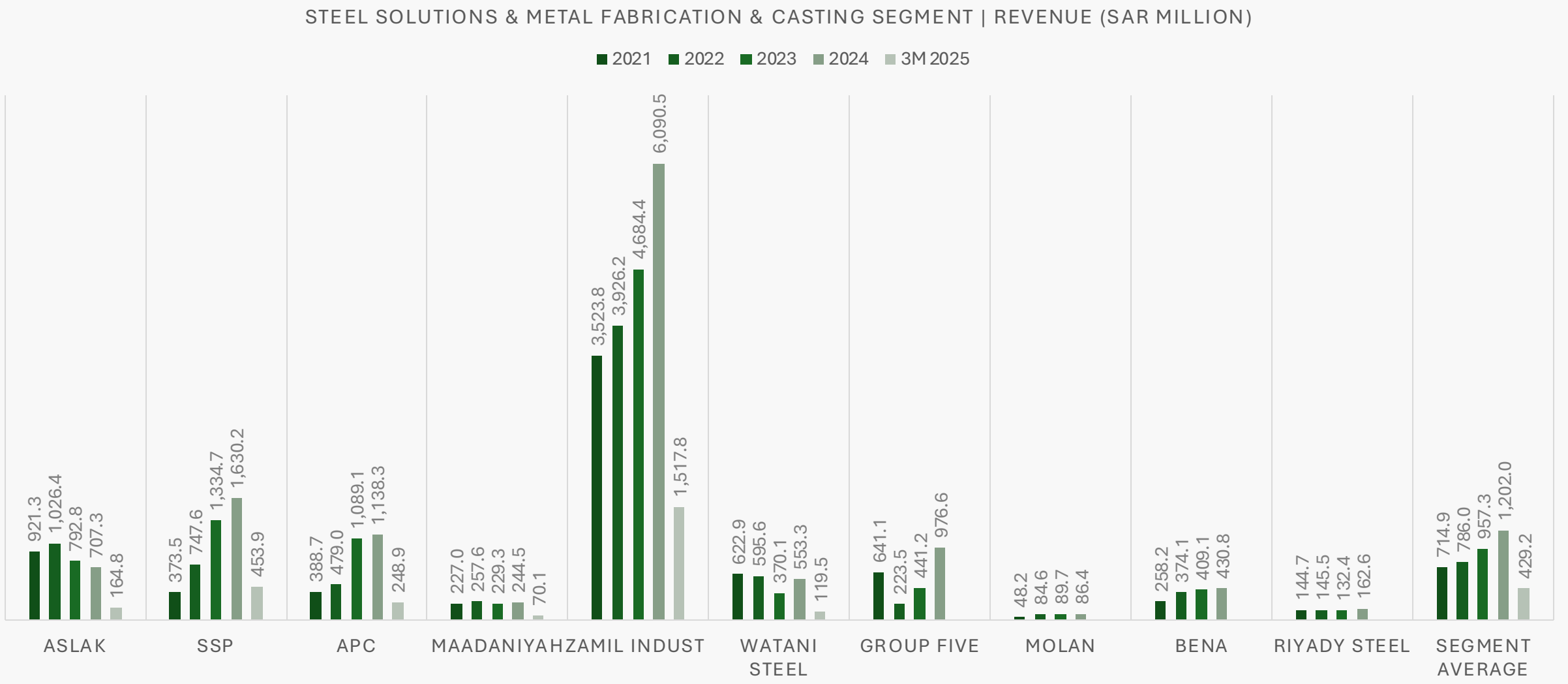
Amount in SAR Million

Companies [2024]	Listing	Market Share (MS)	Revenue (Rev)	Cost of Sales (COS)	Gross Profit (GP)	Net Profit (NP)	Total Assets (TA)	Total Liabilities (TL)	Short-term Debt (STD)	Current Maturity of Long-term Debt (CMLTD)	Long-term Debt (LTD)	Total Debt (TD)	Total Equity (TE)
ASLAK	Main Market	5.88%	707.29	649.37	57.92	16.23	440.33	72.78	0.00	0.46	2.16	2.62	367.55
ALYAMAMAH STEEL (FY24 - Ending September)	Main Market	-	1,956.59	1,732.69	223.90	70.25	1,784.51	1,093.55	742.88	3.45	131.94	878.26	690.97
SSP	Main Market	13.56%	1,630.19	1,231.35	398.83	250.31	2,016.25	913.17	377.61	124.89	49.22	551.72	1,103.08
EAST PIPES (FY24 - Ending March)	Main Market	-	1,543.17	1,192.61	350.56	267.51	1,486.81	634.89	156.81	33.17	105.07	295.05	851.91
APC	Main Market	9.47%	1,138.27	855.08	283.19	168.18	931.58	530.26	346.72	1.33	71.02	419.07	401.32
MAADANIYAH	Main Market	2.03%	244.50	234.03	10.47	-40.30	374.12	128.64	14.87	5.48	7.89	28.24	245.48
ZAMIL INDUST	Main Market	50.67%	6,090.50	5,031.84	1,058.65	66.76	6,033.12	5,363.93	2,112.31	12.57	45.81	2,170.69	669.19
WATANI STEEL	NOMU	4.60%	553.31	519.63	33.68	9.87	370.04	118.69	64.16	0.00	0.00	64.16	251.36
GROUP FIVE	NOMU	8.12%	976.56	869.36	107.20	38.52	1,715.02	1,353.36	834.62	79.03	41.05	954.70	361.67
MOLAN	NOMU	0.72%	86.37	81.93	4.44	-7.07	84.06	61.05	11.71	0.99	8.71	21.41	23.01
BENA	NOMU	3.58%	430.76	391.02	39.74	10.68	278.12	185.03	86.58	9.36	6.36	102.30	93.09
RIYADH STEEL	NOMU	1.35%	162.57	146.22	16.35	2.00	104.62	26.76	0.00	2.23	11.32	13.55	77.86
