

DRIVING CHANGE

Sustainability Report
2023

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ABOUT THIS REPORT



This year marks the Saudi Arabian Mining Company's (Ma'aden) fifth year publishing a sustainability report. Since 2019, Ma'aden has been publicly disclosing its sustainability commitments and progress on its performance on an annual basis through standalone reports. Our previous sustainability reports are accessible through the Ma'aden website [here](#) or the QR code below.



REPORT BOUNDARY

This report covers Ma'aden and its eight affiliates¹ : Ma'aden Aluminium (MRC, MBAC, MAC), Ma'aden Base Metals & New Minerals (BMNM), and Ma'aden Phosphate (MWSPC, MPC, MFC, IMC). They are all located in the Kingdom of Saudi Arabia. This report does not cover any other subsidiaries, joint ventures, or business partnerships.

REPORTING PERIOD

This report covers Ma'aden's activities and performance that occurred from 1st January to 31st December 2023. However, where relevant to be able to better illustrate Ma'aden's sustainability achievements and priorities, information from previous years may also be provided as reference.

REPORTING STANDARDS & FRAMEWORKS

This report has been prepared with reference to the GRI Standards. Please refer to the GRI Content Index on p.160 of this report for more information on how Ma'aden is meeting specific GRI disclosure requirements.

Other sustainability-related standards and reporting frameworks were also used as reference in the development of this report. This approach guarantees that Ma'aden's disclosures not only reflect industry- and region-specific contexts but also align with global and local sustainability goals. The additional standards and frameworks referenced include but are not limited to:

- United Nations Sustainable Development Goals
- United Nations Global Compact
- Saudi Vision 2030
- The Saudi Green Initiative
- Saudi Arabia's National Standards for Sustainability
- The Aluminium Stewardship Initiative
- The Sustainable Accounting Standard Board Standards
- The Greenhouse Gas Protocol standards
- Occupational Safety and Health Administration standards

¹MRC = Ma'aden Rolling Company; MBAC = Ma'aden Bauxite and Alumina Company; MAC = Ma'aden Aluminium Company; MWSPC = Ma'aden Wa'ad Al Shamal Phosphate Company; MPC = Ma'aden Phosphate Company; MFC = Ma'aden Fertilizer Company; IMC = Industrial Minerals Company.



INDEPENDENT ASSURANCE

Selected quantitative indicators disclosed in this report received independent limited assurance from Bureau Veritas S.A. Dubai. As part of Ma'aden's commitment to sustainability, we strive to enhance confidence in the quality, reliability, and accuracy of our publicly disclosed sustainability data. Please refer to the independent assurance statement linked [here](#) in this report for more information on the assurance results.

We recognize the importance of feedback as it enables us to continuously improve our performance and disclosures. We welcome all feedback on and/or enquiries from our stakeholders. Comments and questions relating to this report can be submitted to the contact details below.

Ma'aden Corporate Sustainability

sustainability@maaden.com.sa

Ma'aden, Riyadh HQ, Saudi Arabia

Further information on Ma'aden's position on and approach to sustainability are available at



EXECUTIVE MESSAGES





H.E. Yasir bin Othman AlRumayyan
Chairman

CHAIRMAN'S MESSAGE

Ma'aden is taking groundbreaking steps to make mining a critical pillar of the Saudi economy and a strategically important sector to the delivery of Saudi Vision 2030. Our corporate strategy sets out our ambitious plan to grow tenfold by 2040 and drive sustainable development, unlocking the value of our nation's mineral resources while bringing Saudi Arabia to the forefront of the global mining industry.

Reflecting on Ma'aden's journey, since our establishment as a single gold mine in 1997, we have evolved into one of the world's fastest-growing mining companies and the largest multi-commodity metals and mining company in the Middle East. This transformation has created wide-reaching, positive impacts for our nation. Today, we have over 6,870 employees and operate 17 mines and sites across Saudi Arabia, bringing employment opportunities to communities across the Kingdom in both major cities and rural areas. Our expenditures and investments have helped to bolster local economies and improve quality of life.

We have also expanded Ma'aden's global reach via strategic partnerships, such as the establishment of Manara Minerals in 2023 through a joint venture with the PIF. With an investment mandate to secure international mining assets, including copper, nickel, lithium, and iron ore, Manara Minerals is providing vital metals and minerals that are essential to the global clean energy transition.

This positions Ma'aden to succeed in the future as global demand for renewable energy technologies continues to grow. We will continue scaling up our global presence by evaluating overseas investment opportunities, including acquisitions, mergers, and other growth strategies.

I am proud that we are making progress towards our growth ambitions while also prioritizing sustainability. This involves considering the needs of all stakeholders, including the environment and wider society. Our success in decarbonization and deploying renewable energy is a reflection of our commitment to this belief.

Ma'aden has set a carbon neutrality target for 2050, ten years ahead of Saudi Arabia's 2060 net zero target, in line with the Saudi Green Initiative efforts. We are committed to taking the necessary steps to meet those targets and have worked on enhancing our manufacturing lines to produce low-carbon ammonia and aluminium, increased our investments in carbon capture, utilization, and storage solutions, and are collaborating with regulators and business partners to increase our renewable energy uptake and materials recycling capacities.

On behalf of the Board of Directors, I would like to thank our stakeholders for their continued support and trust in Ma'aden. We will continue to focus on growth and impact to future-proof our business and create lasting shared value for all.

CHIEF EXECUTIVE OFFICER'S MESSAGE

At Ma'aden, we firmly believe that business excellence encompasses more than just financial or operational achievements; it also involves acting responsibly within our communities and our environment. Our dedication to sustainability not only aligns with the goals of Saudi Vision 2030, but also resonates with the principles of the Saudi Green Initiative.

CONTRIBUTING TO A MORE SUSTAINABLE ECOSYSTEM

Ma'aden has taken consistent steps to curb greenhouse gas emissions across its operations, including Scope 1 and 2, where we have reduced our CO₂ equivalent emissions by 14.6% from our 2020 baseline. Beyond our own operations, in 2023 we exported the largest shipment of ultra-low carbon ammonia, with 614,000 tons being distributed to five countries.

We have also made significant strides to reduce our water usage. We have decreased our ground water consumption by almost 10% saving 2.446 million metric tons. Through our partnerships with the Royal Commission for Jubail and Yanub and the National Center for Wildlife we are actively engaged in initiatives that protect and develop Saudi Arabia's natural landscape. Our afforestation initiative has already planted 220,000 trees and 10 million seeds, with plans to plant 10 million trees and 10 million mangroves by 2040.

SUPPORTING THE NEXT GENERATION OF LEADERS

We have celebrated milestones in community development through our commitment to and support of education. With an investment of SAR 158 million, we enhanced our Schools of Excellence program for an additional eight years. We proudly opened the third School of Excellence in Arar for girls, welcoming 100

students in its inaugural class, with a view to triple this number within the next five years. Our support for the next generation of mining leaders also extended to involvement in the Kingdom's first mining science and engineering bachelor's degree program at King Fahd University of Petroleum and Minerals. Over the next decade, we will sponsor 30 students annually.

We have also made considerable progress in integrating sustainability into our corporate culture. Our partnership with the International Women in Mining Organization (IWIM) marked a key step in increasing our female workforce. As the first Middle Eastern company to partner with IWIM, we are at the forefront of championing gender diversity and inclusivity in our industry. Ma'aden is also leading the way in supporting the local economy through our Tharwah program, championing local suppliers to integrate with the mining value chain, with 76% of our procurement coming from local companies.

I was honored to have our efforts recognized in 2023, with the awarding of the prestigious King Khalid Sustainability Award. This accolade reaffirms our steadfast commitment and performance as we look forward to Ma'aden continuing as a key player in Saudi Arabia's development.

I extend my thanks to our Board of Directors for their strategic guidance, to our employees for their tireless efforts, and to our valued business partners for their collaborative spirit throughout this transformative journey. Together, we will continue to build a sustainable future for our people, our planet and our business.



Robert Wilt
Chief Executive Officer

"Our dedication to sustainability not only aligns with the goals of Saudi Vision 2030, but also resonates with the principles of the Saudi Green Initiative."

ABOUT MA'ADEN



ABOUT MA'ADEN

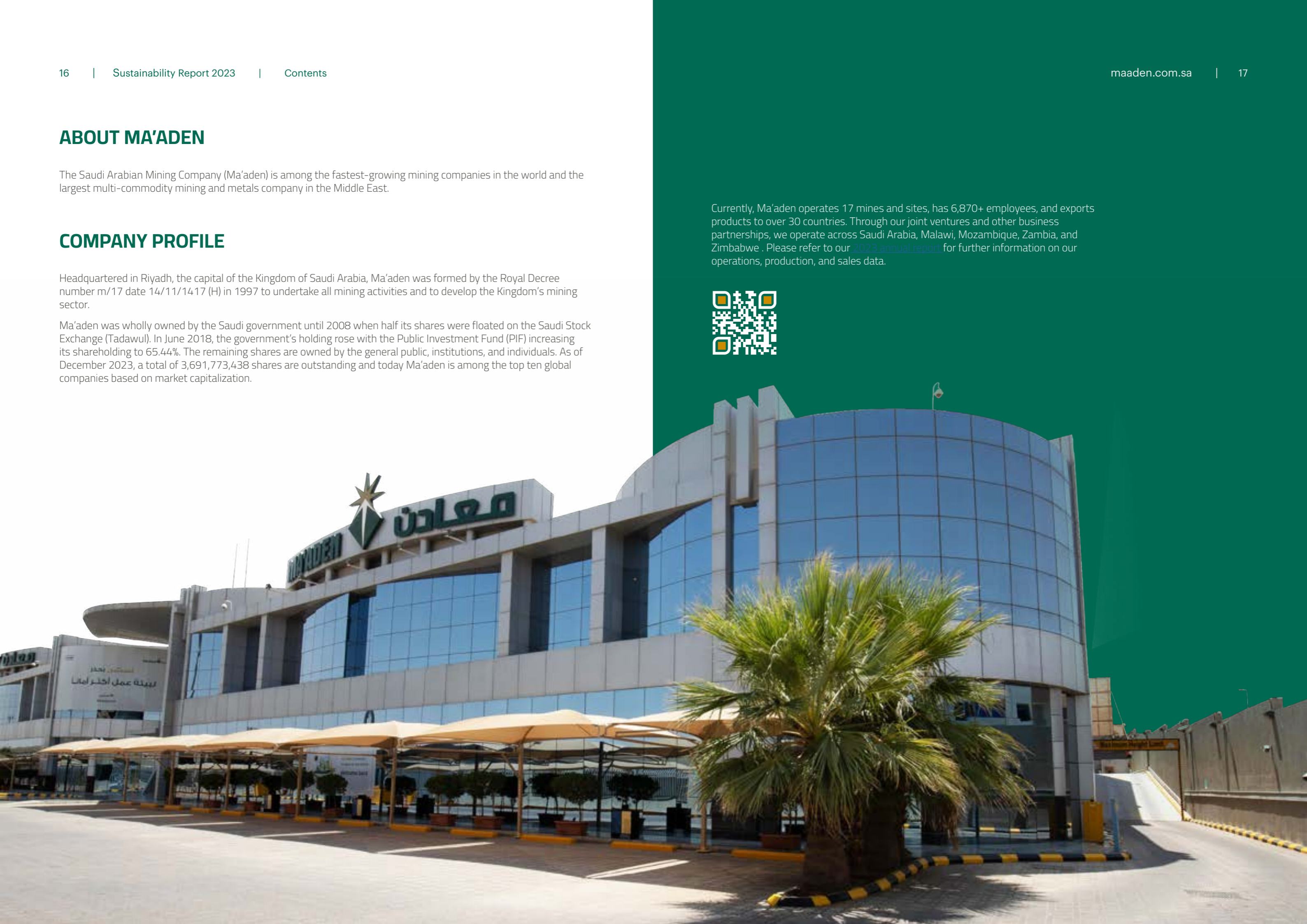
The Saudi Arabian Mining Company (Ma'aden) is among the fastest-growing mining companies in the world and the largest multi-commodity mining and metals company in the Middle East.

COMPANY PROFILE

Headquartered in Riyadh, the capital of the Kingdom of Saudi Arabia, Ma'aden was formed by the Royal Decree number m/17 date 14/11/1417 (H) in 1997 to undertake all mining activities and to develop the Kingdom's mining sector.

Ma'aden was wholly owned by the Saudi government until 2008 when half its shares were floated on the Saudi Stock Exchange (Tadawul). In June 2018, the government's holding rose with the Public Investment Fund (PIF) increasing its shareholding to 65.44%. The remaining shares are owned by the general public, institutions, and individuals. As of December 2023, a total of 3,691,773,438 shares are outstanding and today Ma'aden is among the top ten global companies based on market capitalization.

Currently, Ma'aden operates 17 mines and sites, has 6,870+ employees, and exports products to over 30 countries. Through our joint ventures and other business partnerships, we operate across Saudi Arabia, Malawi, Mozambique, Zambia, and Zimbabwe . Please refer to our [2023 annual report](#) for further information on our operations, production, and sales data.



COMPANY HISTORY

We have come a long way since 1997, when the company was established by royal decree with a mandate to develop Saudi Arabia's minerals sector as the third pillar of the Saudi industry, beyond oil and petrochemicals. Starting from a single gold mine, the Mahd Al Dhahab mine, Ma'aden has continuously explored new mining opportunities and we have expanded our business to provide the global market with

various metals and minerals, including gold, copper, zinc, aluminium, phosphate, bauxite, and magnesite. After investing significant effort, time, and resources in building a world-class, unique, and fully integrated mining value chain, we are now focused on marketing our products worldwide, improving the return on our investments, and consolidating our resources and experience even as we continue to expand into new locations and build new industrial plants.



1997

- Ma'aden was established by royal decree.
- Mahd Ad Dahab gold mine's operations started.



2003

- Bulghah gold mine's commercial production started.



2006

- The construction of Ras Al-Khair industrial city began.



2007

- Ma'aden Phosphate Company, Ma'aden's second affiliate and a joint venture with SABIC, was established.



2008

- Ma'aden was listed on the Saudi Stock Exchange (Tadawul), with 50% of its shares being floated.
- Al-Amar gold mine's commercial operation started.



2009

- Ma'aden Aluminium Company, Ma'aden's third affiliate and a joint venture with Alcoa Corporation, was established.
- Ma'aden Industrial Minerals Company, Ma'aden's fourth affiliate, was established.



2010

- Ma'aden Rolling Company, Ma'aden's fifth affiliate, was established.
- Mining railway operations between Al Jalamid phosphate mine and Ras Al-Khair industrial city began.



2011

- Ma'aden Bauxite and Alumina Company, Ma'aden's sixth affiliate, was established.
- Ma'aden ammonia plant's commercial production started and its first shipment was exported.
- Ma'aden Phosphate Company's first shipment of phosphate fertilizers was exported.



2012

- The production of aluminium ingots began.
- Ma'aden Phosphate Company begins operational activities and production of DAP.



2013

- Ma'aden Wa'ad Al Shamal Phosphate Company, Ma'aden's seventh affiliate and a joint venture with Mosaic and SABIC, was established.
- The construction of Ad Duwayhi gold mine began.



2014

- Ma'aden Barrick Copper Company, Ma'aden's eighth affiliate and a cooperation with Barrick, was established.
- As Suq gold mine's commercial production started.
- Ras Al-Khair's aluminium rolling mill operations started.
- The contract for the construction of Wa'ad Al Shamal industrial city was signed.



2015

- Ad Duwayhi gold plant's commercial production started.
- A 430 km treated water pipeline in Taif was built.



2016

- The official inauguration of Ras Al-Khair industrial city by the custodian of the two holy mosques, King Salman bin Abdulaziz, occurred.



2018

- The official inauguration of Wa'ad Al Shamal industrial city by the custodian of the two holy mosques, King Salman bin Abdulaziz, occurred.
- Saudi Arabia's Public Investment Fund consolidated the government's interest in Ma'aden.



2019

- Ma'aden began the largest exploration project in the history of Saudi Arabia's mining history.
- Ma'aden Fertilizer Company, Ma'aden's ninth affiliate, was established.
- Ma'aden Marketing and Distribution Company, Ma'aden's tenth affiliate, was established.
- Ma'aden completed its first international acquisition – the Mauritius-based fertilizer company, Meridian Group – which became its eleventh affiliate.



2020

- The construction of Mansourah-Massarrah gold mine began.



2021

- Ammonia3, part of Ma'aden Fertilizer Company, began its commercial production and exports.
- Ma'aden's 2040 strategy was launched.



2022

- Ma'aden entered the Forbes 2000 List of World's Largest Public Companies.
- The Tharwah local content program was launched.
- Certification to trade 138 kt of blue ammonia was received and the first shipment was dispatched.
- Ma'aden was among the top three purchasers of carbon credits at the world's largest carbon auction held in Riyadh.
- Pre-commissioning of the Mansourah-Massarrah gold mine.
- Completion of the Ammonia 3 project.



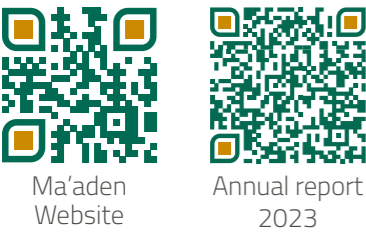
2023

- Manara Minerals, Ma'aden's twelfth affiliate and a joint venture with the Public Investment Fund, was established.
- Ma'aden finalized the commissioning of its Mansourah-Massarrah gold mine, with an annual production capacity of 250,000 ounces of gold.
- Ma'aden's exploration program discovered significant new gold resource potential along a 125km strike in Saudi Arabia.
- In collaboration with the Ministry of Industry and Mineral Resources and King Fahd University of Petroleum and Minerals (KFUPM), Ma'aden launched a new Mining Science and Engineering bachelor's program.

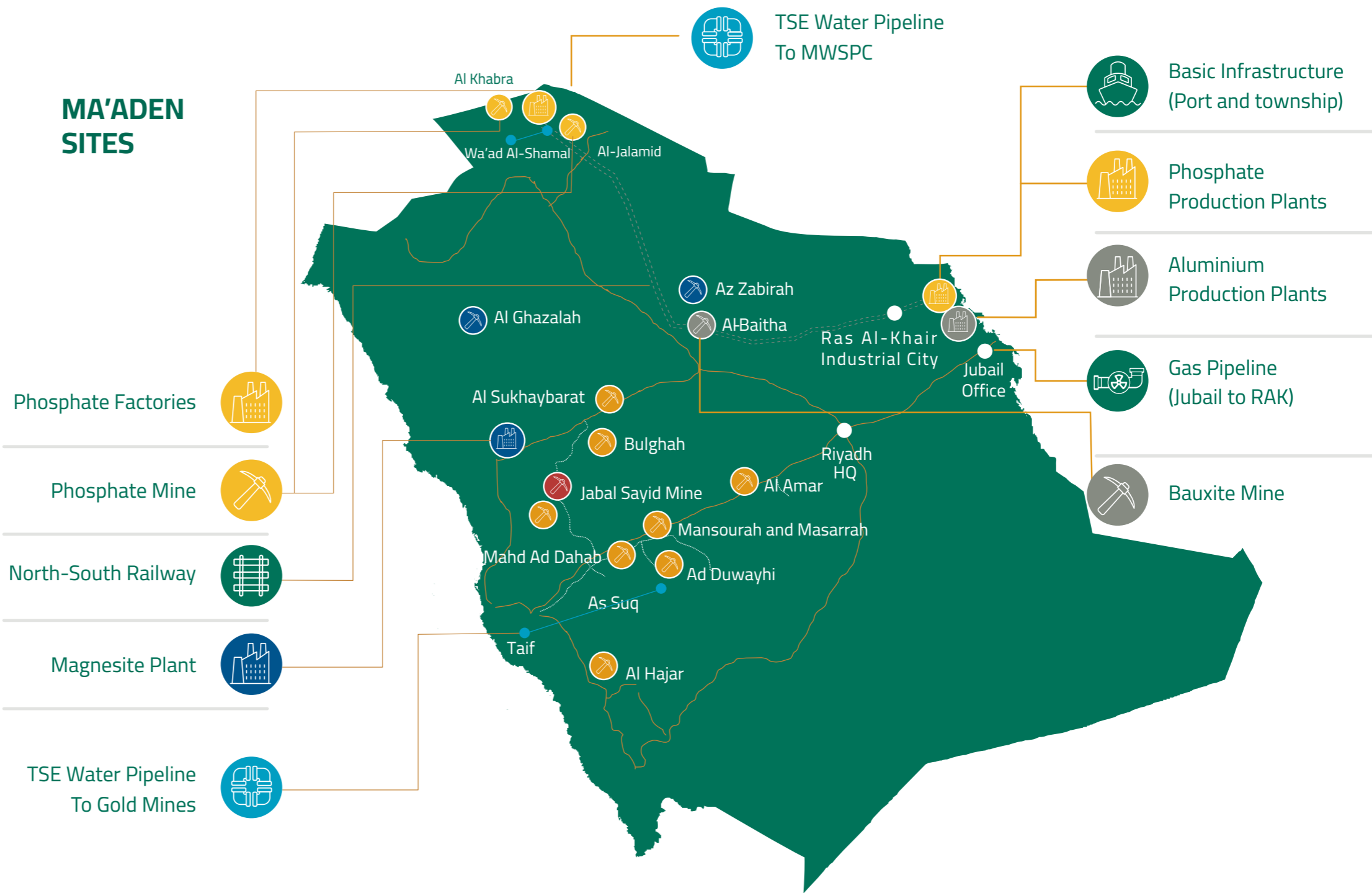
OPERATIONS & BUSINESSES

Our operations and businesses are structured into corporate functions and three core business units (BUs): Aluminium, Phosphate, and Base Metals & New Minerals (BMNM). Our operations also include the activities of our wholly owned subsidiary, Ma'aden Infrastructure Company (MIC), which fulfills a wide range of infrastructure construction and management needs of our businesses.