CATEGORY TOTAL	**-**	**100.00%**	**15,520.08**	**12,935.15**	**2,584.93**	**852.93**	**15,618.56**	**10,482.11**	**4,748.26**	**272.96**	**480.55**	**5,501.77**	**5,136.45**
Average Steel Solutions & Metal Fabrication & Casting Entity	-	10.00%	1,202.03	1,000.98	201.05	51.52	1,234.72	875.37	384.86	23.63	24.35	432.85	359.36

SOURCE | Morningstar, Financial Statements

- Note that the segment average and benchmarks exclude ALYAMAMAH STEEL and EAST PIPES due to their differing fiscal calendars. Note further that ALYAMAMAH STEEL and EAST PIPES are not displayed in consecutive charts for this section but have instead been depicted on a separate page.
- ZAMIL INDUST is the dominant company in this segment targeting the steel, HVAC, and insulation markets with an overall market share of 50.7% in 2024.
- In 2024, steel solutions & metal fabrication & casting entities in the Kingdom generated SAR 15,520.1 million in revenue and SAR 852.9 million in net profits.
- The total debt of the segment in 2024 is SAR 5,501.8 million, which represents a gearing ratio of 1.1.

ZAMIL INDUST GENERATES 5.1X MORE REVENUE THAN THE SEGMENT'S AVERAGE



SOURCE | Morningstar, Financial Statements

- AL YAMAMAH STEEL and EAST PIPES have been excluded because their fiscal years end in September and March, respectively.

SEGMENT GROSS PROFIT MARGINS RISE ON AVERAGE ACROSS PERIODS UNDER REVIEW

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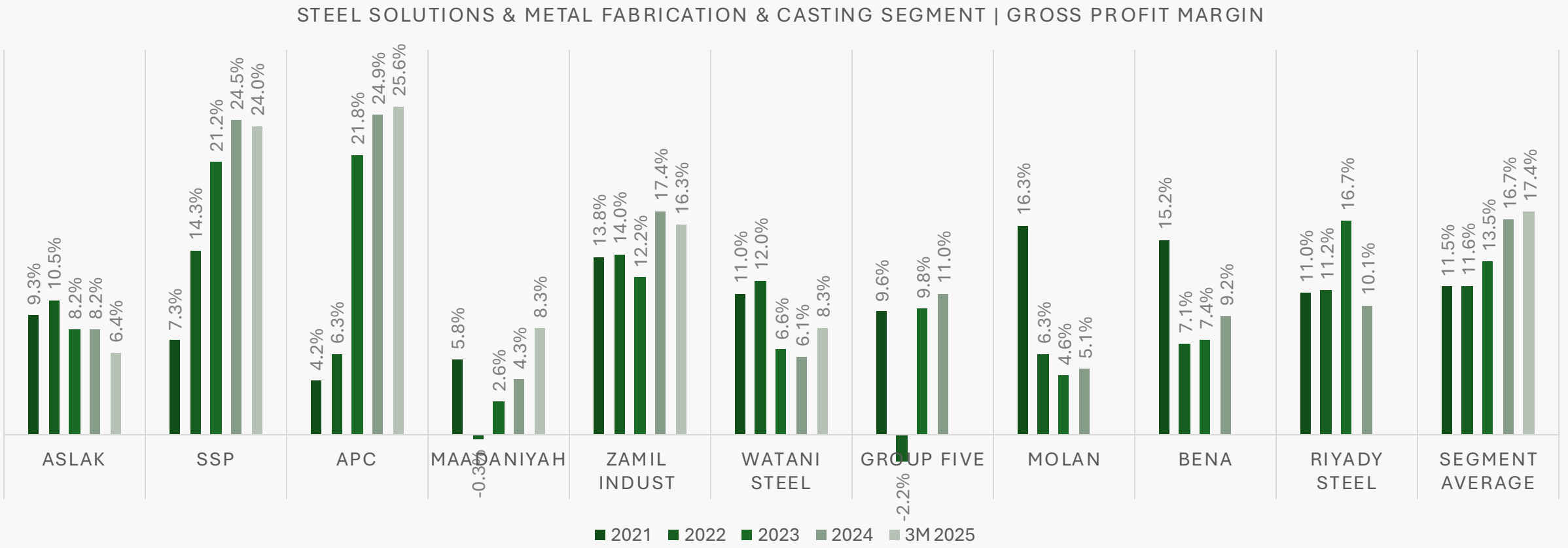

SOURCE | Morningstar, Financial Statements

- The gross profit margins for the steel solutions & metal fabrication & casting segment have remained positive across the periods under review, with the segment as a whole experiencing rising margins across the periods under review.
- GROUP FIVE experienced a negative gross profit margin in 2022 due to a 63.4% decrease in pipe sales revenue, surging raw material costs (iron coils), and supply contracts that did not permit price adjustments. To this effect, it is notable that the firm's recovery in 2023 occurred due to price adjustments.

SEGMENT NET MARGINS EXHIBIT VOLATILITY WITH SOME SEMBLANCE OF RECOVERY ON AVERAGE

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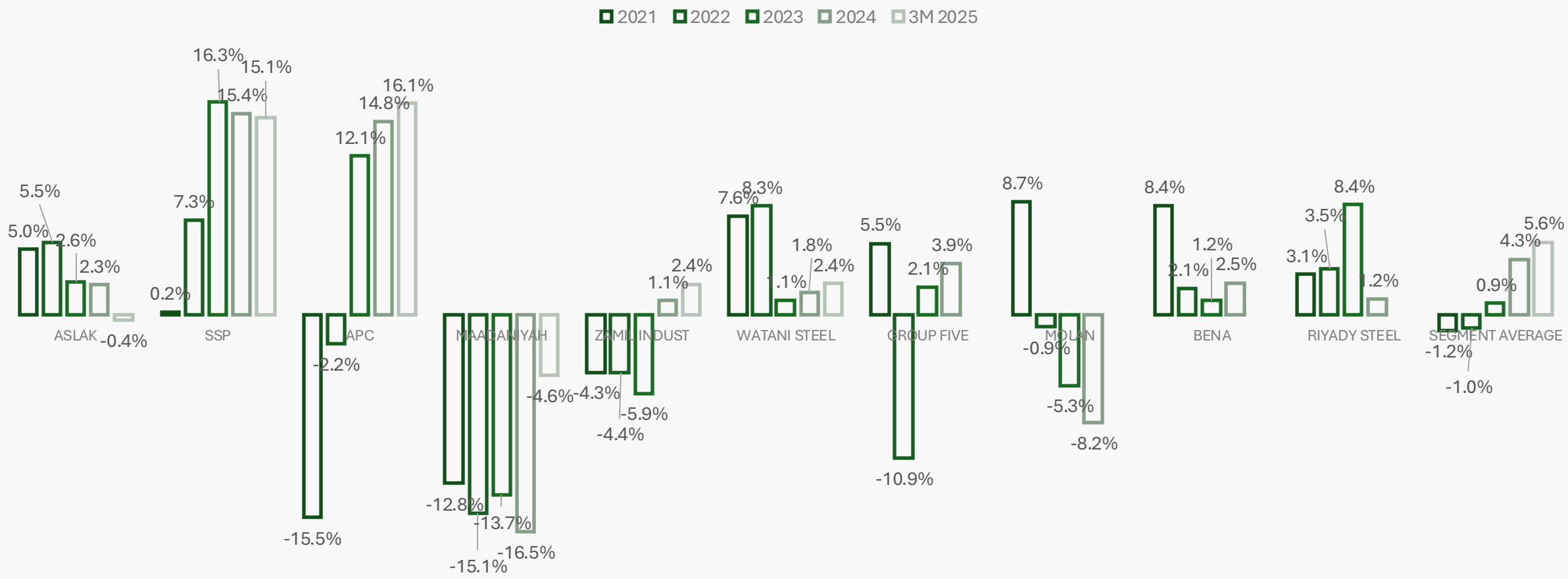
STEEL SOLUTIONS & METAL FABRICATION & CASTING SEGMENT | NET PROFIT MARGIN