This report only contains information regarding the BUs that are included in this report's boundary. For further details about Ma'aden's businesses and the business units that are not covered in this report, please refer to our [website](#) and [2023 annual report](#).



MA'ADEN SITES



Phosphate Factories

Phosphate Mine

North-South Railway

Magnesite Plant

TSE Water Pipeline To Gold Mines

TSE Water Pipeline To MWSPC

Basic Infrastructure (Port and township)

Phosphate Production Plants

Aluminium Production Plants

Gas Pipeline (Jubail to RAK)

Bauxite Mine

Industrial Minerals

Aluminium

Phosphate

Gold/ Copper

Magnesite Plant

Bauxite Mine

Mine

Gold Mine

Magnesite or Kaolin Mine

Production

Production

Copper Mine

EXPLORATION AND RESOURCE DEVELOPMENT

At Ma'aden, we strive for high levels of sustainability and compliance in all of our exploration activities. For us, mineral exploration is a core component of our strategic business and growth plans and, therefore, we are committed to developing a robust pipeline of projects that will support the sustainability, growth, and diversification of our operations into the future. We continue to apply for new exploration licenses as we expand. Ma'aden currently holds various exploration licenses in Central, Western, and Northern Saudi Arabia, and has undertaken extensive exploration and evaluation activities over the areas covered by these licenses. Ma'aden continues to invest heavily in modern exploration technology that are utilized globally, and which are well known and proven, such as regional airborne surveys, geochemical surveys, and remote sensing data to fully evaluate existing and new exploration areas.

Gold was the first commodity mined by Ma'aden and proved to be a strong foundation for our subsequent growth and diversification into base metals.



MA'ADEN BASE METALS AND NEW MINERALS

Gold was the first commodity mined by Ma'aden and proved to be a strong foundation for our subsequent growth and diversification into base metals. Our subsidiary, formally operated under the name of Ma'aden's Gold and Base Metals (MGBM), changed its name to Ma'aden Base Metals and New Minerals (BMNM) and oversees both gold and base metal mines while our joint venture Ma'aden Barrick Copper Company (MBCC) is dedicated to copper operations. As a wholly owned subsidiary of Ma'aden, BMNM generates most of its revenue from gold while the remainder comes from copper, silver, and zinc. BMNM operates seven gold mines: Ad Duwayhi, Al Amar, Bulghah, Sukhaybarat, As Suq, Mahd Ad Dhahab, and Mansourah-Massarrah.

PHOSPHATE

Phosphates are a naturally occurring form of the element phosphorus, one of the three primary nutrients required for photosynthesis and crop growth. Ma'aden mines phosphate rock and processes it into diversified ammonium phosphate fertilizer products. Ma'aden is rapidly becoming one of the leading players in the global phosphate trade. Additionally, because the stable supply of phosphate fertilizers can support stabilizing and increasing agricultural production, we believe we are contributing to enhancing global food security by excelling in our phosphates business.

To strengthen its position, Ma'aden has relied on several subsidiaries and joint ventures to operate the phosphate business – Ma'aden Phosphate Company (MPC), Ma'aden Wa'ad Al Shamal Phosphate Company (MWSPC), Ma'aden Fertilizer Company (MFC), Ma'aden Marketing and Distribution Company (MMDC), Meridian Group, and Industrial Minerals Company (IMC).

MPC is a joint venture investment of which Ma'aden owns 70%. It operates from two primary locations: Al Jalamid in the northern province of Saudi Arabia where a phosphate mine and beneficiation plant are located, and Ras Al Khair Industrial City in the eastern province of Saudi Arabia where Ma'aden's Integrated Fertilizer Production Complex is located.

MWSPC is another joint venture investment of which Ma'aden owns 60%. It is in the Wa'ad Al Shamal Minerals Industrial City, in the northern province of Saudi Arabia. The complex includes seven plants and associated facilities, including a beneficiation plant, phosphoric acid plant, and sulfuric acid plant. Also, MWSPC's Ras Al Khair unit includes a di-ammonium phosphate and granulation plant.

MFC contains Ma'aden's Integrated Fertilizer Production Complex, located in the Wa'ad Al Shamal Minerals Industrial City. Part of this investment includes an ammonia plant in Ras Al Khair Industrial City with a capacity of 1.1 million tons per year.

MMDC is the marketing and distribution arm for Ma'aden's fertilizer products. Its purpose is to accelerate building distribution and product development capabilities that will shorten Ma'aden's learning curve in product development, blending, agronomy, and retail. MMDC also owns and operates Ma'aden's Global Offices.

Meridian Group is a well-established African company with a mature structure and multipart operations that is 85% owned by Ma'aden. It locally manufactures, distributes, and trades in agricultural commodities that allow it to partner with local farmers and provide

them with best value, tailor-made solutions. Meridian Group's core focus is on the importation, blending, and distribution of high-quality fertilizer. Its flagship brand, Superfert Fertilizer, is available throughout the region and enjoys a strong following with an array of farmers and farming enterprises.

IMC was established as a wholly-owned subsidiary of Ma'aden in 2009. It runs Ma'aden's industrial minerals production, specializing in extracting and adding value to Saudi Arabia's extensive deposits of industrial minerals. These include low-grade bauxite, kaolin, magnesite, and magnesia products. IMC operations include Az Zabirah, Al-Ghazallah mines, and Al-Madinah Al-Munawarah processing plant.

ALUMINIUM

Aluminium, one of the world's most versatile and recyclable metals, is the third most abundant element and the most prevalent metal in our planet's crust. Additionally, it is the most utilized non-ferrous metal, with its production surpassing that of all metals except iron. Furthermore, compared to other widely used materials, such as plastics, aluminium possesses much higher recyclability, and the quality of the material does not decrease over multiple recyclings. Therefore, through our aluminium business, Ma'aden can also contribute to more sustainable material usage, contributing to a closed-loop circular economy.

Ma'aden moved into aluminium production to maximize the minerals and metals value chain. Our 'mine-to-metal' vision is to develop a new homegrown and sustainable aluminium industry, to transfer the know-how associated with it, and to position Saudi Arabia as a strong supply-side player in global industries. For this purpose, Ma'aden is operating Ma'aden Bauxite and Alumina Company (MBAC), Ma'aden Aluminium Company (MAC), Ma'aden Rolling Company (MRC), and Sahara and Ma'aden Petrochemicals Company (SAMAPCO) as its aluminium businesses.

MBAC operates the bauxite mine and alumina refinery. Ma'aden's feedstock comes from large bauxite deposits in the Al Ba'itha Mine, which includes the mine and the ore-crushing and handling facilities. The mine's estimated production is 5 million tons of dry-weight bauxite annually. Our alumina refinery, the first in the Middle East, can produce 1.8 million tons of alumina per year.

MAC operates a smelter which is located in Ma'aden's Fully Integrated High-Efficiency Aluminium Production Complex. The smelter's annual production capacity is 780,000 tons per year of primary aluminium. Our casthouse is integrated with the smelter, with a total design capacity of 1.2 million tons per year, producing standard ingot, extrusion billet, and tolling slab.

MRC is wholly owned by Ma'aden and has a capacity of 460,000 tons per year. It currently produces can sheets, end, and tab stock for beverage can manufacturing and auto sheet for the automotive industry.

Besides exploring new projects and operating our businesses, Ma'aden acknowledges the importance of responsibly closing our projects at the end of their lifecycles. Therefore, Ma'aden will make the most efforts to protect the natural resources, community heritage, our employees, and assets when closing our projects.

Our alumina refinery, the first in the Middle East, can produce

1.8 Mn Tons
of alumina per year



CORPORATE STRATEGY

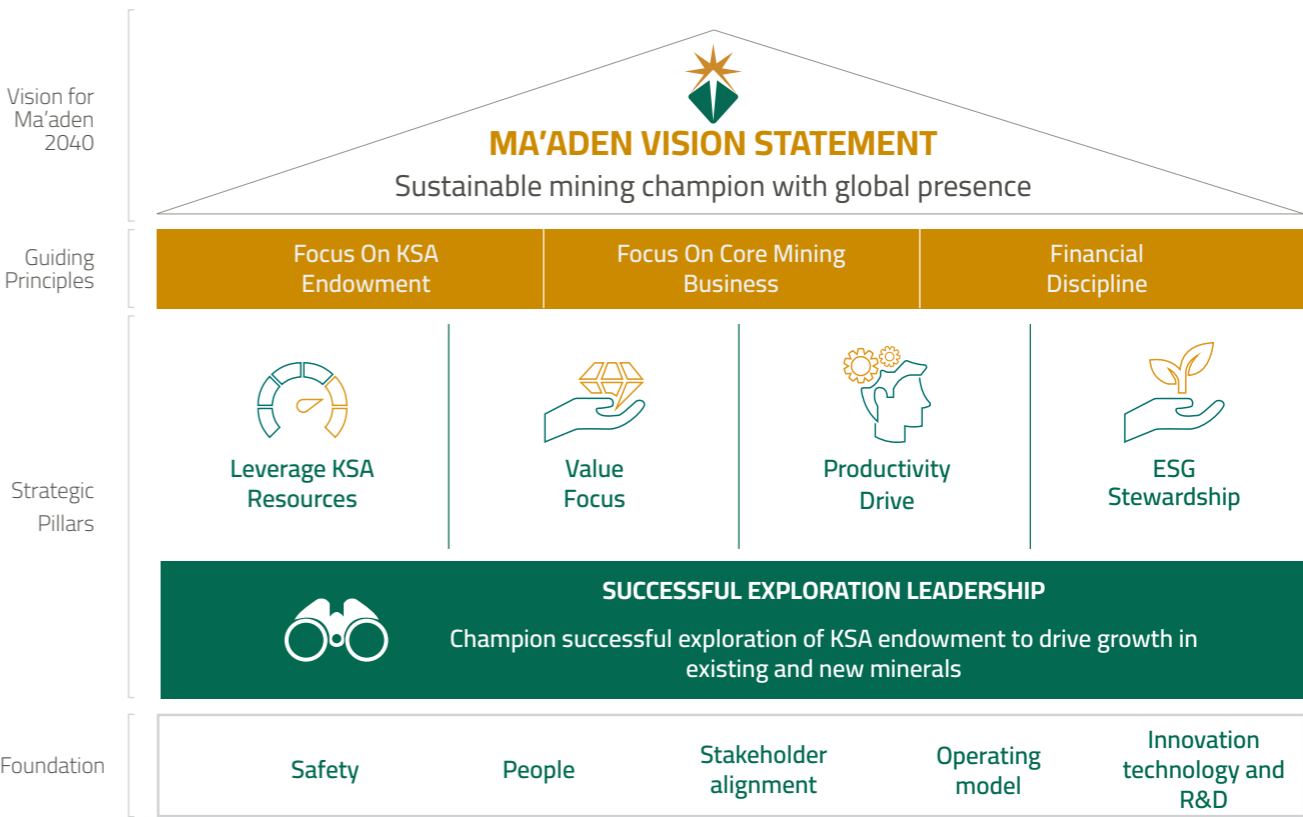
Ma’aden aspires to become a sustainable mining champion with a global presence. This involves leading the development of Saudi Arabia’s mining industry and embracing integrity, care, teamwork, ownership, and continuous improvement. Ma’aden’s corporate strategy includes growing tenfold by 2040 and creating substantial shareholder value while driving positive socioeconomic impacts for the Kingdom in alignment with Vision 2030.

This growth will stem from building scale in existing businesses and expanding our portfolio in new minerals through prevalent exploration in Saudi Arabia. Ma’aden’s 2040 strategy relies on four strategic pillars: leveraging the Kingdom’s resources, focusing on value, driving productivity with strong stewardship of ESG issues, and being the foundational enabler of exploration. Indeed, Ma’aden’s 2040 strategy is founded upon a robust exploration strategy of current and new minerals in an accelerated effort to unlock Saudi Arabia’s promising geological endowment, leveraging world class partners and cutting-edge technologies.



Ma’aden’s profitable business portfolio includes several strategic initiatives under the four strategic pillars including, but not limited to, diversified fertilizer initiatives to become among the top three producers in the global fertilizer market, primary aluminium production capacity growth to become among the top ten producers globally, and diversified gold portfolio as well as base metals including copper, zinc, and other industrial metals.

The company has committed to an ESG strategy aimed at fostering lasting, positive change within the mining industry, closely aligning with the global agenda for ecological sustainability. A key goal under this strategy is achieving carbon neutrality by 2050, demonstrating a firm commitment to significant environmental objectives.



NUMU: CATALYZING TRANSFORMATION FOR MA'ADEN'S 2040 STRATEGY

Ma'aden's pursuit of business excellence is exemplified through the NUMU transformation program. Launched in 2022, NUMU aims to revitalize our organization by fortifying support to our people and processes in order to deliver on our ambitious 2040 strategy. Led by the guiding principle of Let's Unearth Our Potential the program is structured around three pivotal pillars – organizational health and capabilities, core business performance, and growth. Each pillar is designed to reshape our business practices and affirm our position as the employer of choice in Saudi Arabia.

- **Organizational Health and Capabilities:** The deployment of multiple workstreams to improve cultural and talent growth within the organization as well as external recognition and reputation by enhancing employee safety and benefits, work environment, internal processes, and overall employee value proposition.
- **Core Business Performance:** Review and benchmarking of all indicators and metrics within our operations in mining, logistics, and manufacturing to identify areas for potential improvement. The engagement of all BUs in operational excellence initiatives and improvement programs which are expected to deliver significant recurring financial impact. The development of production capabilities throughout all Ma'aden plants and joint investments.
- **Growth:** The implementation of large-scale exploration projects and capital investments and the provision of an enterprise-wide framework and platform for all initiatives and projects in order to provide a strong foundation for all our growth ambitions in the coming decade.

This transformation encompasses all aspects of our operations which has led to 18 major workstreams and over 1,000 initiatives, the introduction of a new operating model that enhances our organizational agility and efficiency, a revamp of our company image to better reflect our commitment to safety, innovation, and sustainability, and the fostering of a culture that celebrates achievement and continuous improvement.

Our investment in cutting-edge systems and technologies has not only streamlined our processes but has also empowered our teams to achieve outstanding results, propelling us toward our long-term strategic goals. Additionally, NUMU has been instrumental in embedding our core values into every facet of our operations. The outcomes of NUMU's implementation thus far have shown improvements in our operational efficiency, employee engagement, and stakeholder relationships. As we continue to implement NUMU, we will remain committed to our dedication to safety, innovation, and sustainable growth, all supported by the collective spirit and dedication of our shareholders, employees, customers, and partners.

CORPORATE VALUES

At Ma'aden, we individually and collectively have committed to adhering to five core values:

 الملكية OWNERSHIP	Personal responsibility and empowerment of others for quality results in pursuit of our collective goals.
 النزاهة INTEGRITY	Honesty, fairness, and the highest ethical and business standards in our relationships with each other and with our stakeholders.
 العناية CARE	Concern and respect for our people, the communities we touch, and the environments we operate in.
 العمل الجماعي TEAMWORK	Communication and collaboration with each other and with our partners to achieve success together.
 التحسين المستمر CONTINUOUS IMPROVEMENT	We are dedicated to the pursuit of continuous improvement. We work tirelessly towards becoming the best version of ourselves. We believe progress is a way of life – one that demands we surpass our previous achievements.



CORPORATE GOVERNANCE

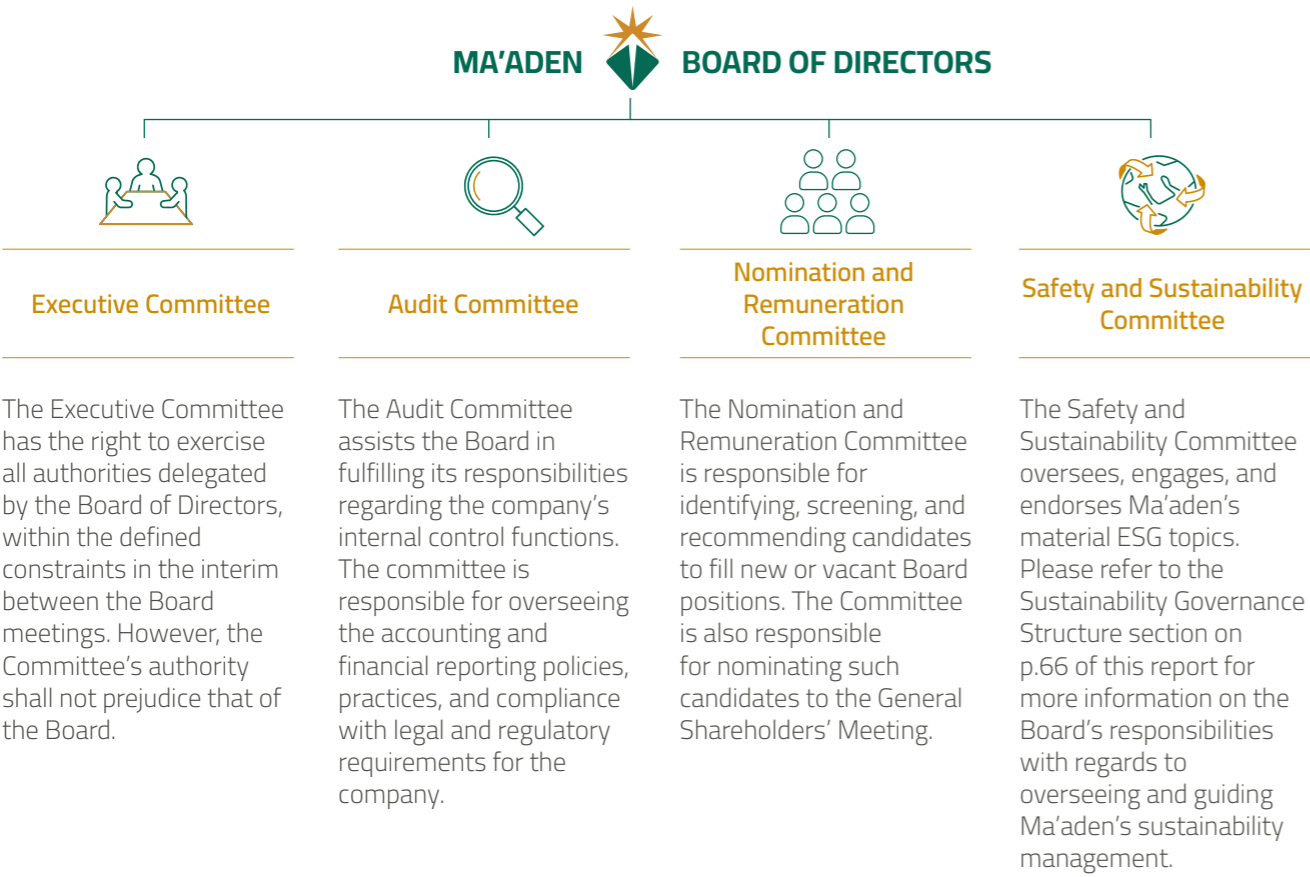
Ma’aden’s approach to corporate governance is to maintain a robust documentary and procedural framework that ensures ongoing compliance with global leading governance practices. As a mining industry champion of Saudi Arabia and a rapidly growing global company, Ma’aden is committed to protecting the rights of its shareholders and other stakeholders.