SOURCE | Morningstar, Financial Statements

- The steel solutions & metal fabrication & casting segment has exhibited considerable volatility with respect to its net results across the periods under review. Some of its volatility stems from the segment's reliance on catering to the construction sector, which it is now trying to branch away from by developing solutions for the petrochemical, automotive, renewable energy, and defense & aerospace industries.
- In MAADANIYAH's case, the losses stem from high operational overheads coupled with pricing pressure on metallic casted products like drawn wires.
- ZAMIL INDUST is showing signs of recovery, having exhibited a positive net profit margin in 2024, but its near-term trend remains yet to be determined.

THE STEEL SOLUTIONS & METAL FABRICATION & CASTING SEGMENT EXHIBITS A HIGHER LEVERAGE RATIO THAN THE MINING & INDUSTRIAL MINERAL SEGMENT ON ACCOUNT OF AN OUTLIER

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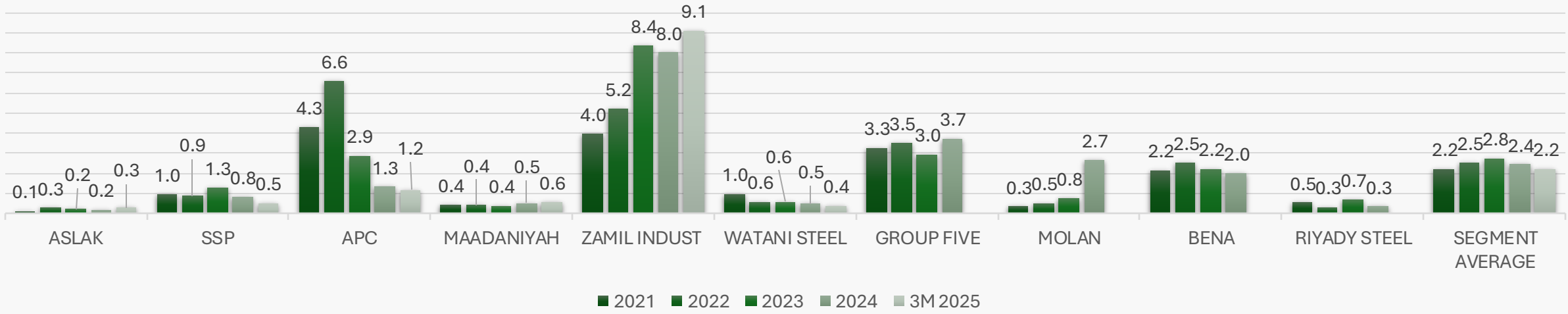
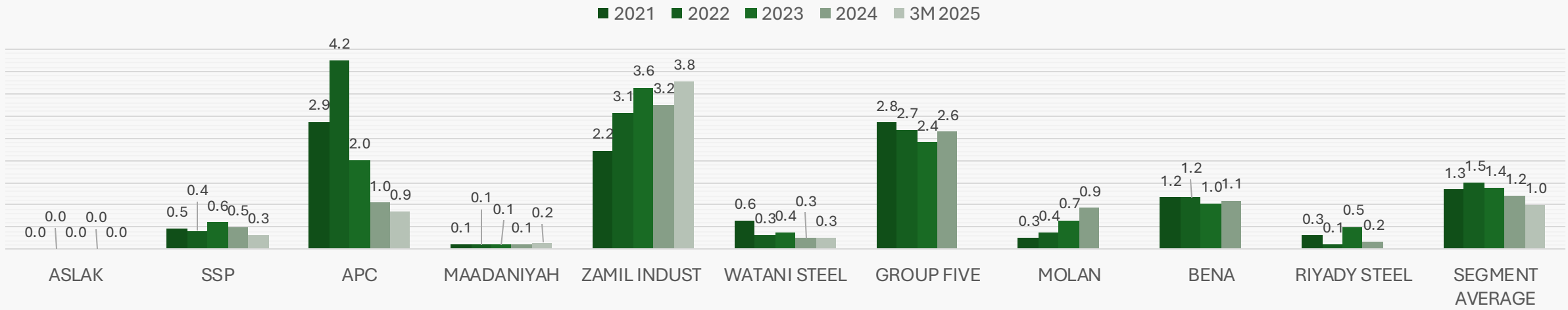
STEEL SOLUTIONS & METAL FABRICATION & CASTING SEGMENT | LEVERAGE RATIO (TOTAL LIABILITIES TO TOTAL EQUITY)