GOVERNANCE FRAMEWORK

We established our Corporate Governance Framework by the provisions of the Saudi Arabia Capital Market Authority’s (CMA) Corporate Governance Regulations, all applicable laws in Saudi Arabia, and Ma’aden’s New Capital Bylaw. This ensures that we comply with all applicable laws and regulations in the Kingdom. The Framework provides our Board of Directors, management, and stakeholders with a formalized direction and expectation for practicing good corporate governance at Ma’aden, including clearly defined roles, responsibilities, policies, and guidelines. This also ensures that Ma’aden is in line with international best practices in corporate governance.

THE BOARD & ITS COMMITTEES

Ma’aden’s corporate governance structure consists of a Board of Directors and four additional functional board-level committees: the Executive Committee, Audit Committee, Nomination and Remuneration Committee, and Safety and Sustainability Committee. These four committees were established by our Board of Directors for the purpose of delegating and assigning authority clearly. They are responsible for reviewing our operations within their areas of expertise and presenting their findings and suggestions to the Board of Directors. This review includes monitoring and assessing our ESG performance.



Our Board, advisors, functional committees, management and employees, shareholders, and direct stakeholders are guided by our corporate Governance Guidelines and Procedures and our Code of Ethics. Nonetheless, the ultimate responsibility for the management of Ma’aden rests with our Board of Directors, including the approval of our Corporate Governance Framework in accordance with the CMA’s Corporate Governance Regulations.

We also publish our corporate governance documents on our website. These include our Conflict of Interest policy, Executive Committee charter, and board remuneration policy, among others. Our Corporate Governance team conducts reviews of these documents on an ongoing basis and updates them where necessary. Revisions to these documents receive approval from our general assembly and/or Board of Directors prior to being formalized and published.

For more information on how Ma’aden implements good corporate governance and to view our related documents, please visit our Corporate Governance [webpage](#).

GOVERNANCE DISCLOSURES

In upholding transparency and accountability for our stakeholders, we disclose our Board’s activities through our annual Board of Directors reports. Minutes of our General Assembly meetings are also published on our website. For more information on this, please visit our website via the links below.

- Minutes of [2023 shareholders meetings](#)
- [2023 Board of Directors Report](#)



CONTRIBUTIONS TO OUR KINGDOM

As one of the largest multi-commodity metals and mining companies in the Middle East, Ma’aden is in a unique position as an influential player within Saudi Arabia’s economy. In delivering our 2040 growth strategy, we also aspire to create shared and lasting value which contributes towards the socioeconomic development of the Kingdom.

We primarily generate economic value through three ways – our financial performance and its indirect economic impacts, our spending on local businesses, and our financial investments in community development programs and projects.

FINANCIAL PERFORMANCE	UNIT	2021	2022	2023
Sales	SAR Mn	26,769	40,277	29,272
EBITDA	SAR Mn	12,347	19,397	9,264
Net income for the year	SAR Mn	6,481	12,129	1,698
Net income attributable to shareholders’ of the parent company	SAR Mn	5,228	9,319	1,577
Sales by segment				
Phosphate	SAR Mn	14,583	26,723	17,417
Aluminium	SAR Mn	9,890	11,280	8,810
Base metals and new minerals	SAR Mn	2,297	2,252	2,987
Net income / (loss) by segment				
Phosphate	SAR Mn	2,413	8,919	2,071
Aluminium	SAR Mn	2,012	396	(1,191)
Base metals and new minerals	SAR Mn	1,192	631	967

ECONOMIC PERFORMANCE

Our approach to economic performance stems from our ambitious strategy to grow tenfold by 2040 and to emerge as the third pillar of the Saudi Arabian economy. This growth will come from building scale in existing businesses and expanding our portfolio in new minerals through an accelerated effort in the exploration of current and new minerals in Saudi Arabia. To achieve this, we will leverage relationships with world-class partners and implement cutting-edge technologies.

In 2023, we recorded total revenues of SAR 29.3 billion. Although we experienced a revenue decline, which was due to lower commodity prices (except gold), we experienced increases in production and sales volumes and remain well-placed to meet the growing long-term demand for our products. In addition to a lower pricing environment, net profit was impacted by the successful completion of the aluminium pot relining and a one-off utility charge.

In 2023, Moody’s assigned Ma’aden a long-term issuer Rating of Baa1 with a ‘stable’ outlook and Fitch assigned a long-term issuer default rating of BBB+ with a ‘stable’ outlook. The investment grade ratings reflect Ma’aden’s diversified multi-commodity business model with global leadership in phosphate production, the Middle East’s largest integrated aluminium value chain, and a scalable base metals and new minerals business. The ratings affirm Ma’aden’s sustainable, leading low-cost base and robust financial profile, as local and international investment opportunities are assessed. The actions also

follow recent credit rating upgrades for Saudi Arabia, in line with the positive momentum generated by significant reforms driving the Kingdom’s Vision 2030.

Additionally, Ma’aden demonstrated resilience amidst off-peak commodity prices and market challenges by increasing total production in di-ammonium phosphate (DAP), alumina, gold, and silver. We recorded record phosphate production and generated strong volumes across the business.

PRODUCTION BY BUSINESS UNIT	UNIT	2021	2022	2023
Phosphate	Ton	7,952,140	9,605,768	10,173,689
DAP	Ton	5,079,131	5,151,313	5,898,907
Ammonia	Ton	1,811,476	3,205,197	3,200,029
Industrial Minerals	Ton	1,061,533	1,249,258	1,074,753
Aluminium	Ton	4,059,694	3,868,505	3,743,348
Alumina	Ton	1,879,261	1,745,091	1,825,106
Cast Aluminium	Ton	990,889	950,786	893,437
CRU	Ton	93,537	88,894	75,703
Molten Aluminium	Ton	805,057	775,012	701,357
Rolling Mill	Ton	290,950	308,721	247,745
Recycled Aluminium / total production of aluminium	%	9.8	4.9	4.9
Base Metals and New Minerals	Ton	6,911	5,433	4,237
Gold	Ton	10	9	12
Silver	Ton	3	4	5
Copper	Ton	1,411	1,076	1,067
Zinc	Ton	5,487	4,343	3,154
Total Production	Ton	12,018,745	13,479,706	13,921,274



For a more detailed breakdown of our financial and operational performance in 2023, please refer to our [2023 annual report](#).

LOCAL CONTENT

At Ma’aden, we believe that the ultimate social responsibility of a business is to contribute to the development and prosperity of the local community it belongs to. Therefore, we are constantly making efforts to develop local content and to invest in our local communities’ development. Local content refers to the portion of total expenditure that remains in Saudi Arabia and is a core component of Vision 2030. Promoting local development benefits us and our stakeholders in all areas of operations, such as by growing our social license to operate, improving the livelihoods of our host communities, and reducing project and reputational risks.

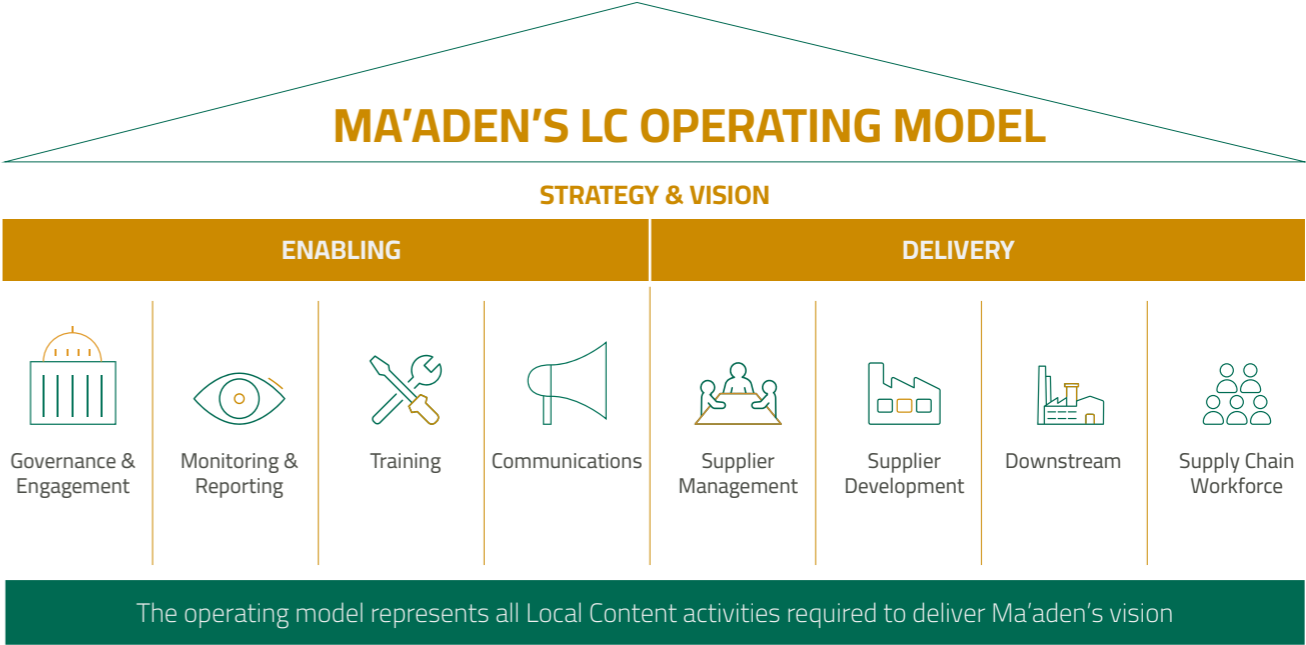
APPROACH TO DEVELOPING LOCAL CONTENT

We have a Local Content Policy which sets out our approach to maximizing local content and GDP contribution across the mining industry value chain in Saudi Arabia through spending on local labor, goods, services, assets, and technology. Guided by five strategic objectives, this Policy aligns with national laws, regulations, and requirements, and complements our other existing corporate policies.

FIVE STRATEGIC PRIORITIES



We also have an operating model which represents all local content activities, broadly categorized into enabling activities and delivery activities, required to deliver our vision. Enabling activities comprise of initiatives that strengthen the support infrastructure of the delivery activities, which comprise of initiatives that directly impact our value chain stakeholders - such as our local suppliers.



In 2022, Ma’aden was awarded the Local Content (LC) Certificate, achieving a local content score of 50.39%, which surpasses our targeted goals ahead of schedule. The validity of this certificate extends for 19 months, allowing us to use it as a benchmark through 2023 to measure ongoing progress in enhancing local content. This achievement not only reflects our commitment to Vision 2030 but also underscores our strategic efforts to bolster the economic growth and sustainability of our local communities.

THARWAH – MA'ADEN LOCAL CONTENT PROGRAM

Ma’aden’s Tharwah Program, launched in 2022 by Ma’aden’s CEO, aims to support Saudi Arabia’s local entrepreneurs, suppliers, and other businesses, and the economic goals within Vision 2030, thereby embodying the meaning of the Arabic word “tharwah” – wealth.

The Program has five strategic objectives.

- **People:** To create new opportunities for the employment of Saudi nationals. These include new jobs that are attractive, sustainable, and offer the opportunity for growth and development.
- **Businesses:** To create new opportunities for Saudi-Arabia-based companies to grow, invest, and create new businesses and industries within the Kingdom.
- **Small and medium sized enterprises (SMEs):** To support the creation and growth of SMEs as an engine of growth for the Saudi economy.



- **Remote regions:** To work with the communities and businesses of the remote regions where Ma’aden operates in order to grow their local economies and create opportunities for prosperity.
- **Supply chain:** To work with organizations across the mining industry, thereby growing value-chain-wide capabilities and capacities for further developing local content.

The Program is working closely with national partners and promising private sector players to foster a robust ecosystem that can provide support for our suppliers in areas of industrial consultation, land facilitation, funding, regulatory and enablers, and workforce. Several of the memorandums of understanding (MOUs) that we signed in 2023 included those with entities such as the Arar Chamber of Commerce, SME Bank, Italmatch Chemicals, and NAMI.

In 2023, the Supplier Development Program (SDP) was launched as part of the Tharwah Program. It is a long-term partnership between Ma'aden and its suppliers that aims to enhance the business performance of both parties while strengthening their business relationship to one another. Within this partnership, we provide business expertise and overall guidance to the suppliers while the suppliers commit resources and invest in developing their capabilities across their people, products, and technologies. The SDP is implemented through four work streams:

- **Top spend suppliers:** Aims to increase the local content score of our top spend suppliers, increase our spending on high-performing ones, and enhance their capabilities and their workforces. In 2023, we shortlisted 32 top spend suppliers and categorized them into those performing above the average local content sector scores (53% of shortlisted suppliers) and those performing below the average local content sector scores (47% of shortlisted suppliers). For those who performed below the average local content sector scores, we developed growth plans to help them improve their local content contributions.

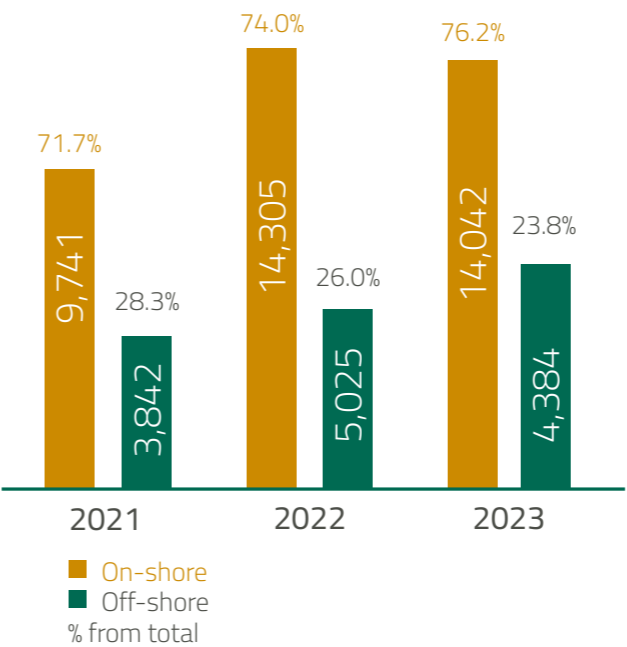
- **Small and medium sized enterprises (SMEs):** Aims to enhance the capabilities of SME suppliers that manufacture products aligned with our supply chain opportunities. Under this workstream, we create development plans that will support local SMEs to increase localization in their value chains, improve their workforce through Saudization, and expand their production capabilities and capacities. In 2023, we successfully enrolled six SME suppliers.
- **Supplier onboarding:** Aims to onboard local suppliers that offer products or services aligned with Ma'aden's supply chain opportunities. The two key activities under this workstream are vendor registration support, which assists local suppliers in using Ma'aden's Supplier Relationship Management portal, and business facilitation support, which introduces suppliers to the right buyers from each of Ma'aden's business units. In 2023, we successfully onboarded 11 suppliers.
- **Investor development:** Aims to support local or foreign suppliers to invest in manufacturing products aligned with Ma'aden's supply chain and downstream local content opportunities. Interested investors will undergo due diligence, investor registration processes, pre-feasibility assessments, business case development, and support provision.

2023 ACHIEVEMENTS

In 2023, Ma'aden's commitment to local content remained a top priority, aligning with our strategic goals to support the Kingdom's economy. We spent 76% of our total supply chain spending on on-shore supply chain partners, a consistent year-on-year increase since 2021. Our total spending on on-shore vendors also increased between 2021 and 2023 to 62%.

We launched the Supplier Development Program (SDP) as part of the Tharwah Program, aiming to Enhance Local Content Performance for both Ma'aden and its Suppliers

Supply chain spend (MM SAR)

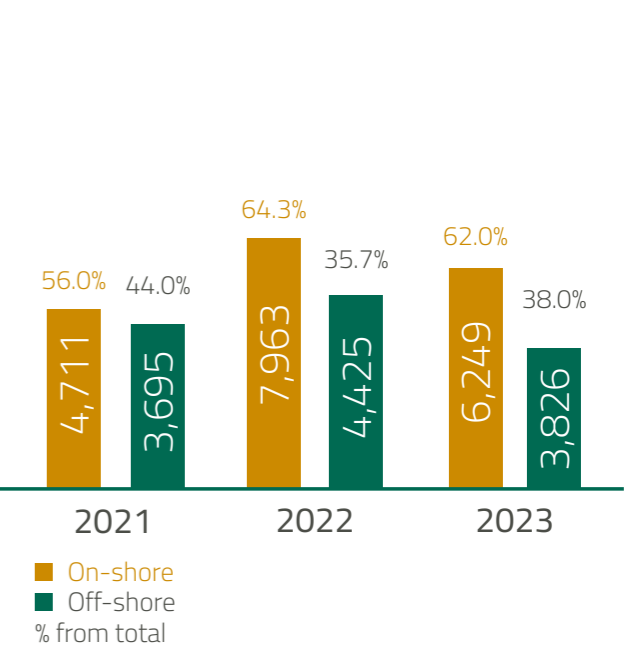


We also performed an analysis of our local content spending to investigate our potential for further localization. This resulted in the identification of 45 supply chain localization opportunities and 27 downstream localization opportunities across our three business units. A detailed business case was developed for each of the identified opportunities in order to equip our suppliers and local content investors with valuable insights.

Our other local content achievements in 2023 are described below.

- **Tharwah suppliers event:** Ma'aden's local content function hosted its first suppliers event which was attended by over 80 senior representatives from our top strategic suppliers. During the event, our CEO highlighted our significant investment in aligning with Vision 2030 to position ourselves as the third pillar of the Saudi economy and in being recognized as a mining champion for the industry.
- **3D printing for spare parts:** Ma'aden started adopting 3D printing technology as a response to a critical equipment failure incident and to reduce similar operational risks. This resulted in a lead time reduction to one week from 18 weeks, cost savings of 50%-70% for materials, and an increase in local content impact to 30% from 0%. Ma'aden is currently exploring metallic parts printing opportunities with Nami, a 3D printing company.
- **Shifting spend to local suppliers:** Ma'aden's transition to local gasket manufacturing from

Goods spend (MM SAR)



overseas suppliers reduced delivery lead time to three weeks from 13 weeks, achieved cost savings of 95% from lower material prices, increased manufacturing efficiency, streamlined operations, reduced delays, and supported local growth.

- **Chamber of Commerce workshops:** Ma'aden presented the Tharwah Program in several workshops on localization held by the Almadinah Chamber of Commerce, Eastern Chamber of Commerce, Council of Saudi Chambers, and Arar Chamber of Commerce.
- **PIF Private Sector Forum participation:** Ma'aden met with industry leaders at the 2023 PIF Private Sector Forum to support local content development across key areas within the metals and mining sectors, including phosphate, aluminium, gold, and base metals. Ma'aden participated in workshops and seminars where it highlighted its partnerships with the Kingdom's local private sector as part of its strategy to increase the contribution of local actors to its projects' supply chains in support of Vision 2030.
- **Northern Borders Investment Forum participation:** Ma'aden participated in panel discussions and speaker sessions at the 2023 Northern Borders Investment Forum which focused on strategic opportunities in the northern border regions of Saudi Arabia. Ma'aden also presented on the Tharwah Program and its many supply chain and downstream investment opportunities to support local suppliers and investors.

COMMUNITY INVESTMENT

To create shared value, we invest in the communities in which we operate based on their specific local needs and our business interests. Our community investments span a range of socioeconomic development areas, particularly in the mining sector, and are overseen and driven by our Community Initiative Committee. These investments include improving the local economies and quality of life of the Kingdom’s remote regions. We also foster external partnerships with governmental agencies and non-governmental organizations (NGOs) to leverage their local expertise and existing relationships with these communities in order to make more meaningful impact.

Since the inception of our Community Initiative Committee in 2015, we have invested over SAR 270 million and have approved 448 community initiatives. Our total community investment made in 2023 was

over SAR 49 million. This was attributed to 93 initiatives across seven community investment categories. This also represents a near-double increase from 2021, signifying our commitment to creating and distributing value to our communities.

Consistent with prior years, education and training has taken the majority share of our total annual community investment. This stems from our strong belief that education is a key foundation to building a strong pipeline of skilled youths which drive Saudi Arabia’s future economy. Between 2021 and 2023, our spending across each community investment category also increased. This reflects our long-standing commitment and progress towards fostering sustainable development and collective prosperity across the communities of the Kingdom.

COMMUNITY INVESTMENT BY CATEGORY	UNIT	2021	2022	2023
Education and Training	SAR	23,110,000	25,749,329	37,188,469
Other Social Investment or Charitable Giving	SAR	450,938	453,500	5,766,000
Public & Government Relation and Sponsorship	SAR	340,359	1,501,200	3,420,000
Infrastructure	SAR	288,000	156,522	1,345,200
Enviroment, Energy & Climate Change	SAR	275,220	81,050	1,118,564
Community Development	SAR	207,500	4,177,602	858,795
Health & Welfare; Water & Sanitation	SAR	107,425	219,100	114,500
Total Investment	SAR	24,779,442	32,338,303	49,811,528

FOOD SECURITY

This year, we signed a Framework Agreement with Shareek and a Support Agreement with the Ministry of Investment (MISA). The Shareek Framework Agreement is expected to help boost Ma’aden’s growth potential across its asset base while the MISA Support Agreement will accelerate the delivery of Ma’aden’s Phosphate 3 project by providing the required infrastructure for a project of this scale. Saudi Arabia’s Shareek program partners with leading organizations in the Kingdom to unlock the full potential investment of the country’s

private sector, which is contributing to achieving national targets defined by Vision 2030.

The delivery of Phosphate 3 will enhance Ma’aden’s growing presence in the agricultural value chain and will enable both the Kingdom of Saudi Arabia and Ma’aden to play an increasingly important role in global food security and food systems around the world. The project will help to secure Ma’aden’s position as the world’s second-largest exporter of high-quality phosphate fertilizers.



SUSTAINABILITY AT MA'ADEN



SUSTAINABILITY AT MA'ADEN

Underpinned by an ambitious strategy, strong governance structure, and a unified organizational drive, Ma'aden is committed to the continuous improvement of its sustainability impact on communities and the environment throughout the Kingdom of Saudi Arabia to support Saudi Vision 2030 and beyond.

2023 ESG PERFORMANCE HIGHLIGHTS

ECONOMIC



76%

of our **total supply chain** spending on on-shore supply chain partners, a consistent year-on-year increase since 2021. [Read More](#)



46%

increase in **community investments** from SAR 32 million in 2022 to SAR 49 million in 2023. [Read More](#)

ENVIRONMENTAL



138K tons

Blue ammonia export to five additional countries and/or regions. [Read More](#)



220K trees

and **10 million seeds** planted in King Salman Royal Natural Reserve and Imam Turki bin Abdullah Royal Natural Reserve since 2022. [Read More](#)



13.8%

of **liquid waste** recovered and recycled from total liquid waste generated, more than a two-fold increase from 2021. [Read More](#)



Peaking at
1,500 m³/h.

Completion of Treated Sewage Effluent project commissioning, significantly **reducing groundwater** use by incorporating Treated Sewage Effluent (TSE) water. [Read More](#)

SOCIAL

IWiM
1ST

First Middle Eastern company to partner with IWiM to **advance gender equity** in the mining sector. [Read More](#)



300K+ training hours completed in 2023

Recorded **66 average training hours** per male employee and **110 average training hours** per female employee, representing consistent year-on-year growth. [Read More](#)



30 students annually

Launched a **mining-specific bachelor's program** in KFUPM to build a strong pipeline of skilled youths to the mining sector. [Read More](#)



3X more female full time employees between 2021-2023

Established a **Diversity and Inclusion department** and a Chief Diversity and Inclusion Officer position. [Read More](#)



158 million cumulative investment since 2016

Additional SAR 20 million investment in the **Schools of Excellence program**, bringing cumulative investment to SAR 158 million since 2016. This includes the recent establishment of a new school for girls. [Read More](#)

GOVERNANCE



0 incidences archived

Achieved **zero incidences of corruption** or legal actions received regarding anti-competitive behavior and/or violations of anti-trust and monopoly legislation. [Read More](#)



4 times increase

Over **four times** increase in **supplier ESG screening rate** from 2022. [Read More](#)



2023 SUSTAINABILITY FOOTPRINT PERFORMANCE PROGRESS

In 2021, we established our sustainability footprint system which is a set of key sustainability metrics upon which we have set long-term quantitative targets (2040) for, a baseline (2020), and annual progress tracking obligations. The ultimate purpose of these targets is to enable Ma’aden to become a local industrial role model in Saudi Arabia while contributing to the Kingdom’s ESG objectives. Additional targets are still being developed, including increased renewable energy sourcing, Scope 3 GHG emissions reduction, where we are currently developing Scope 3 Baselineing Activities and investigating appropriate targets, and closing any gaps in social- and governance-related performance compared to global mining industry best practices.

The baseline of our sustainability footprint is 2020, and our future goals are:



SCOPE 1 & 2 GHG EMISSIONS INTENSITY REDUCTION by 37% by 2030, and 60% by 2040



GROUNDWATER USAGE INTENSITY REDUCTION by 46% by 2030, and 65% by 2040



RENEWABLE ENERGY USAGE INCREASE to 10% of energy mix by 2030, and 20% by 2040



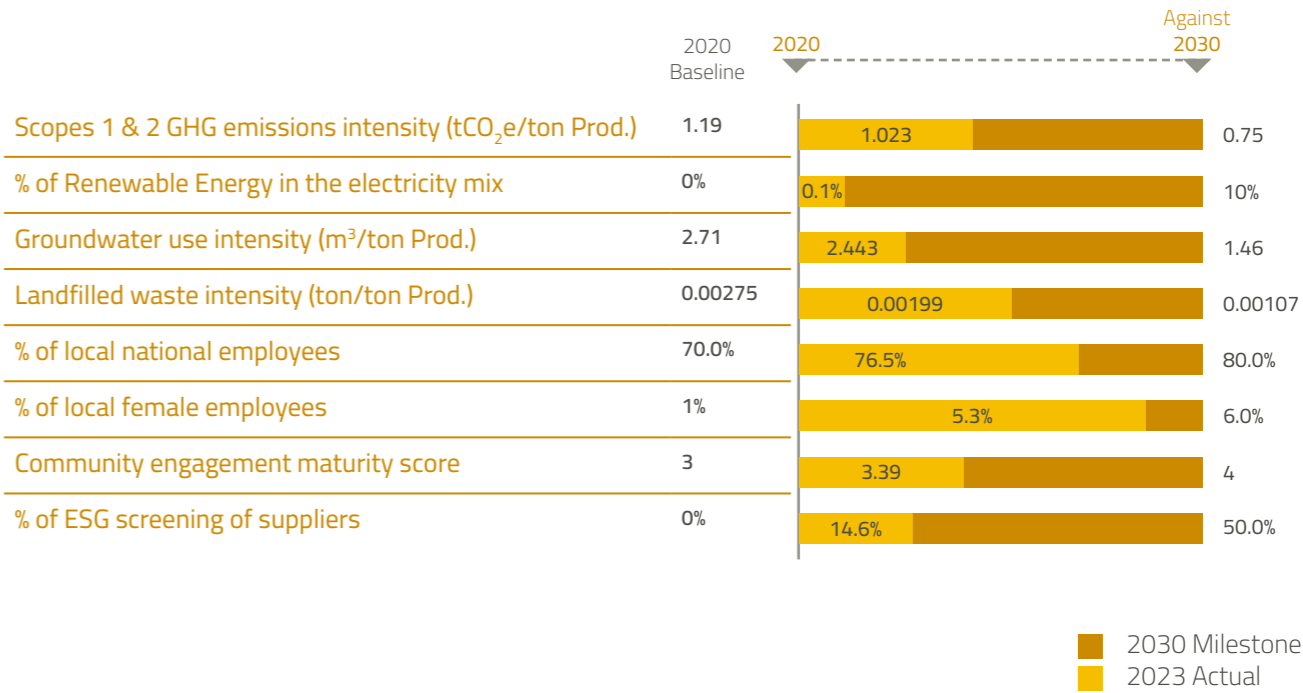
FEMALE EMPLOYMENT INCREASE to 6% of all Full-Time Employees by 2030, and 15% by 2040



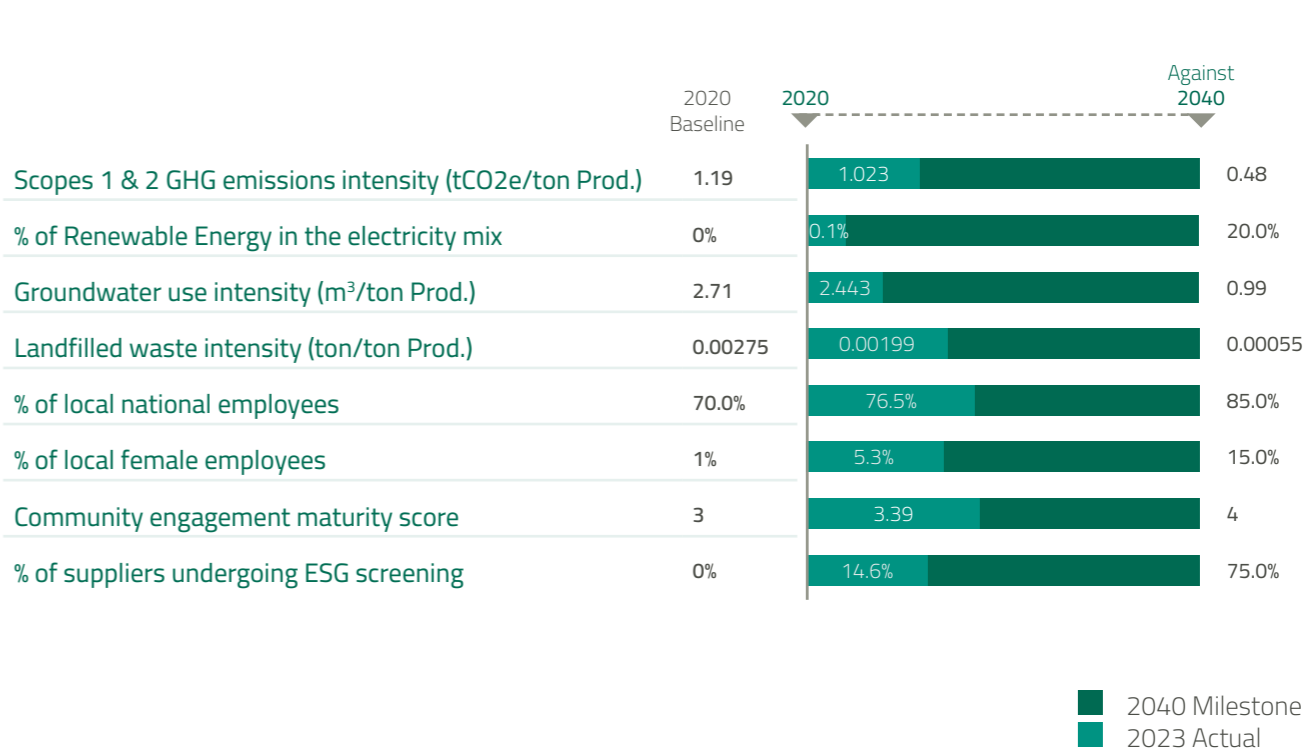
INCREASE ESG SCREENING of suppliers to 75% by 2040



PROGRESS AGAINST MILESTONE (2030)



PROGRESS AGAINST TARGET (2040)



COMMITMENT TO SUSTAINABILITY

At Ma'aden, sustainability is our top priority in all our business endeavors. In line with our vision to become a sustainable mining champion with a global presence, we are committed to being responsible stewards of the communities, resources, and environments in which we operate in addition to contributing to the advancement of Saudi Arabia's mining industry and wider economy.

As a forward-looking company, Ma'aden strives to maximize value creation through sustainable growth and delivering large-scale positive impacts to the people of Saudi Arabia. Acknowledging that environmental and social issues transcend geographic boundaries, a holistic and broader world-view approach to corporate sustainability is essential for any organization to be able to make a worthwhile positive impact. Therefore, Ma'aden fully supports global and local sustainability goals, including but not limited to the United Nations Sustainable Development Goals (UN SDGs), the Ten Principles of the United Nations Global Compact (UNGC), Saudi Vision 2030, and the Saudi Green Initiative (SGI).

Our Sustainability Framework sets out our ESG ambitions to become a Saudi ESG role model by 2040 through clear objectives, well-set company policies, internal systems and guidelines, and strategic initiatives. By implementing our Sustainability Framework, we operationalize our vision and create a foundation upon which progress can be tracked and achievements can be reported on. We also recognize that we cannot do this alone. This is why we collaborate with other organizational players across our value chain to adopt ESG best practices and leverage our respective strengths.

Please refer to the corresponding sections of this Sustainability at Ma'aden chapter for more information on how we align our Sustainability Framework with international and national sustainability agendas and how we work with our key stakeholders to embed sustainability beyond our direct operations.



ALIGNMENT WITH GLOBAL & NATIONAL GOALS

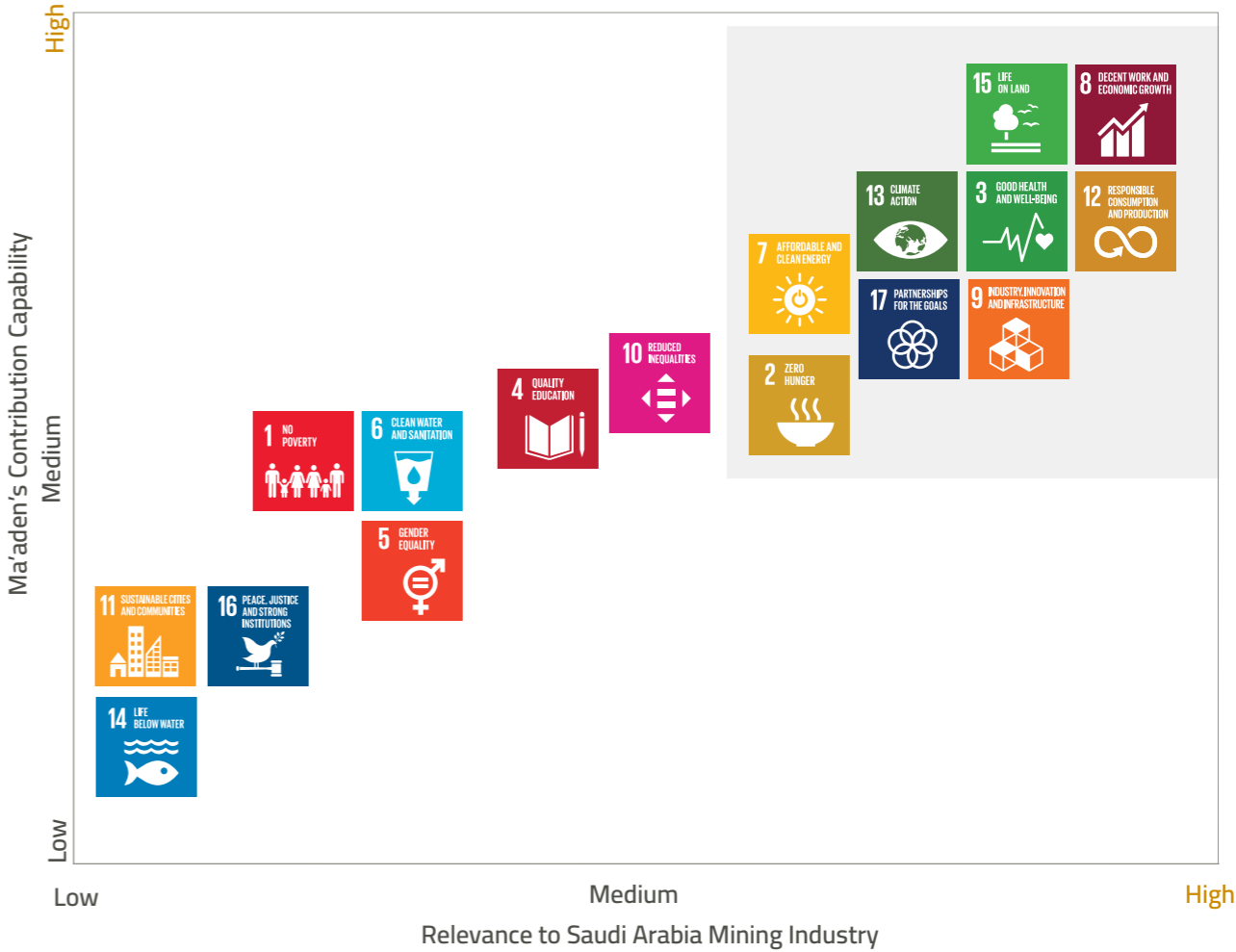
As part of our efforts to achieve our corporate vision, we are working to align our business practices with global and national agendas on sustainability.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The SDGs, created by the United Nations in 2015, are a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. This set of 17 integrated goals lay out a blueprint for governments to address the world's most pressing development challenges which balance social, economic, and environmental sustainability.

Nonetheless, corporations in the private sector have a key role to play in the achievement of the SDGs as their reach, through their value chains, can go far beyond the boundaries of any nation or government and they are the ones employing people and creating products and/or services which impact lives and landscapes. Ma'aden also recognizes that contributing positively to the SDGs may provide enormous untapped business opportunities which will further bolster our ability to meet our ambitious growth target and advance our industry as the key third pillar of Saudi Arabia's economy.

We have performed a mapping exercise of the SDGs based on our organizational capability and their relevance to our industry within Saudi Arabia. We have identified nine SDGs which we believe we have the highest capability to influence and are most relevant to the Saudi Arabia mining industry. These nine SDGs are prioritized during the decision-making processes of implementing our approach to sustainability.



UNITED NATIONS GLOBAL COMPACT

In 2023, Ma'aden became a signatory to the UNGC. By joining the world's largest corporate sustainability initiative, we are pledging our commitment to uphold the Ten Principles of the UNGC on human rights, labor, environment, and anti-corruption, as well as to take strategic actions to advance the UN SDGs.

As a company that employs over 6,870 people, we have an important responsibility to take care of our workforce. This means respecting human rights, labor rights, the environment, and practicing ethical business that uphold anti-corruption in order to empower our employees and maintain healthy workplace environments for them to succeed.

For more information on how the Ten Principles link to Ma'aden's ESG priorities [click here](#).

Saudi Vision 2030

Ma'aden is in a unique position to be a key player in the realization of Vision 2030



Saudi Green Initiative
مبادرة السعودية الخضراء

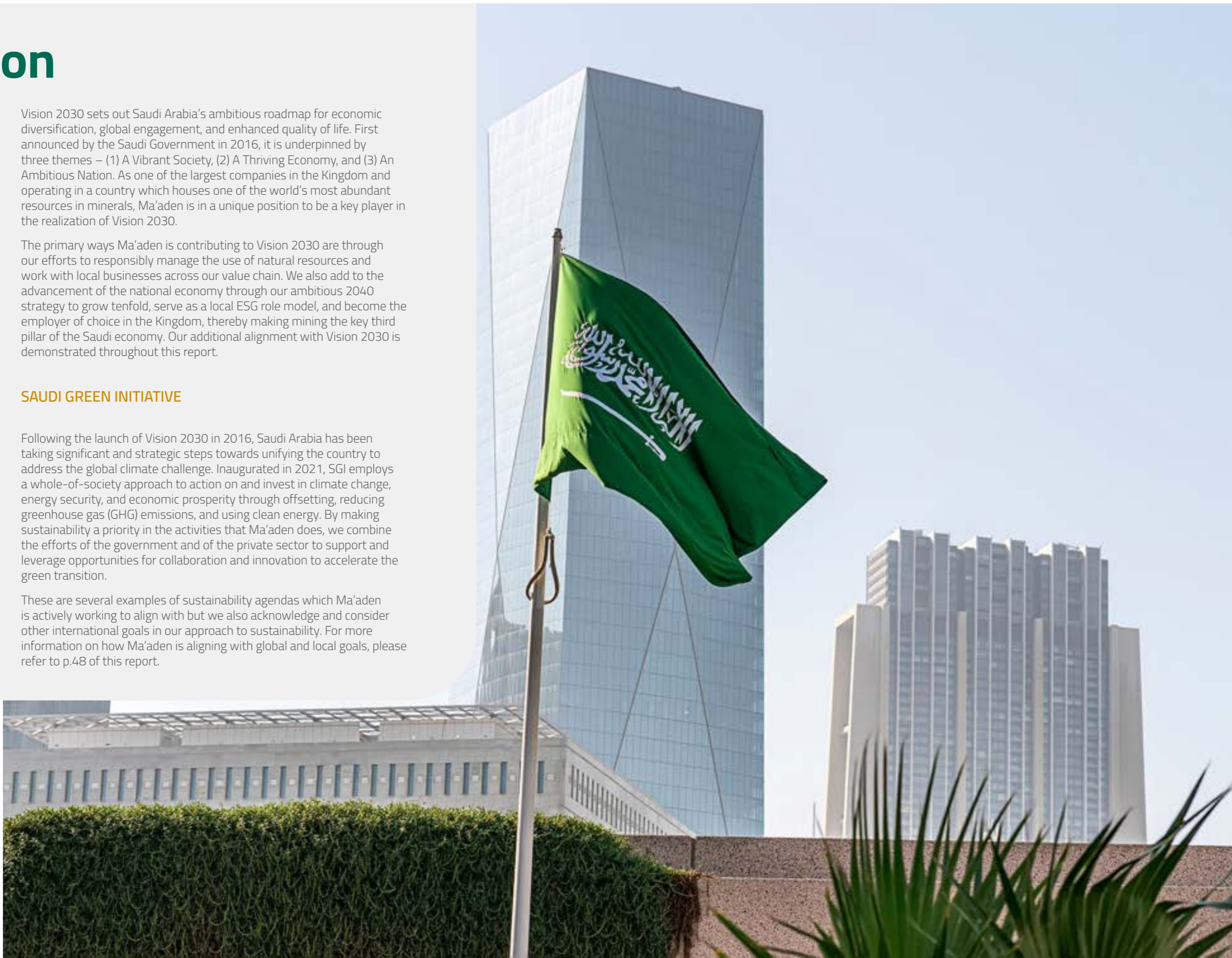
Vision 2030 sets out Saudi Arabia's ambitious roadmap for economic diversification, global engagement, and enhanced quality of life. First announced by the Saudi Government in 2016, it is underpinned by three themes – (1) A Vibrant Society, (2) A Thriving Economy, and (3) An Ambitious Nation. As one of the largest companies in the Kingdom and operating in a country which houses one of the world's most abundant resources in minerals, Ma'aden is in a unique position to be a key player in the realization of Vision 2030.