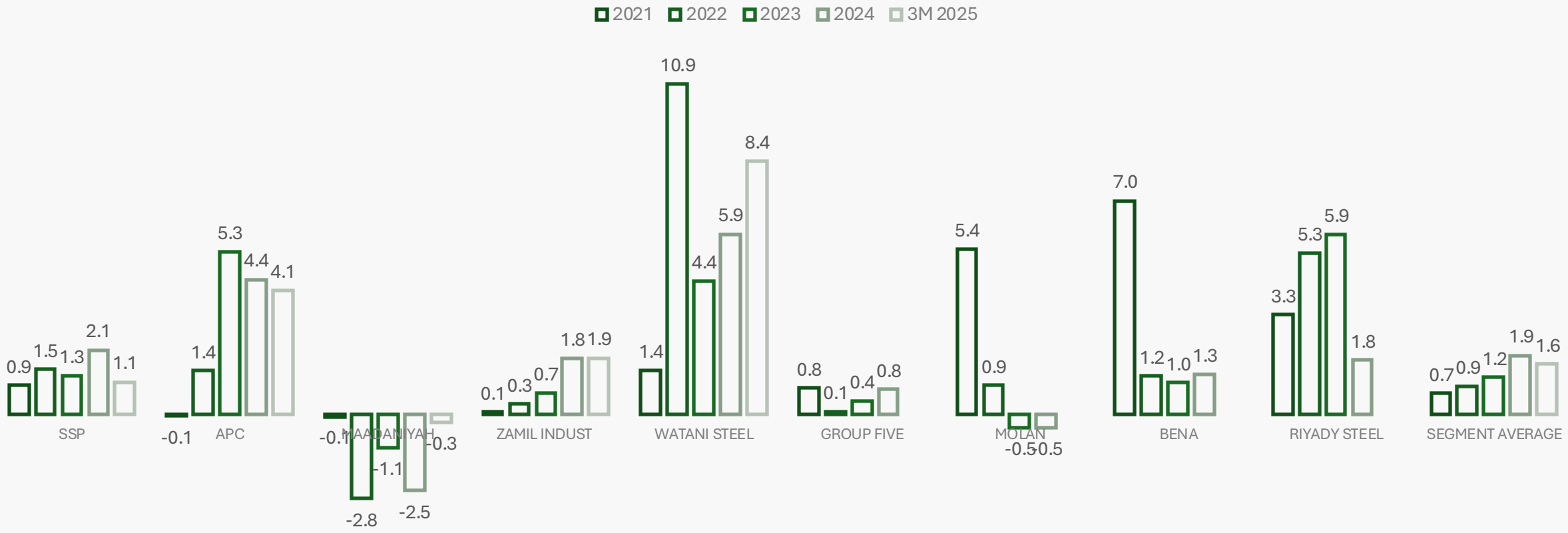
STEEL SOLUTIONS & METAL FABRICATION & CASTING SEGMENT | GEARING RATIO (TOTAL DEBT TO TOTAL EQUITY)



SOURCE | Morningstar, Financial Statements (All Charts)

AROUND HALF OF SEGMENT PARTICIPANTS EXHIBITED A DSCR ABOVE 1.0X ACROSS THE PERIODS UNDER REVIEW

STEEL SOLUTIONS & METAL FABRICATION & CASTING SEGMENT | DEBT SERVICE COVERAGE RATIO (FREE CASH FLOW FROM OPERATIONS/(CURRENT MATURITY OF LONG-TERM DEBT + FINANCE COSTS))

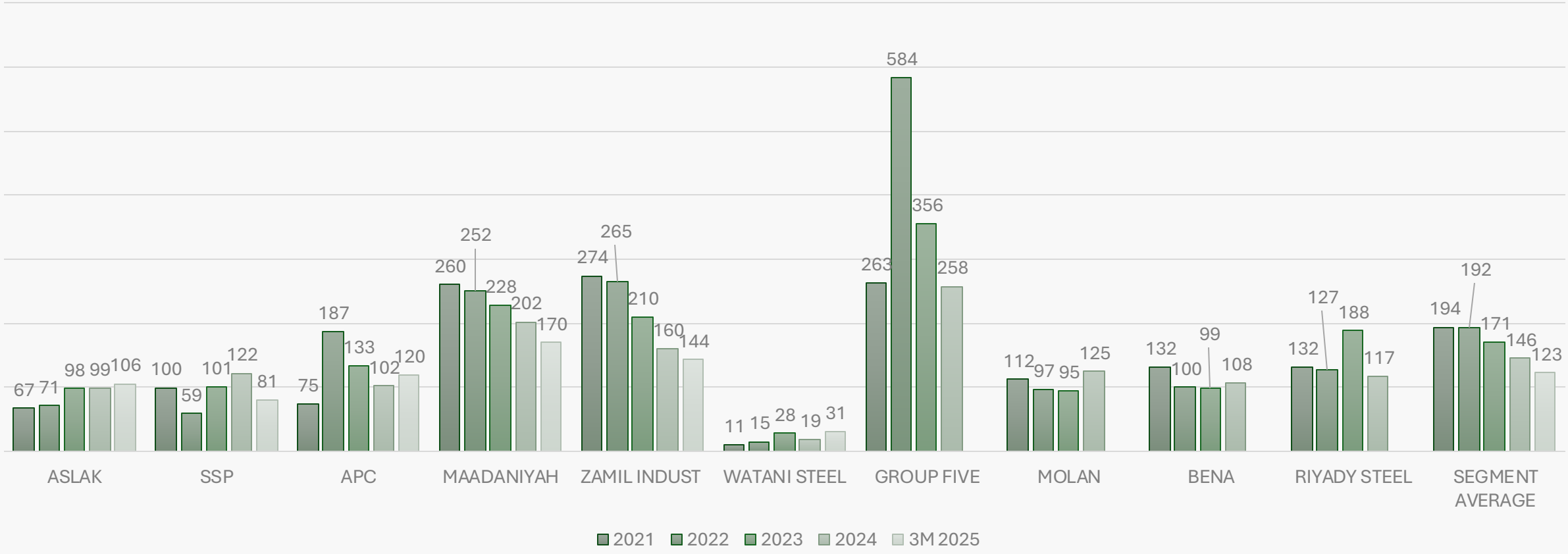


SOURCE | Morningstar, Financial Statements

- Note: ASLAK has been omitted due its relatively high coverage metrics across the periods under review. It had a DSCR of 32.3x in 3M 2025 and 43.5x in 2024.
- The Debt Service Coverage Ratio (DSCR) of entities constituting the steel solutions & metal fabrication & casting segment has exhibited considerable volatility in line with its net operating results. However, it is notable that around half of segment participants have hovered above the peripheral limit of 1.0x across the periods under review.

THE STEEL SOLUTIONS & METAL FABRICATION & CASTING SEGMENT GENERALLY MAINTAINED A COMFORTABLE WORKING CAPITAL CYCLE

STEEL SOLUTIONS & METAL FABRICATION & CASTING SEGMENT | NET WORKING CAPITAL DAYS



SOURCE | Morningstar, Financial Statements

- The steel solutions & metal fabrication & casting segment's working capital cycle generally stretches from 90 to 180 days. The segment average has decreased over the periods under review, but that is on account of a decreasing trend in companies with a relatively higher period-on-period working capital cycle. Those companies include MAADANIYAH, ZAMIL INDUST, and GROUP FIVE.
- The volatility in the working capital cycle experienced by GROUP FIVE in 2022 occurred due to a build up in inventory from SAR 173.0 million in 2021 to SAR 341.2 million in 2022. This occurred alongside a decrease in revenue from SAR 641.1 million in 2021 to SAR 223.5 million in 2022.

AL YAMAMAH STEEL	FY21	FY22	FY23	FY24	6M FY25
Revenue (SAR Million)	1,619.03	1,464.98	1,559.53	1,956.59	997.17
Gross Profit Margin	22.49%	5.34%	-1.82%	11.44%	9.20%
Net Profit Margin	15.10%	-1.16%	-10.59%	3.59%	2.49%
Leverage	0.76	1.45	1.89	1.58	1.65
Gearing	0.57	1.17	1.51	1.27	1.40
DSCR	12.84	2.65	-1.45	2.40	2.15
NWC Days	188	309	239	184	200

SOURCE | Morningstar, Financial Statements

- The fiscal year for AL YAMAMAH STEEL ends in September. FY24 therefore refers to the period ending on the 30th of September 2024.