The primary ways Ma'aden is contributing to Vision 2030 are through our efforts to responsibly manage the use of natural resources and work with local businesses across our value chain. We also add to the advancement of the national economy through our ambitious 2040 strategy to grow tenfold, serve as a local ESG role model, and become the employer of choice in the Kingdom, thereby making mining the key third pillar of the Saudi economy. Our additional alignment with Vision 2030 is demonstrated throughout this report.

SAUDI GREEN INITIATIVE

Following the launch of Vision 2030 in 2016, Saudi Arabia has been taking significant and strategic steps towards unifying the country to address the global climate challenge. Inaugurated in 2021, SGI employs a whole-of-society approach to action on and invest in climate change, energy security, and economic prosperity through offsetting, reducing greenhouse gas (GHG) emissions, and using clean energy. By making sustainability a priority in the activities that Ma'aden does, we combine the efforts of the government and of the private sector to support and leverage opportunities for collaboration and innovation to accelerate the green transition.

These are several examples of sustainability agendas which Ma'aden is actively working to align with but we also acknowledge and consider other international goals in our approach to sustainability. For more information on how Ma'aden is aligning with global and local goals, please refer to p.48 of this report.



SUSTAINABILITY FRAMEWORK

ABOUT THE FRAMEWORK

Our company-wide Sustainability Framework, developed in 2019, sets out our sustainability ambitions through clear commitments, well-set company policies and systems, and strategic initiatives to continuously improve how we govern, disclose on, and manage our ESG issues and impacts. Drawing from our learnings and strategic focus areas over the years, the implementation

of our Sustainability Framework has resulted in multiple achievements.

These include prioritizing the wellbeing, health, and safety of our employees, investing in the socioeconomic development of our communities, managing resource utilization to protect our natural environment, and upholding good governance practices.



OUR FRAMEWORK DEMONSTRATES OUR COMMITMENT TO EIGHT MAJOR SUSTAINABILITY GOALS:

- 1 Create a zero harm work environment and strengthen the safety culture of our employees, contractors, customers, and host communities;
- 2 Provide employees with a nurturing environment that improves their health and wellbeing;
- 3 Be a welcomed neighbor, respecting human rights and maintaining meaningful relationships with our host communities globally;
- 4 Contribute positively to the economy in our host countries and local communities in which we operate;
- 5 Continue to be a steward for responsible water management practices and provide innovative solutions to water scarcity, ensuring that community water systems are not affected by our operations;
- 6 Evolve our business practices to pioneer new thinking, technology, and business models to ensure climate resilience, ecological preservation, and environmental justice at each of our businesses;
- 7 Strive to reduce waste and impacts associated with our sourcing, operations, and materials across our value chain and throughout our products' lifecycles; and
- 8 Gain international recognition for being a sustainable company, driven by robust business practices, innovation, and values.

MA'ADEN ACHIEVES THESE GOALS BY:

- ✓ Adopting a leadership model that inspires a culture of sustainability internally and creates informed leaders who actively represent the company as a sustainability champion;
- ✓ Implementing our Sustainability Framework through promoting transparency, consistency, and accountability; and
- ✓ Empowering and holding each business accountable to have the capacity to implement sustainable practices that fit its scale, nature, and risk profile.

IMPLEMENTING THE FRAMEWORK

As we implement the Framework across Ma’aden, we empower our affiliates to own and advance their sustainability efforts toward our unified goals. One way of achieving such empowerment is aligning our internal standards, policies, and systems to the Framework and constantly building awareness about them among the employees of all our businesses.

MA'ADEN INTERNAL STANDARD		1. Business Excellence	2. Health Safety & Security	3. Employee Wellness	4. Community & Human Rights	5. Economic Contributions	6. Water Stewardship	7. Climate Change & Biodiversity	8. Tailings & Materials Management
ENVIRONMENTAL	Mine Closure and Rehabilitation Policy	✓							
	Water Recovery Plan						✓		
	National Engineered Wastewater Treatment (NEWT)						✓		
	Environmental Monitoring Program							✓	✓
	Materials Handling and Storage Code of Practices								✓
SOCIAL	Hazardous Materials Management Standard								✓
	Community Management System (CMS)	✓	✓		✓				
	Ma'aden Suggestions System (MASS)	✓							
	Social Baseline and Impact Assessment (SBIA STD)								
	Community Engagement Framework (CEF)				✓	✓			
	Local Content Standard (LC STD)					✓			
	Saudization Terms and Conditions					✓			
	Social Investment Standard					✓			
GOVERNANCE	Supply Chair Workforce Initiative								
	Code of Conduct	✓		✓	✓				
	Group Risk Policy & Standard	✓	✓		✓				
	Procurement Manual	✓				✓			
	Sustainability Communication Standard (SC STD)	✓	✓	✓	✓	✓	✓	✓	✓
	SafeSTEPS Program		✓						
	Environment, Health & Safety Policy		✓				✓		
	EHSS Management System (MSHEM)		✓				✓		
	Traffic and Vehicle Safety Standard		✓						
	HR Guideline			✓					
	HR Policy Manual			✓					

Implementing the Framework not only enables us to operationalize our vision of becoming a sustainable mining champion with a global presence, it also creates a foundation upon which progress can be tracked and achievements can be reported on. Furthermore, this strengthens our contributions to the achievement of relevant global and local sustainability agendas and international mining standards such as the International Council on Mining and Metals’ (ICMM) Mining Principles.

MATERIALITY ASSESSMENT

As stakeholders globally are demanding more and more transparency from companies on how they are managing their risks of and impacts on ESG issues, it is a business imperative for companies to identify the ESG issues which are most relevant to them. Prioritizing focal topics will also provide the basis and direction for creating suitable strategies, developing tangible and measurable targets, and linking these to operations development.

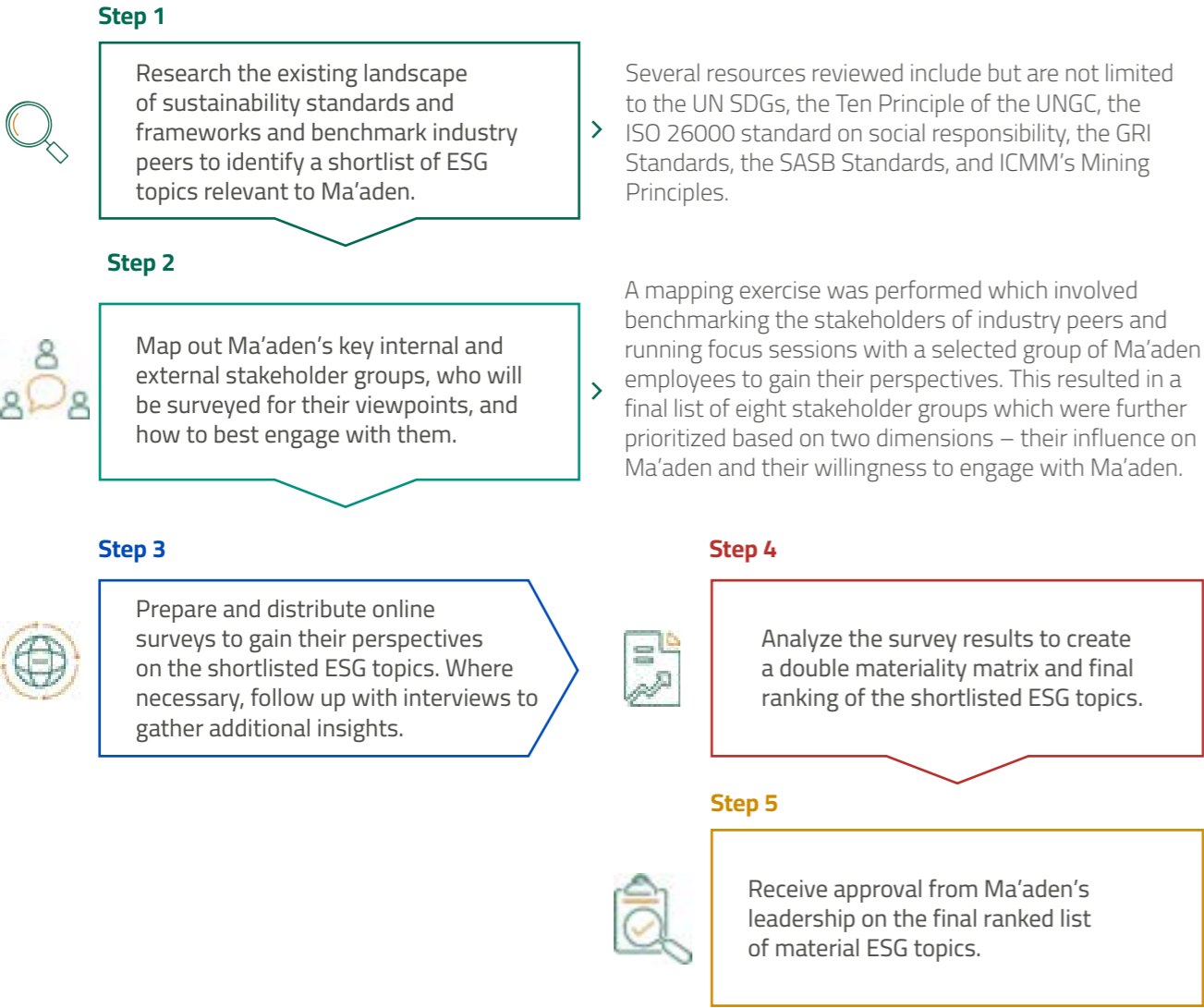
A materiality assessment provides companies with a tool to capture their stakeholders’ perspectives, both internal and external, on ESG and thereby helps prioritize topics for investment and resource allocation. Ma’aden defines materiality as topics both in which Ma’aden’s activities create the most significant impacts on the environment and society (i.e., outward impact) and that have the most significant financial impacts on Ma’aden’s business (i.e., inward impact). To this end, we have been applying a double materiality assessment approach, considering both dimensions of impact materiality and financial materiality, to identifying and prioritizing our material ESG topics.

MATERIALITY ASSESSMENT PROCESS

In 2023, Ma’aden performed its most extensive stakeholder surveying yet to supplement the materiality assessment it conducted in 2022. By combining both primary data, through internal and external stakeholder surveys and interviews in 2023, and secondary information, through desktop research of sustainability standards and frameworks and industry peer benchmarking in 2022, Ma’aden carried out a comprehensive double materiality assessment which more accurately reflects its sustainability risks and opportunities.



The combined 2022 and 2023 double materiality assessment process is illustrated below.



The eight stakeholder groups identified are further described below.

Stakeholder Group		Description
Internal	Employees and contractors	Individuals who are employed either full-time or part-time by Ma'aden.
	Business suppliers	Entities (i.e., seller) that provide goods and/or services to Ma'aden (i.e., buyer), enabling Ma'aden to produce its products.
	Joint venture partners	Entities that are under formal business arrangement with Ma'aden for the purpose of pooling both parties' resources to conduct business collaboratively.
	Product customers	Entities (i.e., buyer) that purchase Ma'aden's (i.e., seller) products for use in the production of their own products and/or services.
Broader	Shareholders, investors, and analysts	Individuals and/or entities that own shares in Ma'aden, have the financial capacity to commit capital into Ma'aden with the expectation of financial return, or conduct financial performance analysis on behalf of investors, respectively.
	Government and regulatory bodies	Entities that exercise executive, legislative, judicial, or regulatory, functions of or pertaining to government, including overseeing Ma'aden's compliance with relevant laws and regulations.
	Non-governmental organizations	Mission-driven entities whose purpose is to address social and/or environmental issue(s).
	Social program partners	Entities that Ma'aden collaborates with to implement its corporate social responsibility or social stewardship initiatives.



MATERIALITY ASSESSMENT RESULTS

We identified a set of 20 ESG topics which we found to be most material to Ma’aden. These 20 topics comprise a roughly equal mix of environmental, social, and governance topics. They are further described, in no particular order, below.

	No.	Material Topic	Description	Reason for Materiality
ENVIRONMENTAL	1	Air Quality	Non-GHG emissions (e.g., hazardous air pollutants, criteria air pollutants, and volatile organic compounds from smelting and refining activities).	Non-GHG air pollutants can create significant and localized environmental health risks and are subject to increasingly stringent air quality regulations worldwide.
	2	Biodiversity	Minimizing and recovering the organization's negative impacts on natural ecosystems around its business operations (e.g., landscapes, plants, wildlife habitats, etc.).	Mining operations can threaten surrounding landscapes and habitats which can pose reputational/regulatory (e.g., laws protecting endangered species), financial (e.g., higher extraction costs), and/or operational impacts (e.g., difficulty obtaining new permits).
	3	Response to Climate Change	Reducing direct and indirect GHG emissions by optimizing efficiencies in energy consumption and mining operations.	Mining operations are energy-intensive and generate significant direct GHG emissions which can lead to reputational impacts and increased regulatory compliance costs if emissions are not reduced, and financial risks if energy intensity is not managed.
	4	Sustainable Material Management	Proper disposal or storage of hazardous materials or mining waste (e.g., waste rock, tailings, slurries, slags, sludges, smelting, toxic chemicals, etc.).	Hazardous materials and mining waste can create significant long-term threats to human health and ecosystems through the potential contamination of groundwater/surface water and, additionally, can result in regulatory risks and remediation costs.
	5	Sustainable Water Use	Reducing water use and contamination (e.g., operation optimization, desalination, water recirculation, innovative waste disposal solutions, etc.).	Mining operations can affect both the availability and the quality of local water resources and can result in operational, regulatory, and reputational risks due to water scarcity, costs of water acquisition, regulations on effluents or the amount of water used, and competition with local communities and other industries for limited water resources.
	6	Community Relations and Social Initiatives	Socioeconomic, cultural, health, and human rights impacts of the organization on its surrounding local communities.	Community rights and interests may be affected by environmental and social impacts of mining operations, such as competition for access to local energy or water resources, air and water emissions, and waste from operations that can disrupt operations if not managed effectively.

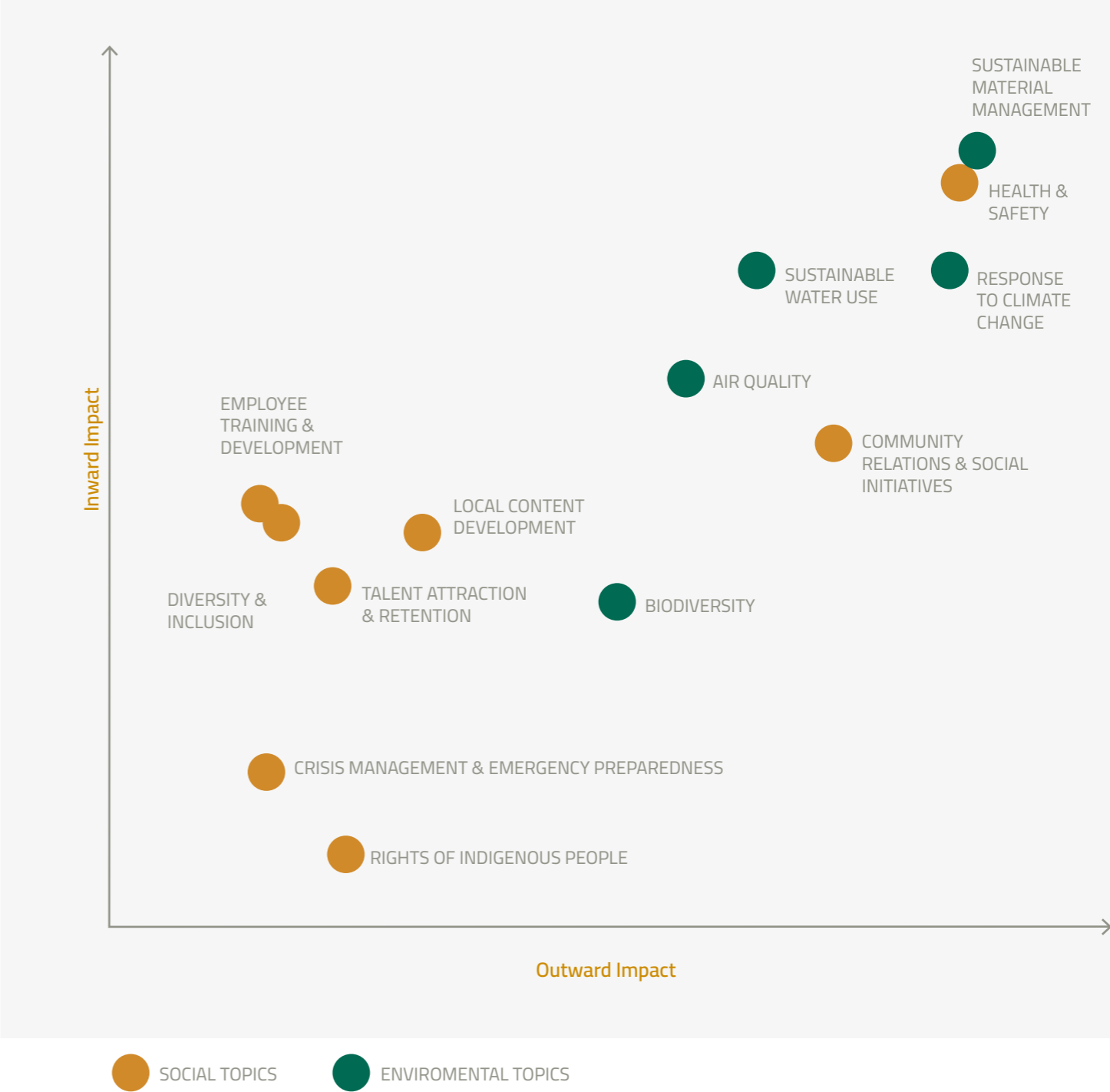
	No.	Material Topic	Description	Reason for Materiality
SOCIAL	7	Crisis Management and Emergency Preparedness	Preventing, mitigating, and recovering the damage of significant operational hazards (e.g., failures in structural integrity of tailings storage facilities, etc.).	Catastrophic failures of facilities can release significant volumes of waste streams and potentially harmful materials into the environment, leading to significant impacts on ecosystems, human livelihoods, local economies, and communities. Such catastrophic incidents may result in significant financial losses and may impair social license to operate.
	8	Diversity and Inclusion	No tolerance for discrimination, ensuring equal opportunities, and encouraging inclusive culture among the organization's employees.	Workforce diversity can result in operational innovation, talent attraction, and a positive corporate culture, which may also mitigate reputational and financial risks.
	9	Employee Training and Development	Providing opportunities for employees to learn and practice essential work-related and management-related skills, knowledge, etc.	A culture of and support for continued learning and development among employees at all levels may elevate job satisfaction, increase productivity, and foster enhanced employee retention by empowering employees with fresh skills and knowledge and paving the way for career advancement within the organization.
	10	Health and Safety	Protecting employee health and safety, and creating a culture of safety and wellbeing among employees at all levels.	Safety is critical as hazardous working conditions may cause operational downtime, productivity losses, and accidents. Poor health and safety records may also result in fines and penalties, and an increase in regulatory compliance costs resulting from more stringent oversight.
	11	Local Content Development	How the value the organization generates affects the local economy (e.g., through procurement practices, employment of workers, etc.).	Vision 2030 objectives (e.g., localization) can result in financial and reputational risks if not adequately addressed and integrated throughout mining operations.
	12	Rights of Indigenous People	Minimizing negative impacts on the basic rights and living conditions of the people who have long inhabited the area where the organization operates its business.	Organizations perceived as violating human rights or failing to account for indigenous peoples’ rights may be affected by international scrutiny or permit suspensions and can face substantial costs related to compensation or settlement payments and/or write-downs in the value of reserves.
	13	Talent Attraction and Retention	Continued attraction, engagement, and retention of talented and skilled labor forces for the organization's business.	Organizations with a reputation for being a desirable workplace gain a competitive edge as highly skilled and motivated employees who join the firm will contribute to innovation, productivity, and overall growth. Retaining experienced employees will also contribute to organizational stability and constant turnover can disrupt workflows, hinder productivity, and lead to knowledge loss.