EAST PIPES	FY21	FY22	FY23	FY24	9M FY25
Revenue (SAR Million)	935.51	597.47	1,438.65	1,543.17	1,832.85
Gross Profit Margin	24.61%	4.64%	10.83%	22.72%	25.10%
Net Profit Margin	15.85%	-0.54%	6.95%	17.33%	20.85%
Leverage	0.58	0.74	0.60	0.75	0.44
Gearing	0.31	0.57	0.42	0.35	0.11
DSCR	5.06	0.92	5.42	5.41	3.63
NWC Days	129	242	150	247	190

SOURCE | Morningstar, Financial Statements

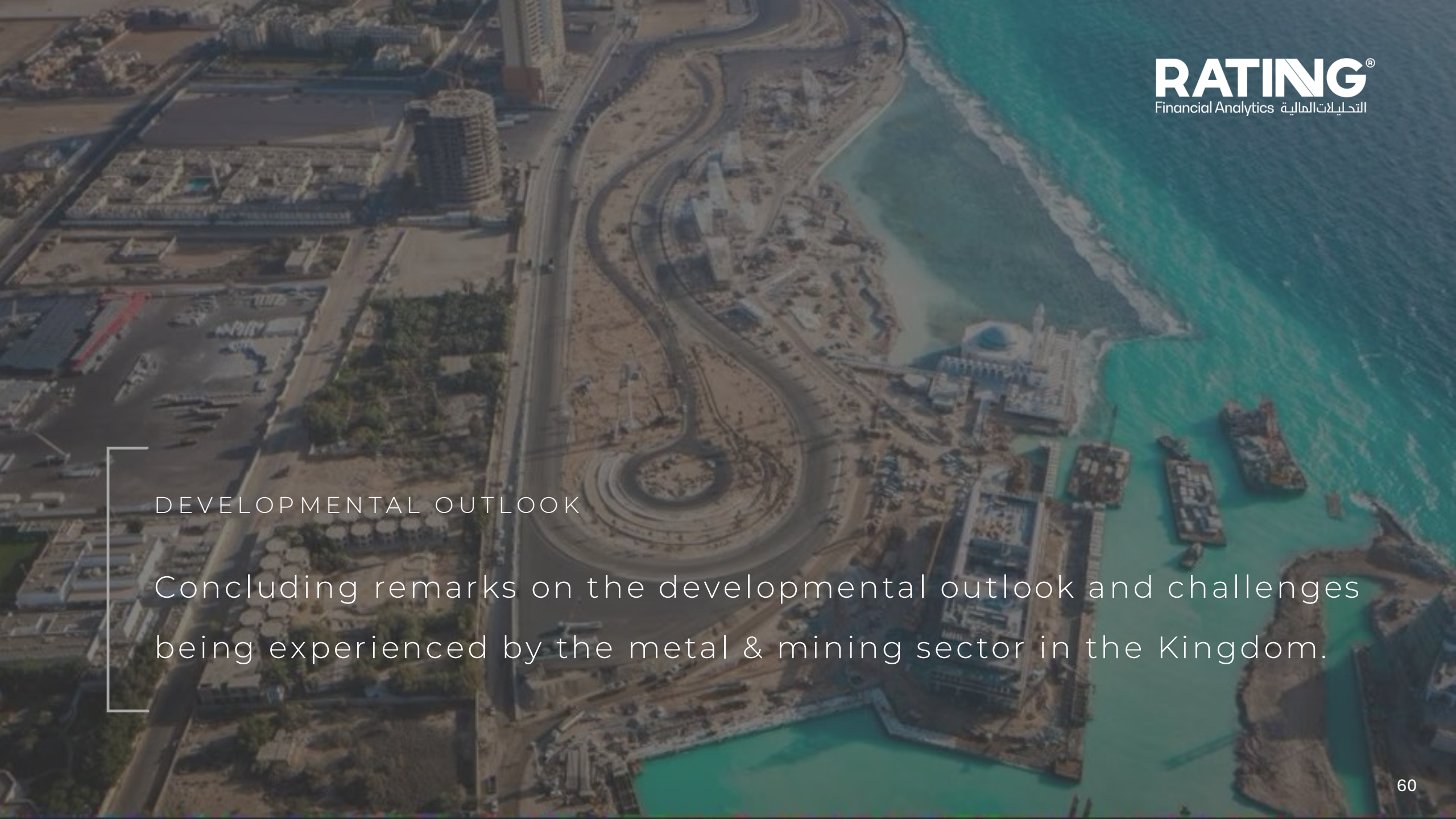
- The fiscal year for EAST PIPES ends in March. FY24 therefore refers to the period ending on the 31st of March 2024.