	No.	Material Topic	Description	Reason for Materiality
GOVERNANCE	14	Board's Oversight on Managing ESG Matters	Assigning board members' role and responsibility to oversee sustainability topics that are material to the organization.	Engaging on ESG issues at the top of the organization will facilitate the awareness and implementation of sustainability priorities throughout the organization, including incorporating sustainability considerations into strategic decision-making processes.
	15	Compliance with Rules, Regulations, and Laws	Conducting business practices which abide by all applicable business rules, regulations, and laws to keep the highest level of ethics.	Government relations are important to gain access to mining reserves, with anti-corruption, anti-bribery, and payments-transparency laws and initiatives creating the regulatory mechanisms to reduce the risk of misconduct. Violations of these laws could result in significant compliance costs.
	16	Composition and Diversity of the Board	Composing a governing body that is capable of managing and guiding the organization's performance on all its material sustainability topics.	Integration of diverse governance, risk management, and strategic ESG decision-making capabilities at the board level can align business practices with relevant sustainability standards, influence the company's long-term sustainability mandate, and protect key stakeholder relationships.
	17	Engaging Internal and External Stakeholders	Identifying key stakeholders of the business and including them in important decision-making processes (including labor relations).	Successfully identifying, prioritizing, and engaging with internal and external stakeholders can foster transparency, build trust, and enable the incorporation of diverse perspectives to mitigate risks, enhance the company's social license to operate, and promote responsible business practices
	18	Evaluation and Compensation of the Board	Aligning board incentives with the organization's values by connecting the board's performance evaluation to the organization's management of its material ESG topics.	Board evaluation, and their corresponding compensations, is an essential practice to ensure that the Board of Directors operates at its highest level, meets the organization's needs, and upholds effective governance standards. It helps drive accountability, transparency, and continuous improvement in corporate governance.
	19	Incorporating ESG into the Whole Value Chain	Establishing awareness of material ESG topics and promoting sustainable practices within the organization and throughout its supply chain.	Monitoring and evaluating ESG risks across the entire value chain can build resilience across the changing market landscape and pre-empt any financial, reputational, geopolitical, and regulatory changes.
	20	Site Expansion, Reclamation and Closure	Closing assets and/or facilities, rehabilitating operational sites at the end of their commercial use, and managing their impacts on the environment, local communities, and workers.	Regulatory risks, related to site reclamation after a mine is decommissioned, can be managed in accordance with applicable regulatory requirements to restore mined properties according to previously-approved reclamation plans. Material costs may arise from removing or covering refuse piles, meeting water treatment obligations, and dismantling infrastructure at the end of life.

Among the 20 material ESG topics identified to be most material to Ma'aden, seven are related to governance. As these topics are integral to business excellence and should be managed and disclosed on regardless of their materiality, they are not mapped in the double materiality matrix below.















































Based on their rankings, these topics inform Ma'aden's strategic sustainability priorities, initiatives, and public disclosure focus areas. As the global and local business landscapes continue to evolve, we will periodically review the relevance of our ESG material topics to our business and update them when necessary.































2023 MA'ADEN MATERIALITY MATRIX



ALIGNMENT WITH GLOBAL/LOCAL SUSTAINABILITY GOALS

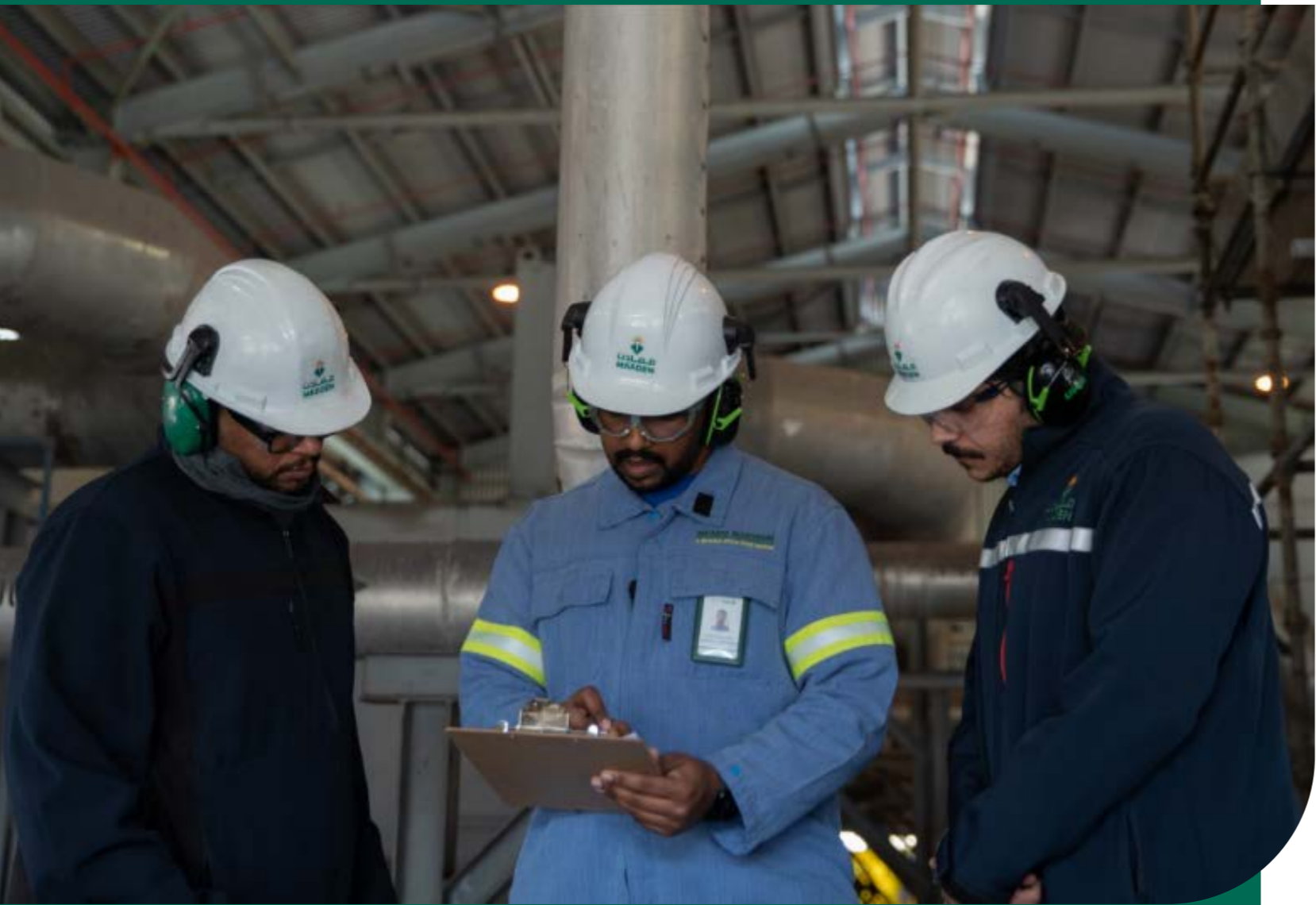
In selecting material sustainability topics, Ma'aden considered how we should align our management of each topic with contributing to achieving global and the kingdom's sustainability goals. The table below shows which topic is relevant to which sustainability goals.

	Material Topic	UN SDGs	UNGC's 10 Principles	ICMM's Mining Principles	Saudi Vision 2030	Saudi Green Initiative	Saudi National Standards for Sustainability
ENVIRONMENTAL	Air Quality		  		- Ensure environmental sustainability		
	Biodiversity	 	  		- Ensure environmental sustainability	- Protecting land and sea	- Biodiversity
	Response to Climate Change	 	  		- Ensure environmental sustainability	- Reducing emissions - Greening Saudi	- Energy consumption and natural resources - Emissions
	Sustainable Material Management		  	 	- Ensure environmental sustainability	- Reducing emissions	- Materials used
	Sustainable Water Use		  		- Ensure environmental sustainability		- Water and liquid wastes - Effluents/ liquid waste and residues
SOCIAL	Community Relations and Social Initiatives	   			- Enable social contribution of businesses - Enable larger impact on non-profit sector		- Local community development
	Crisis Management and Emergency Preparedness						
	Diversity and Inclusion	 			- Ensure equal access to job opportunities		- Diversity, equal opportunities, and non-discrimination
	Employee Training and Development	 			- Create an empowering environment for Saudis		- Training and qualifying workers
	Health and Safety	 					- Occupational health and safety
	Local Content Development				- Develop human capital in line with labor market needs		

	Material Topic	UN SDGs	UNGC's 10 Principles	ICMM's Mining Principles	Saudi Vision 2030	Saudi Green Initiative	Saudi National Standards for Sustainability
	Rights of Indigenous People	   	 				
	Talent Attraction and Retention		 		- Develop human capital in line with labor market needs - Attract relevant foreign talents for the economy		- Employment policy and regulation - Change in work practices – human resources
	Board's Oversight on Managing ESG Matters						- Sustainability governance
	Compliance with Rules, Regulations, and Laws				- Foster Islamic values		- Ethics and integrity - Protecting integrity and combating corruption - Anti-corruption behavior
	Composition and Diversity of the Board	 					- Governance and Board of Directors
	Engaging Internal and External Stakeholders	 	   		- Further integrate Saudi economy regionally and globally		- Engaging stakeholders
	Evaluation and Compensation of the Board						- Governance and Board of Directors
	Incorporating ESG into the Whole Value Chain						- Sustainability strategy
	Site Expansion, Reclamation and Closure	  		  			

STAKEHOLDER ENGAGEMENT

Our business impacts a wide range of stakeholders who, in turn, have an influence on how we operate our business. Therefore, it is important that we understand the key concerns and interests of our stakeholders so that we can ensure we take their needs into consideration when reviewing and implementing our ESG framework and initiatives. Beyond involving stakeholders in our materiality assessment process, we also formally and informally engage with them on an ongoing basis throughout the year. Details on how we engage our stakeholders and respond to their needs are further outlined below.



EMPLOYEES & CONTRACTORS

Ma'aden's focus with regards to employee engagement is on how both can support the growth of each other. Through surveys, interviews, flyers placed around workspaces, and email announcements, we communicate ways in which employees can be more aware of, act on, and be advocates for Ma'aden's sustainability commitments. They also serve as multiple channels for which employees can communicate their inputs to Ma'aden.



GOVERNMENT & REGULATORY BODIES

As part of good corporate governance and the practice of business excellence, Ma'aden adheres to all relevant laws and regulations that the Saudi government enacts. To facilitate this, Ma'aden engages with Saudi governmental authorities to proactively keep up with emerging regulations and ensure regulatory compliance.



SHAREHOLDERS, INVESTORS & ANALYSTS

Through annual shareholder meetings and investor relations activities, among others, Ma'aden regularly engages with investors to transparently disclose business performance and significant managerial decisions that will impact them. Ma'aden also constantly responds to investors' requests for information, respecting their rights as shareholders.



NON-GOVERNMENTAL ORGANIZATIONS

Ma'aden acknowledges that non-governmental organizations (NGOs) are key players in the sustainability agenda. They are not only influential advocates of environmental and/or social issues but they often also possess the technical expertise and network to support private sector businesses in becoming more sustainable enterprises. Therefore, Ma'aden engages with NGOs as a means to strengthen our own sustainability awareness or explore opportunities for partnerships to establish environmental and/or social initiatives.



PRODUCT CUSTOMERS

The voices of customers are critical indicators of how Ma'aden is currently performing and its future trajectory towards continued success. Therefore, Ma'aden acknowledges the importance of carefully listening to customers' opinions and responding promptly. We engage with our product customers to monitor their needs and expectations which inform how we innovate our business and products to maintain adequate customer satisfaction levels.



SOCIAL PROGRAM PARTNERS

We maintain regular communication with all of our social program partners in order to ensure smooth implementation of our collaborative initiatives. Where we are not able to directly engage with local communities that fall within the remit of our social initiatives, our social program partners serve as their representatives to voice their needs and concerns to us. As a mining leader in Saudi Arabia with a goal to be a role model for the mining industry, supporting our Kingdom's people is a priority for us, which is why we are actively in touch with our social program partners.



BUSINESS SUPPLIERS

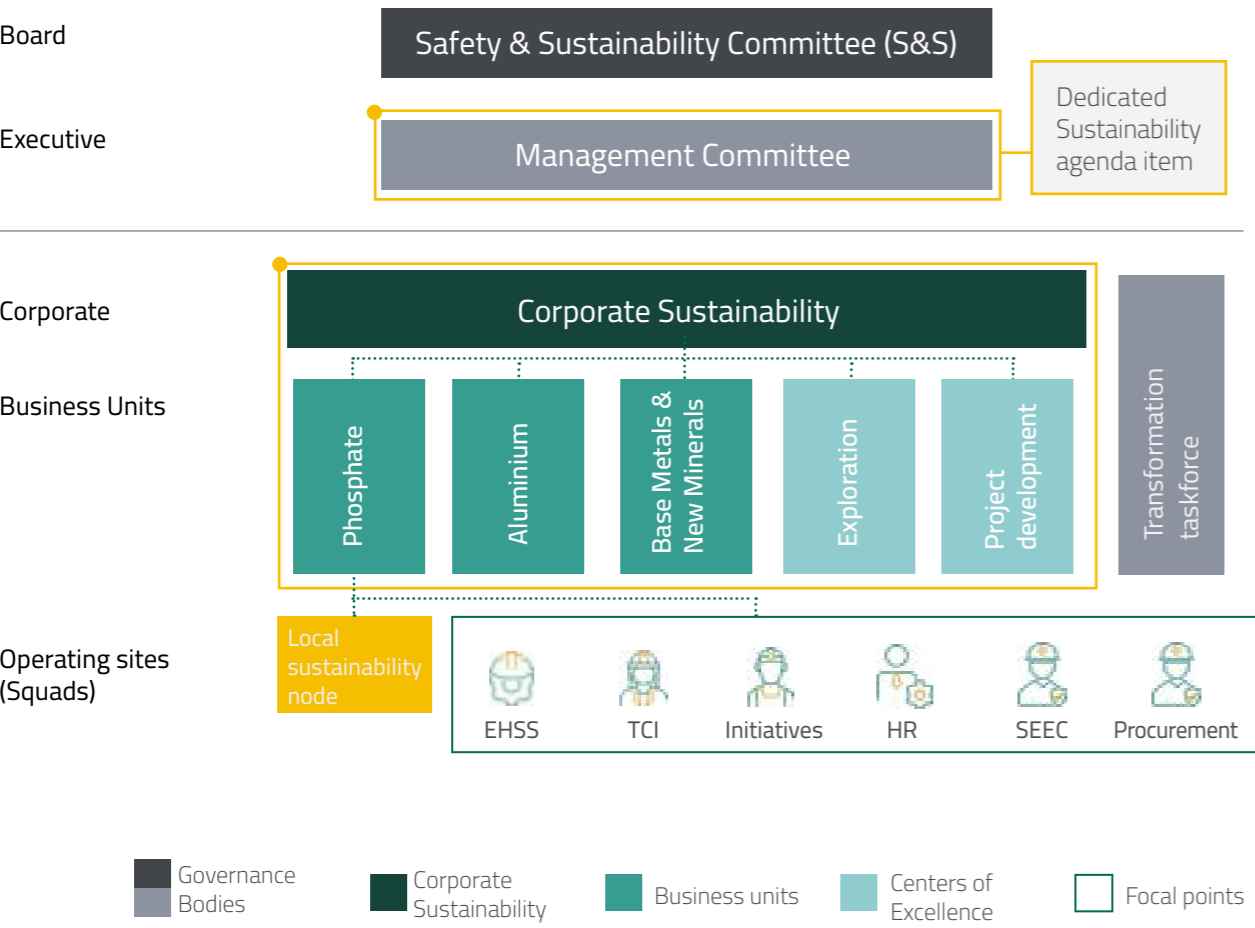
We strive to find ways to work together in order to further build and maintain transparency and accountability across our value chain. To this end, we expect timely reporting from our suppliers and other business partners and engage with them to provide disclosure support where needed. We also actively communicate with them during times of significant management decisions.

More ways in which we engage with our various stakeholders are outlined throughout the rest of this report.

SUSTAINABILITY GOVERNANCE STRUCTURE

Successful integration and effective management of sustainability at any organization requires having committed leadership, clear direction, and strategic influence. These are enabled through a robust governance structure. At Ma'aden, we believe that commitment begins at the top and we have established a sustainability governance structure which reflects this while aligning with and complementing our existing business model and other organizational structures.

GOVERNANCE | SUSTAINABILITY ANCHORED ACROSS THE ORGANIZATION.



As part of our sustainability governance structure, we have clearly defined roles and responsibilities for all the functions involved. As the highest governing body at Ma'aden, our Board of Directors oversees our sustainability strategy, framework, and public disclosures and bears ultimate responsibility for our ESG performance. Reporting to the Board of Directors, our CEO sets the direction for our ESG strategy, framework, policies, and initiatives as well as exercising oversight of our ESG performance with guidance from our board-level Safety and Sustainability Committee. Both the Board of Directors and the CEO provide final approvals for Ma'aden's sustainability disclosures, including our annual sustainability reports.

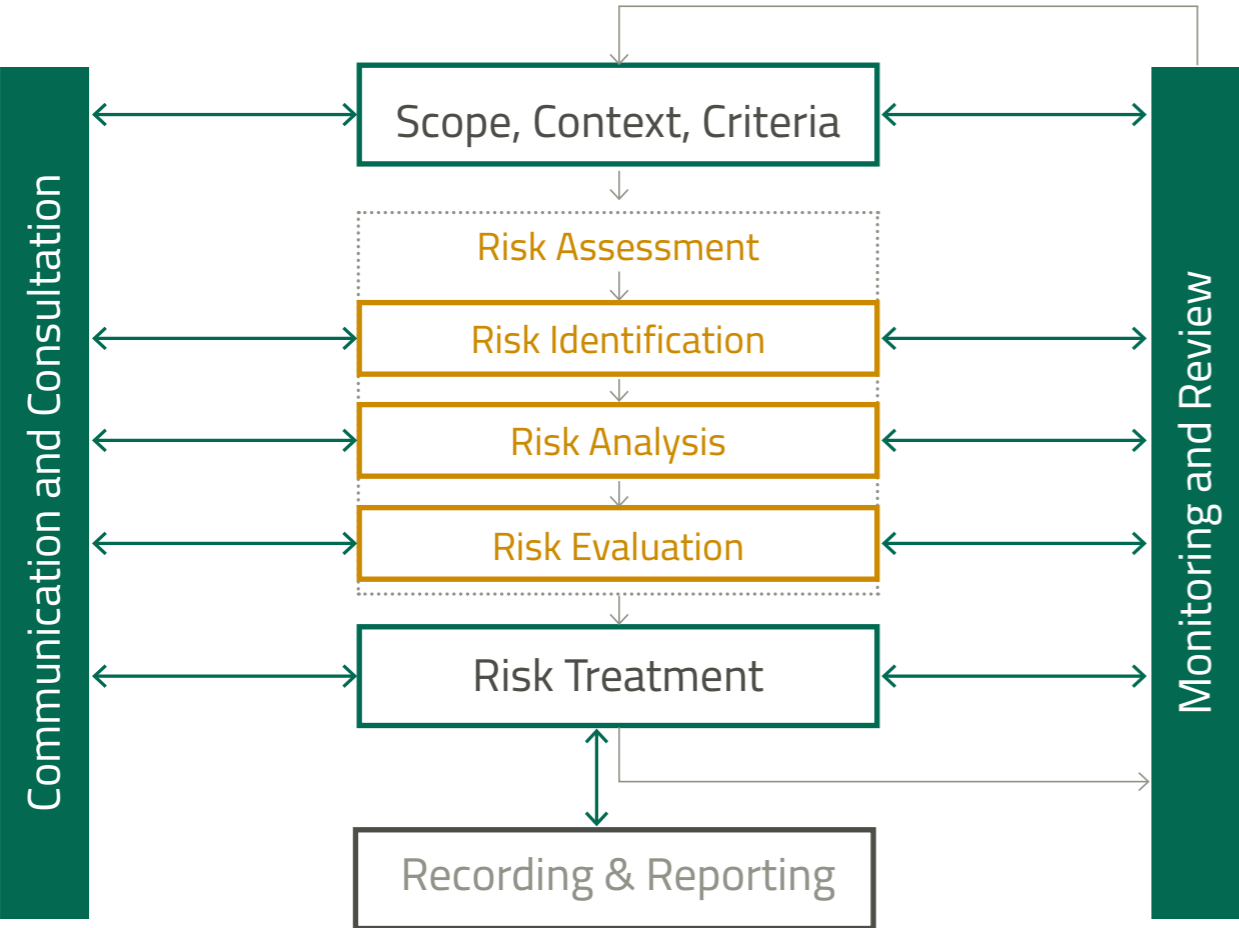
On-the-ground environmental and social initiatives are carried out and managed by our individual corporate functions and affiliate business units, with our corporate sustainability team playing a centralized role in coordinating with our business units and other corporate functions to provide technical and resource support and monitor performance. This structure allows Ma'aden to more efficiently tailor initiatives and programs to the specific needs and opportunities of local communities across our operational locations while maintaining company-wide strategic alignment and providing a channel for bottom-up input from the corporate functions and business units to higher-level management.