A SNAPSHOT OF THE MISCELLANEOUS SEGMENT

Company Info	Taqat Mineral Trading Co.	Mohammed Hadi Al Rasheed and Partners Co.	Average Miscellaneous Entity
Listed on Tadawul/NOMU	Nomu	Nomu	-
Ticker	TAQAT	ALRASHEED	-
Fiscal Ending Month	Dec	Dec	Dec
Key Financials			
SAR Million	**2024**	**2024**	**2024**
Revenue	236.41	307.02	271.72
Cost of Sales	235.29	198.17	216.73
Gross Profit	1.12	108.85	54.99
Net Profit	-7.62	80.75	36.56
Total Assets	145.25	314.76	230.00
Total Liabilites	24.72	84.10	54.41
Short-term Debt	0.00	0.00	0.00
CMLTD	7.71	11.18	9.44
Long-term Debt	9.63	21.73	15.68
Total Debt	17.34	32.91	25.13
Total Equity	120.53	230.66	175.60

	TAQAT			ALRASHEED				SEGMENT AVERAGE			
PARTICULARS	**2022**	**2023**	**2024**	**2021**	**2022**	**2023**	**2024**	**2021**	**2022**	**2023**	**2024**
Revenue (SAR Million)	239.98	156.41	236.41	120.55	167.59	215.22	307.02	120.55	203.79	185.82	271.72
Gross Profit Margin	3.51%	-0.25%	0.47%	34.36%	27.94%	32.90%	35.45%	34.36%	13.56%	18.95%	20.24%
Net Profit Margin	0.35%	-9.67%	-3.22%	20.42%	14.71%	20.78%	26.30%	20.42%	6.25%	7.96%	13.46%
Leverage	0.29	0.38	0.21	0.62	0.48	0.42	0.36	0.62	0.40	0.41	0.31
Gearing	0.05	0.24	0.14	0.45	0.34	0.24	0.14	0.45	0.22	0.24	0.14
DSCR	0.84	-0.42	-0.21	2.94	3.36	5.76	8.30	2.94	2.62	3.14	4.52
NWC Days	15	7	23	219	185	153	109	219	85	92	74

SOURCE | Morningstar, Financial Statements (All Tables)



DEVELOPMENTAL OUTLOOK

Concluding remarks on the developmental outlook and challenges being experienced by the metal & mining sector in the Kingdom.

DEVELOPMENTAL OUTLOOK

- The Kingdom aims to attract SAR 750,000.0 million in mining investments by 2030, up from earlier estimates of SAR 375,000.0 million. Moreover, the mining sector's contribution to GDP is expected to grow to SAR 281,250.0 million by 2030, up from its 2024 contribution of SAR 19,456.0 million.

- The Saudi Metal and Mining Exchange is to be created in a partnership with the National Stock Exchange of Australia (NSX) and Ajlan & Bros, to facilitate mineral trading and mining stock listings. Once initialized, the exchange will transform the Kingdom's mining sector by providing a transparent, regulated marketplace for trading metals and mining assets.
- It will enhance access to capital for local mining firms, attract foreign investment, and establish regional price benchmarks for key minerals. By expanding the range of tradable assets beyond oil and petrochemicals, the exchange supports Vision 2030's diversification goals, while also enabling closer integration with industrial hubs.

- A significant development in the metal & mining sector within the Kingdom is the strategic MOU between MAADEN and U.S.-based MP Materials to develop a full rare-earths supply chain domestically. Announced in May 2025, this partnership aims to build a downstream ecosystem—from mining through separation, refining, and magnet production—to help position Saudi Arabia as a global hub for these critical materials.

CHALLENGES

- Infrastructural challenges - While major hubs are well-connected, remote mining regions continue to lack adequate roads, power, and water access, delaying project execution and raising costs.

- Skilled labor shortage – Limited pool of experienced geologists, engineers, and mining technicians. This forces companies to import talent, thereby increasing overheads.

- Regulatory complexity – Despite significant improvements in licensing, there remains a degree of bureaucracy that investors have argued serves more so as a deterrent.

- Environmental pressures – The mining and metal industries are operationally water-intensive. This has resulted in substantial pressure to promote water recycling and adopt zero-liquid-discharge (ZLD) technology. ZLD is a wastewater treatment approach that aims to eliminate liquid discharge from a facility by recovering and reusing nearly all wastewater.

- Sectoral expansion driven by oil revenue – Oil price volatility has the propensity to impact the flow of investment and support provided to the metal & mining segment. This is especially important because the return horizon for mining projects is long-term .

Speak To!

Nabil Abdullah Al-Mubarak
Co-Founder; CEO & MD
Nalmubarak@rating.com.sa

Rai Umar Zafar
Chief Strategy Officer
Rzafar@rating.com.sa

Sunil Bhole
Chief Rating Officer
SBhole@rating.com.sa

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THANK YOU

PO. Box 71514
3858, Mohammad Ali Jinnah Road
Area Code 13241
Alshohda Dist.
Kingdom of Saudi Arabia
CR No. 1010770275
V.A.T. Number 311144738800003
rating.com.sa
Email: info@rating.com.sa
Phone: 9200 09570

rating.com.sa
Email: info@rating.com.sa
Phone: 9200 09570