ESG RISK MANAGEMENT

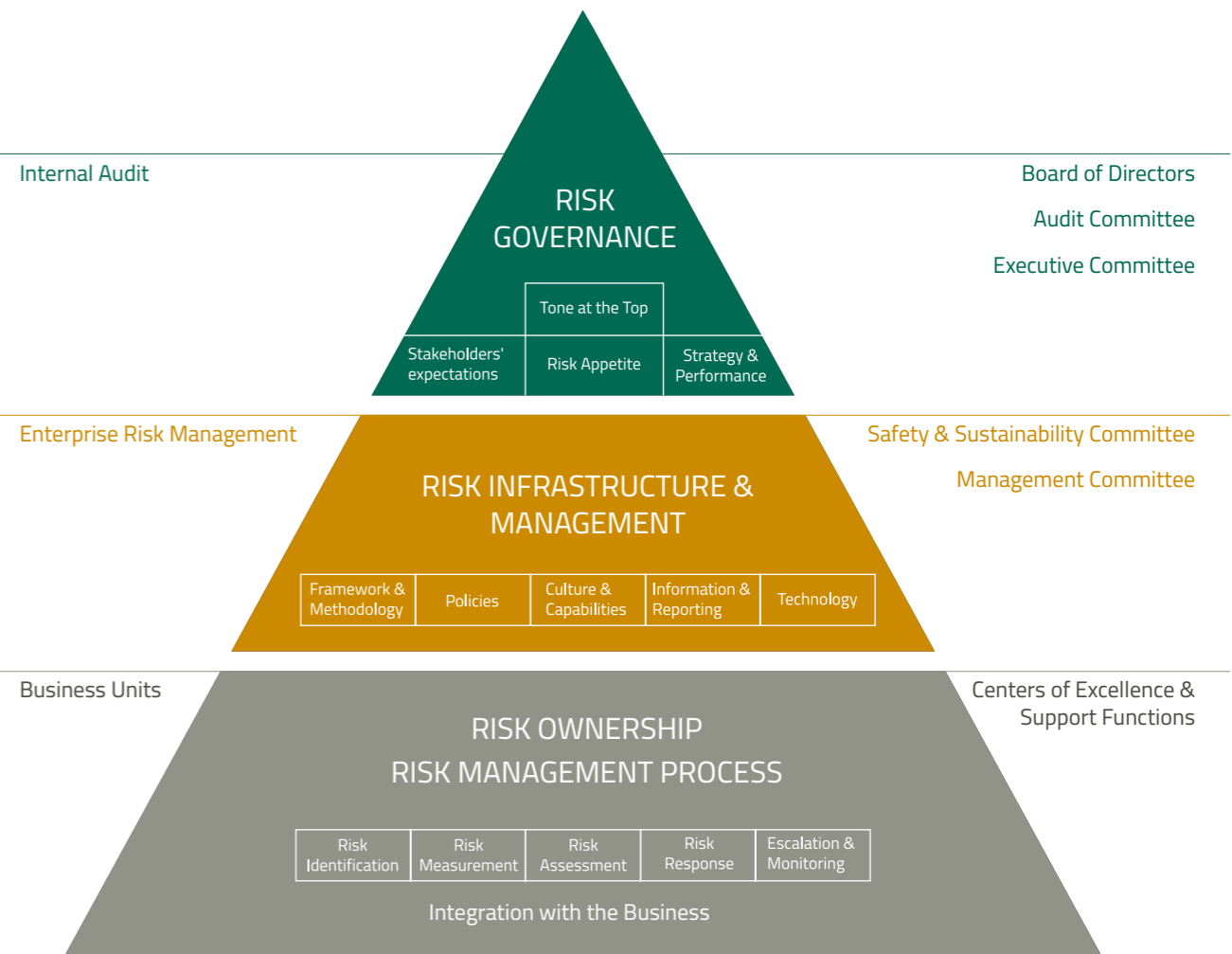
Risk management is critical to the longevity and success of our business as it helps us identify, assess, mitigate, and manage both downside and upside risks that can impact our operations, reputation, and financial performance.

Our approach to ESG risk management is anchored by our Enterprise Risk Management (ERM) Framework which applies an eight-step process to monitoring and managing a broad range of relevant internal and external risks, including ESG risks relating to greenhouse gas emissions, environmental incidents, our social license to operate, contributions to local communities, engagements with local vendors and contractors, and use of natural resources like groundwater. Additionally, we also have other internal frameworks and systems in place, such as our health, safety, security, and environmental management system (MSHEM), which complements our ERM Framework. This allows for a more comprehensive and robust management of Ma'aden's ESG risks.

Ma'aden's ERM governance structure, under which ESG risks are covered, follows a three-lines-of-defense model which comprise risk owners, ERM function, and internal audit function. The risk owners are our business units and corporate functions that have direct exposure to risks through their activities and are responsible for implementing Ma'aden's risk management process. The ERM function plays a more centralized and strategic role by developing and revising our ERM Framework and related policies and ensuring that appropriate risk management is being carried out by the risk owners. The internal audit function provides independent assurance that our risk management, governance, and internal control processes are operating effectively. Our Board of Directors, supported by our Audit Committee and our Executive Committee, holds ultimate responsibility for risk management and governance at Ma'aden. This comprehensive approach is further supported by our Governance, Risk, and Compliance Framework, ensuring department-specific standards and regulations, such as those set by the Capital Market Authority (CMA), Ministry of Commerce (MoC), General Organization for Social Insurance (GOSI), and other entities, are seamlessly integrated into our company-wide ESG risk response strategy.



Each ESG-related risk has a detailed mitigation plan, with key risk indicators being developed to effectively monitor and identify trends related to these risks. Ma'aden maintains a watchlist of ESG-related risks across all business units and corporate functions, enabling us to identify emerging risks and adapt to changes in the wider risk landscape.





2023 SUSTAINABILITY AWARDS & CERTIFICATIONS

AWARDS

Ma'aden is pleased to have received multiple sustainability awards over the years. These awards are a testament to our continued commitment to advancing the global sustainability agenda through process improvements, innovation, value chain partnerships and engagement, and overall business excellence. In 2023, Ma'aden was a recipient of five local and international sustainability awards:

Mar 14 | Ma'aden was recognized among Top 10 Most Innovative Companies in Saudi Arabia by Forbes

This advanced Ma'aden's position as an industry leader in leveraging innovation for sustainable energy use.

Sep 6 | Ma'aden won second place for the Community Awareness Award at the GPCA Responsible Care Excellence Awards

Ma'aden won second place for its Schools of Excellence program in the Gulf Petrochemicals and Chemicals Association's (GPCA) third annual Responsible Care Excellence Awards which took place on the sidelines of the fifth annual GPCA Responsible Care Conference held in Bahrain.

Oct 2 | Ma'aden won second place for the Sustainability category of the King Khalid Awards

Ma'aden received the award in recognition of its sustainability performance across social, economic, and environmental dimensions in Saudi Arabia.

Oct 3 | Ma'aden won first place at the Arabia CSR Awards

The award recognized the scientific and societal impacts of Ma'aden's School of Excellence initiatives in Arar and Tarif which started in 2016.

Oct 24 | Ma'aden's Technology and Innovation Team won Team of the Year Award at the Middle East Management Excellence Awards

The award recognized Ma'aden's commitment to and achievements in pioneering innovation to bridge the gap between present challenges and future aspirations, including balancing growth and sustainability.



SUCCESS STORY

MA'ADEN WINS SECOND PLACE AT 2023 KING KHALID SUSTAINABILITY AWARDS

The King Khalid Sustainability Award recognizes organizations that have made sustainability a core part of their business strategy, fostering significant economic growth and contributing to social, environmental, and economic development in the Kingdom of Saudi Arabia. The award provides a thorough assessment of initiatives, reflecting each participant's success in meeting various sustainability challenges. This evaluation is based on global best practices and is complemented by training workshops and brainstorming sessions, which help participants enhance their sustainable development practices and competitive advantage.

Ma'aden proudly secured second place in the Responsible Competitiveness category at this prestigious award ceremony. Ma'aden received the award in recognition of its sustainability performance across social, economic, and environmental dimensions in Saudi Arabia. This accolade highlights our exceptional practices in workforce development, particularly through the establishment of the Saudi Technical Institute for Mining. Additionally, our commitment to sustainability is demonstrated by the implementation of internal performance awards and the adoption of rigorous criteria for leading indicators in safety, environment, and community engagement. Our achievements, which are also in-line with the Saudi Vision 2030, affirm our leadership in promoting sustainable practices in the mining sector and are a testament to our ongoing efforts to shape a more eco-conscious future.



Ma'aden proudly secured second place in the Responsible Competitiveness category at this prestigious award ceremony

CERTIFICATIONS

Ma’aden strives to meet the highest standards of sustainability implementation and third-party certifications provide a level of verification that we are upholding these standards. As of December 2023, the environmental, health, safety, quality, and asset management related certifications we hold are listed below.

CERTIFICATION	DESCRIPTION	CERTIFIED SINCE	APPLICABLE MA’ADEN BUSINESS
ASI Chain of Custody Standard	Includes requirements for establishing a chain of custody for ASI-certified aluminium, allowing further production and processing to be controlled throughout the value chain.	Jul 14, 2021	MA
ASI Performance Standard	Covers critical aspects that affect the entire aluminium value chain, including GHG emissions, waste management, material stewardship, biodiversity, and human rights.	Jul 14, 2021	MA
DAWR	Certification covering the biosecurity integrity, from manufacturing to loading, of fertilizer products imported into Australia.	Jan 26, 2020	MPC
DNV	Accreditation to produce and export ultra-low carbon ammonia	Sep 30, 2023	MPC
HQS Certification	Specifies requirements for a low-risk system for the import of fertilizers into New Zealand.	Apr 17, 2018	MPC
IATF 16949:2016	Emphasizes the development of a process-oriented automotive quality management system that provides for continual improvement, defect prevention, and reduction of variation and waste in the supply chain.	2018	MA (MRC)
IFA Protect & Sustain	Focuses on product stewardship relating to safety, security, and sustainability for the fertilizer industry.	Oct 11, 2017	MPC
Imported Inorganic Bulk Cargo Fertilizer Assessment & Management	Achieved Level 1 Gold status for vessels importing fertilizers into Australia in bulk.	Jan 26, 2020	MPC
ISO 9001:2015	Covers the establishment, implementation, maintenance, and continuous improvements of a quality management system.	Dec 10, 2012	MPC
		Aug 22, 2013	MA (MAC, MBAC, MRC)
		Dec 27, 2013	
		Mar 3, 2020	IMC
		Jun 15, 2023	MWSPC
			BMNM

CERTIFICATION	DESCRIPTION	CERTIFIED SINCE	APPLICABLE MA’ADEN BUSINESS
ISO 14001:2015	Covers the design and implementation of an environmental management system for continuous improvements in environmental performance.	Dec 10, 2012	MPC
		Dec 27, 2013	IMC
		Jan 9, 2017	MA (MAC, MBAC, MRC)
		Mar 3, 2020	MWSPC
		Dec 20, 2022	HQ
		Jun 15, 2023	BMNM
ISO 22301:2019	Specifies requirements for a business continuity management system to enhance resilience against various unforeseen disruptions.	Jan 20, 2023	IMC
		Feb 13, 2023	MWSPC
		Nov 16, 2023	MA (MAC, MBAC, MRC)
ISO 31000:2018	Focuses on identifying, analyzing, evaluating, treating, monitoring, and communicating risks across the organization.	Jan 5, 2020	MPC
ISO 37001:2016	Outlines a framework for managing bribery risks and enhancing transparency and compliance in organizational practices.		HQ
ISO 45001:2018	Focuses on the management of risks and improvements in operational health and safety performance.	Dec 10, 2012	MPC
		Oct 22, 2018	MA (MAC, MBAC, MRC)
		Mar 3, 2020	MWSPC
		Mar 3, 2021	IMC
		Jun 15, 2023	BMNM
ISO 50001:2018	Focuses on establishing, implementing, maintaining, and improving an energy management system.	Dec 10, 2012	MPC
		May 24, 2021	MA (MRC)
		Feb 9, 2022	MA (MAC)
ISO 55001:2014	Specifies requirements for an asset management system within the context of the organization.	Dec 17, 2019	MPC
ISO/IEC 17025:2017	Focuses on the competence, impartiality, and consistent operation of laboratories, ensuring the accuracy and reliability of their testing and calibration results.	Jul 7, 2021	MPC
		Feb 21, 2022	MA (MBAC)
		Jun 6, 2023	MWSPC
ISO/IEC 27001:2022	Specifies requirements for a management system on information security, cybersecurity, and privacy protection.	Nov 26, 2020	HQ
		2023	
RC 14001:2015	Specifies requirements for a chemical responsible care management system which include health and safety, security, transportation, outreach, and emergency response, among others.	Feb 15, 2022	MPC



TOWARDS A SUSTAINABLE FUTURE

As a company that directly depends on the Earth’s natural resources, we believe in taking care of the land, air, water, and biodiversity that our operations and supply chains impact as well as rely on. We are committed to climate action by reducing our GHG emissions and energy use intensity, fresh water (groundwater) and waste management through enhanced resource use efficiency and recycling, and biodiversity conservation via risk and impact assessments. Additionally, we strive to develop greener products through innovative processes in order to integrate sustainability into our wider value chain.

OUR APPROACH TO ENVIRONMENTAL MANAGEMENT

Our approach to environmental management is centered around careful monitoring, mitigating, and governing the environmental aspects of our activities to achieve high-quality performance beyond regulatory compliance. To accomplish this, we have implemented a company-wide operating governance framework that sets out our proactive and consistent approach to identifying and responding to environmental risks.

A comprehensive environmental monitoring program has been established at all of our operational sites. This includes, but is not limited to, continuous and periodical monitoring of air quality from our point sources and ambient environment, water quality of our discharges and outfalls, groundwater and soil quality at our operational sites, and noise levels at sensitive receptors. Monitoring is performed by applying internationally accepted methodologies and using state-of-the-art monitoring equipment by trained professionals. Periodical environmental monitoring reports are then developed and submitted to the relevant regulatory authorities. In 2023, we reviewed and updated our environmental monitoring program to improve our alignment with the new standards issued by Saudi Arabia’s National Center for Environmental Compliance (NCEC).

Our environmental management system is also benchmarked against the ISO 14001 Standard and the ICMM Mining Principles and undergoes periodic reviews through internal audits and corporate assessments. Furthermore, all of our business units possess ISO 14001 certification.

OVERALL ENVIRONMENTAL PERFORMANCE

One way we measure our environmental performance is through the number of environmental incidents we are involved in or responsible for. In 2021 and 2023, we reported four environmental incidents, none of which were Class 1 or Class 2. This highlights our commitment to environmental stewardship in the face of our rapidly growing business. All environmental incidents and near-miss events were reported and investigated through our incident management system. Corrective actions were then taken to avoid incident recurrences.

Our environmental management system is benchmarked against the ISO 14001 Standard

ENVIRONMENTAL INCIDENTS REPORTED ²	UNIT	2021	2022	2023
Class 1 Incident	#	-	-	-
Class 2 Incident	#	-	-	-
Class 3 Incident	#	4	6	4
Total Incidents	#	4	6	4

²A Class 1 incident is defined as an environmental incident with major severity. A Class 2 incident is defined as an environmental incident with moderate severity. A Class 3 incident is defined as an environmental incident with minor severity. The three levels of severity are determined based on the incident’s impact on the environment.

CLIMATE CHANGE

The challenges brought about by climate change pose a constraint to both Ma’aden’s business as well as the biophysical and social environment within which we operate. Therefore, we recognize the need to urgently work towards meaningful decarbonization for our operations and beyond, such as through reducing our emissions or transitioning to lower-carbon alternatives as part of our daily processes and practices.

GHG EMISSIONS

As one of the fastest-growing mining companies in the world, we face a dual challenge of scaling up operations while reducing our carbon footprint. Our total direct (Scope 1) and indirect (Scope 2) GHG emissions increased by 15.4% between 2021 and 2023, a result of our expanding mining business. However, our Scope 2 GHG emissions have consistently decreased, primarily due to improvements in the national grid’s emission factors. Furthermore, we have succeeded in maintaining our Scope 1 and 2 GHG emissions intensity, in which it was 1.023 tCO₂e/ton total production in 2023. While our sites are subject to significant changes in the energy input requirements associated with their expansion projects and advancing mine age, we maintain a strong focus on operational efficiencies and technological upgrades to manage our emissions intensities.

GHG EMISSIONS ³	UNIT	2021	2022	2023
Total Scopes 1 & 2 GHG emissions	Ton	12,337,564	13,900,977	14,236,275
Direct (Scope 1) GHG emissions	Ton	7,133,515	9,461,014	10,172,050
Indirect (Scope 2) GHG emissions	Ton	5,204,049	4,439,963	4,064,225
Overall Scope 1 and 2 GHG emissions intensity	tCO₂e/ton production	1.027	1.031	1.023
Scope 1 and 2 GHG emissions intensity for aluminium production	tCO ₂ e/ton production	1.760	1.599	1.573
Scope 1 and 2 GHG emissions intensity for phosphate production	tCO ₂ e/ton production	0.628	0.786	0.792
Scope 1 and 2 GHG emissions intensity for BMNM production	tCO ₂ e/ton production	39.716	50.521	69.889

One of Ma’aden’s ESG goals is to be a sustainable forefront player in the global fertilizer industry. In 2023, we obtained certification to produce 614,000 tons of ultra-low-carbon ammonia by DNV, an international sustainability assessor. This represents the world’s largest quantity accredited to this date, a significant step forward in our plan to transform our business into an ESG role model in the Kingdom. Our ultra-low-carbon ammonia production utilizes a unique method that captures waste heat to generate clean energy in-house, thereby significantly reducing our dependence on energy from the grid.

Addition to that Ma’aden is set to avoid the release of 450,000 metric tons of CO₂ per year through capturing CO₂ from ammonia units at RAK. The captured CO₂ will be distributed by Gulf Cryo to International Maritime Industries, Saudi Arabia’s maritime yard, and for industrial applications such as enhanced oil recovery and water desalination, as well as other industries. The first phase of the project is slated to be operational by 2026.

Our continued innovation in both our products and processes highlights our commitment to operational excellence and broadening our portfolio of premium products. This positions us well in key global markets while driving the decarbonization of the fertilizer industry’s value chains.

³For the reported Scopes 1 and 2 GHG emissions intensities, aluminium production covers Ma’aden’s MAC, MRC, and MBAC affiliates, phosphate production covers Ma’aden’s MPC affiliate, MWSPC and IMC, and BMNM production covers Ma’aden’s BMNM affiliate.

SUCCESS STORY

EXPANSION OF BLUE AMMONIA EXPORT GEOGRAPHIES

In 2023, building on its 2022 certification for 138,000 tons of blue ammonia, Ma’aden expanded the international reach of its exports, reinforcing its role in promoting green industrial value chains globally.

In 2023, Ma’aden broadened its global influence by adding new destinations to its blue ammonia export list. This expansion reinforces Ma’aden’s role in greening industrial value chains on a global scale, marking significant progress in its efforts to promote sustainable practices worldwide.

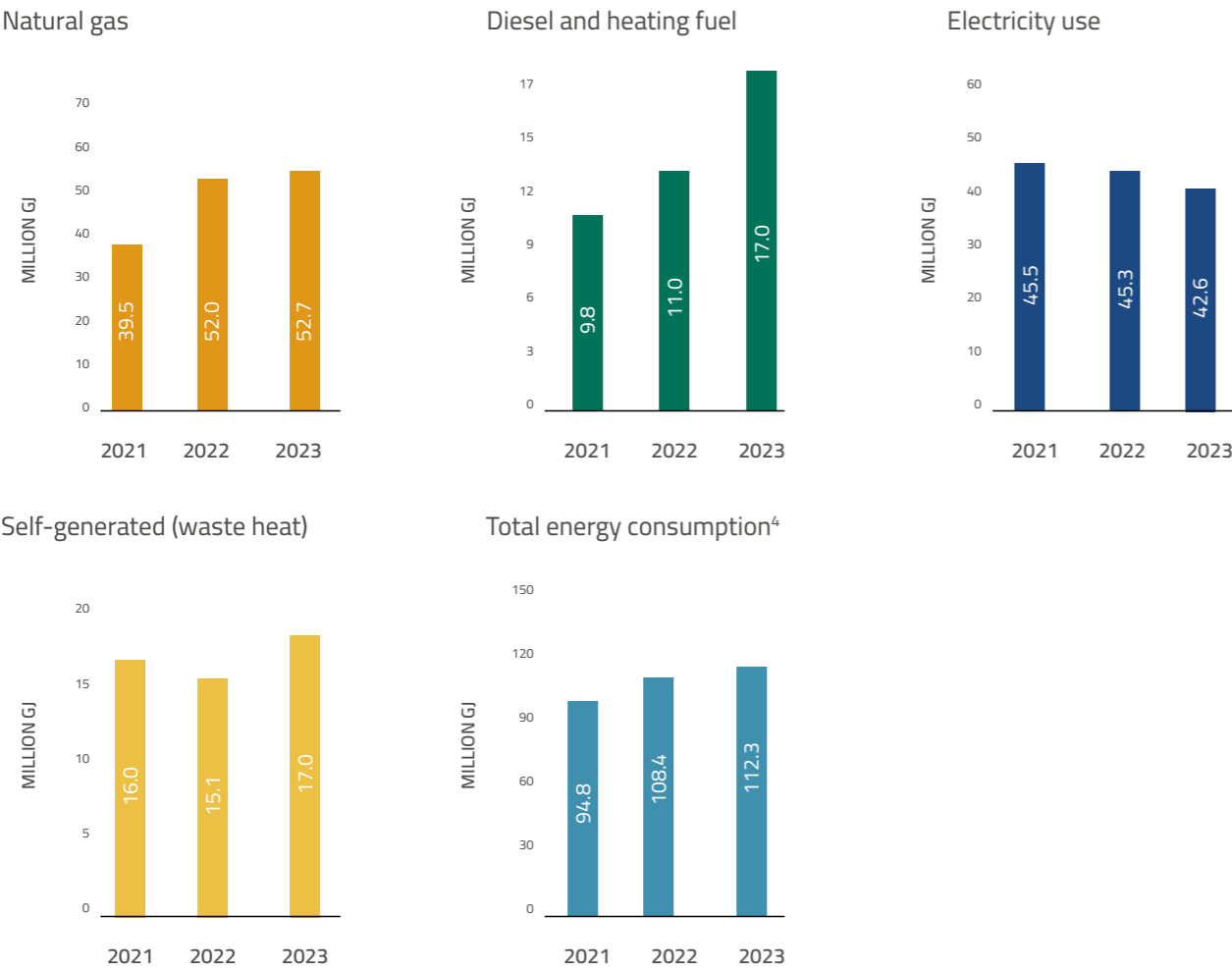
- **China** – Signed an agreement to supply 25,000 tons of blue ammonia to Shenghong Petrochemicals, a leading petrochemical producer in China.
- **European Union** – Arrival of the first blue ammonia shipment via the Black Sea port in Bulgaria in partnership with Agropolychim.
- **India** – Signed an agreement to supply blue ammonia to Coromandel International Limited, one of the largest complex fertilizer manufacturer and marketer in India.
- **Japan** – Signed an agreement to supply blue ammonia to Mitsui & Co., Ltd., a Japanese industrial and trading conglomerate.
- **Taiwan** – Signed an agreement to supply blue ammonia to Taiwan Fertilizer Co. Ltd., a fertilizer manufacturing company in Taiwan.

The environmental benefits of this blue ammonia production are substantial.



ENERGY CONSUMPTION

Similar to our challenge with GHG emissions, the rapid growth and expansion of our business requires energy - hence why our total energy consumption has been increasing since 2021. Nonetheless, our use of self-generated energy has increased, indicating our progress on energy recovery and waste reduction.



In our corporate headquarters (HQ) located in Riyadh, we have implemented several energy saving initiatives such as the replacement of lamps with LED lights, the replacement of power switches with motion sensor switches, and the delivery of an energy survey whereby the facility management team surveyed the HQ building during resting hours and manually switched off lights when not needed. These initiatives resulted in a 29.5% decline per occupant in our HQ building's electricity use from 564 kWh/head in 2022 to 398 kWh/head in 2023.

In addition to operational efficiencies, Ma'aden is taking proactive steps to decarbonize by implementing trailblazing initiatives, demonstrating sustainability leadership within the Saudi mining industry. They include

our work towards increasing the share of renewable energy in our overall energy mix and developing lower-carbon products. In 2022, a 6MW solar photovoltaic power plant was installed in our Mansourah-Massarrah gold mine and became the first mine in Saudi Arabia to use solar energy as an energy source. In 2023, we focused on maintaining the power plant's efficiency in order to be able to more consistently generate electricity from solar energy at full load.

Additionally, we have prioritized low-carbon aluminium as one of our key product offerings. Low-carbon aluminium is aluminium that has been primarily generated using recycled content and renewable energy sources, thereby minimizing waste generation and

GHG emissions. We are working to increase our low-carbon aluminium production to be at the forefront of transforming Saudi Arabia's aluminium industry. Our aluminium production processes currently use approximately 20,000 tons of steam per day. To reduce our reliance on natural gas, which is burned to produce the steam, we are exploring cleaner methods such as electrifying the boilers using renewable energy sources or extracting steam from solar steam technology which leverages solar energy. In 2022, we announced our partnership with GlassPoint to build the world's largest solar process heat plant at our alumina refinery. When complete, the 1,500 MW solar steam facility will help to reduce our carbon emissions by over 600,000 tons annually, representing over 50% of the alumina refinery's carbon footprint and 4% of our overall carbon footprint. In 2023, we continued to work with GlassPoint in preparation for the first stage of the project's development which is slated to start in 2024.

Concurrently, Ma'aden is exploring new partnerships with independent recycling service providers to supply post-consumer aluminium can scraps to Ma'aden for use as input materials in its aluminium product manufacturing. Ma'aden is also investigating opportunities for building recycling facilities in order to minimize its aluminium waste while maximizing its in-house recycling capabilities.

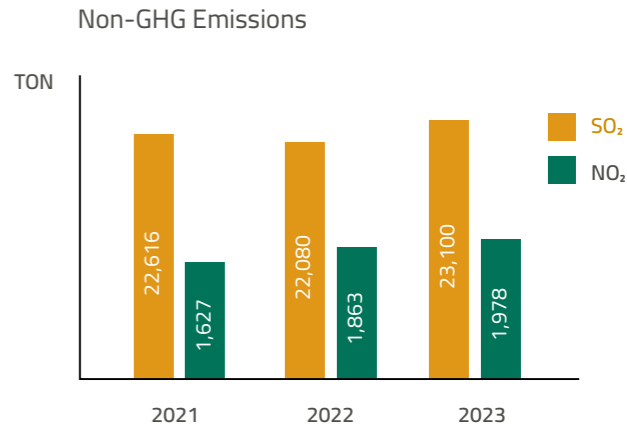
Ma'aden has prioritized low-carbon aluminum in response to increasing customer demand for sustainable products. This initiative underscores Ma'aden's commitment to offering eco-friendly solutions that align with market trends and environmental standards.

NON-GHG EMISSIONS

Air quality is an important issue to address because, if not properly controlled, air emissions from mining operations can be harmful to human and environmental health. Potential impacts can occur both on site and beyond our site boundaries in surrounding communities. At Ma'aden, we actively monitor for particulate matter, like PM10 and PM2.5, as well as nitrous oxide (NO₂) and sulfur oxide (SO₂).

Our NO₂ and SO₂ emissions increased from 2021 and 2023. Similar to our GHG emissions and energy consumption performance, this reflects our expanding mining business. Nonetheless, we meet or exceed relevant regulatory limits and international standards for mining industry emissions and air quality, such as those stipulated by the ICMM.

Our strategy focuses on the precise control and mitigation of air emissions at their source, ensuring that we continue to minimize our impact on air quality across all our operational sites. Through continuous improvement and innovative emissions reduction techniques, we are dedicated to advancing our environmental performance and contributing positively to the global sustainability agenda.



⁴Corrected for 2021 & 2022 self generated (waste heat)

BIODIVERSITY

Since mining and related processing operations can be disruptive to local ecosystems if not responsibly managed, Ma’aden actively works to mitigate or compensate for ecological damage wherever possible. We strive to refrain from operating in protected areas without essential protective measures and to maintain or improve the quality of land, water, and natural ecosystems in areas where we do operate. We do so by developing and implementing sound risk and impact policies and practices that help preserve the ecosystems we depend on.

Ma’aden has a Biodiversity Management Standard that defines the minimum requirements to develop and integrate a strategic approach to biodiversity. This involves the identification and mitigation of biodiversity impacts across all stages of our mining operations, from exploration and project development to operations and closure. In compliance with the Standard, all of our business units are required to establish, maintain, and implement location-specific procedures to:

- 1. Identify and assess the biodiversity features within the business unit’s areas of influence and establish a baseline of key biodiversity values;
- 2. Conduct risk assessments on the likelihood and consequences of potential direct, indirect, cumulative, and perceived impacts; and
- 3. Regularly reassess and review potential biodiversity impacts.

Our business units receive training on implementing the procedures with the help of external ecological consultants. At the corporate level, we have also begun engaging with local governmental agencies to participate in preserving biological features, such as by providing endangered species secure habitats without disturbance.

In 2023, the total size of our operational sites which are either in or adjacent to protected areas and/or areas of high biodiversity value increased to 172.16 km2. This increase mainly stemmed from one new site which we began to operate in and the inclusion of the Imam Turki Bin Abdulaziz Royal Reserve in the list of protected areas in June 2023. Ma’aden has been operating its bauxite mines in the reserve since 2013. Nonetheless, we strictly adhere to our internal policies and applicable local and international environmental regulations, which is why we have not identified any significant impacts on biodiversity since 2021 despite the expansion of our operational sites.

BIODIVERSITY IMPACTS	UNIT	2021	2022	2023
Operational sites in, or adjacent to, protected areas and/or areas of high biodiversity value	Km²	4.79	9.79	172.16
	#	1	2	4
IUCN Red List species and national conservation list species with habitats in areas affected by operations	#	1	1	1
Significant impacts on biodiversity	Qual.	-	-	-

As biodiversity issues are complex and possess interlinkages with other environmental issues such as climate change and environmental degradation, among others, we collaborate with external organizations that have technical expertise and experience in biodiversity conservation to maximize our positive impact. One such method to address these multidimensional environmental challenges is nature-based solutions (NBS). We have begun implementing NBS projects which address both climate mitigation and nature preservation.

Furthermore, we signed a MOU with Saudi Arabia’s National Center of Wildlife (NCW) in 2023 to launch community-based initiatives for preserving wildlife in the Kingdom. The partnership will include the exchange of knowledge and expertise, establishment of joint initiatives, and the development of plans for participating in wildlife conservation programs that involve and

benefit local communities too. Currently in the planning phase, one of our initiatives is to build a 175 km fence within Saja Umm Ar-Rimth Natural Reserve to protect the houbara bustard, a migratory bird species listed as ‘vulnerable’ in the IUCN Red List. Delivery of the initiative is planned to start in 2024. Additional progress on this partnership will be disclosed in subsequent sustainability reports.

One of our initiatives is to build a

175 km

fence within Saja Umm Ar-Rimth Natural Reserve



SUCCESS STORY

NATURE-BASED SOLUTIONS

In our pursuit of sustainability, Ma'aden embraces a vision to safeguard nature through ambitious NBS projects for preserving biodiversity, mitigating climate change impacts, enhancing climate resilience, and protecting our overall environment and its ecosystem services. Our key NBS initiatives include mangrove planting and afforestation, in addition to supporting existing ocean regeneration initiatives.

At the COP28 climate summit in Dubai, Ma'aden launched a dedicated mangrove plantation strategy which includes planting 10 million mangroves by 2040 to restore and stabilize Saudi Arabia's coastline ecosystems. The strategy was operationalized through Ma'aden's MOU with the Royal Commission for Jubail and Yanbu, signed on the same day, to establish a mangrove park and support planting initiatives on Gurmah Island in Jubail. Mangroves are known to provide ecosystem services that stabilize coastlines, prevent erosion, sequester carbon, and purify water supplies. Therefore, they act as a vital source of livelihood for communities, a critical habitat for plants, birds, and marine life, and a natural buffer against climate change impacts. As part of the MOU, both parties will also cooperate on research initiatives relating to mangrove planting and ecosystem health, and will develop local community programs that support ecosystem restoration and improve environmental awareness.

Beyond mangroves, Ma'aden also has a 2040 afforestation target to plant 10 million terrestrial trees and irrigate them using renewable water sources. In 2022 alone, Ma'aden planted 100,000 trees in King Salman Royal Natural Reserve, which leveraged the help of 1,000 volunteers. Since then, we have been working to plant 120,000 trees and 10 million seeds in Imam Turki bin Abdullah Royal Natural Reserve which we aim to complete by 2024.

During the 7th Future Investment Initiative (FII) conference in Riyadh in October 2023, Ma'aden announced its new role as an anchor partner for WAVE, a collective action platform established by the FII Institute and Saudi Arabia's Ministry of Energy, to contribute to the acceleration of global ocean regeneration efforts. Led by Princess Reema bint Bandar, Saudi Arabia's ambassador to the United States, WAVE aims to restore marine and coastal ecosystems, advance ocean-based climate solutions, and strengthen the resilience of coastal communities. Oceans and seas are vital to the health of our planet, the global economy, and human health as they feed us, regulate our climate, and generate most of the oxygen we breathe. Furthermore, 30% of Ma'aden's products are shipped across the ocean and Ma'aden has significant operations along the Arabian Gulf. Therefore, ocean sustainability matters to us and is part of our sustainability agenda. With WAVE's first phase of securing partnerships ending with 22 anchor, strategic, initiative, and program partners, it will subsequently launch a set of programs to raise awareness, establish a digital information hub, accelerate innovations, support scientific efforts, and drive stakeholder collaborations to find solutions for ocean regeneration.

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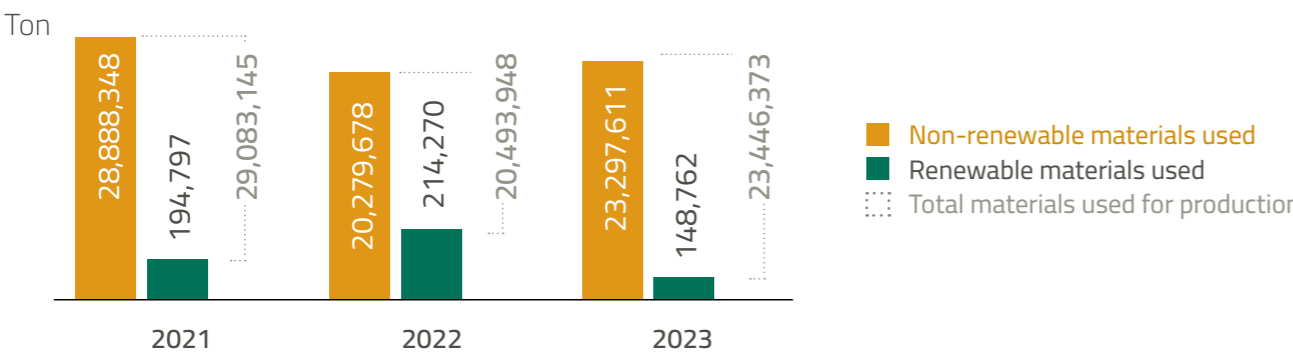
MATERIALS & TAILINGS

Sustainable development includes circular economy-based models, and mining presents an opportunity to integrate materials and waste management solutions into business functioning by increasing the share of renewable materials used, minimizing the generation of waste while maximizing the recycling of waste.

MATERIALS

We use both non-renewable and renewable materials in our production processes. However, in our pursuit of sustainable mining, we strive to reduce the share of non-renewable materials in the total amount of materials we use. From 2021 to 2023, the total amount of materials Ma’aden used for production consistently declined. This was attributed to a decrease in both non-renewable and renewable materials used by 19.4% and 23.6% respectively. Within the same period, however, our total production volume increased by 15.8%, thereby highlighting our successful achievement of material use efficiency improvements.

Materials Used for Production (tons)



TAILINGS & WASTE MANAGEMENT

Waste management starts with minimizing the inception of materials in our production and ends with minimizing the final disposal of waste generated by our production. This implies that the successful management and minimization of waste should be an indicator of how efficient our operations are. From 2021 to 2023, our solid waste generation increased by 3.3% whereas our liquid waste generation declined by 62.8%. This reflects our improved efficiency in managing our operations to minimize the total amount of waste we generate. Furthermore, our waste recovery and recycling rates have improved significantly, whereby both solid and liquid waste recovery rates more than doubled over the three years. The increase in waste recovery and recycling rates indicates that we are increasing our material use efficiency.

WASTE GENERATION, RECOVERY & RECYCLING	UNIT	2021	2022	2023
Total solid waste generated	Ton	2,304,343	2,870,261	2,396,570
Solid hazardous waste generated	Ton	2,255,949	2,848,773	2,356,397
Solid non-hazardous waste generated		48,394	21,488	40,173
Total liquid waste generated	m³	11,834	14,628	28,881
Liquid hazardous waste generated	m³	11,834	14,628	20,025
Liquid non-hazardous waste generated	m³	-	-	8,856
Total solid waste recovered and recycled	Ton	17,146	15,837	36,937
Solid hazardous waste recovered and recycled	Ton	8,196	5,460	9,863
Solid non-hazardous waste recovered and recycled	Ton	8,950	10,377	27,074
Percentage of solid waste recovered and recycled from solid waste generated	%	0.7%	0.6%	1.5%
Total liquid waste recovered and recycled	m³	4,161	6,375	3,949
Liquid hazardous waste recovered and recycled	m³	4,161	6,375	3,949
Liquid non-hazardous waste recovered and recycled	m³	-	-	-
Percentage of liquid waste recovered and recycled from liquid waste generated	%	35.2%	43.6%	13.7%

To strengthen our operational efficiencies and waste reduction and recovery capabilities, Ma’aden engages with external service providers that have the technical expertise and experience to support our waste-related efforts. In 2023, we signed a SAR 105 million procurement and construction contract with Darkstone Arabia Ltd, an industrial maintenance, engineering, and construction company, to deliver the second phase of our Mansourah-Massarrah gold mine tailings storage facility (TSF) construction project. As part of the contract,

Darkstone will build the mine’s waste management system, including floor and perimeter embankment, piping, mechanical works, and HDPE geomembrane. Darkstone will also build the mine’s waste distribution and water management systems. For the same project, we also signed a contract with ATC Williams, a tailings, water, and waste solutions provider, to aid in the design of the tailings and water management system of the mine.



At Ma’aden, our waste management efforts also go beyond proper waste handling and waste generation reduction. We recognized that our waste should be reprocessed and repurposed, thereby reducing the need for storage which has grown over time. One of our primary focus areas on this is the monetization of waste byproducts from our processes, transforming what was once considered waste into value-adding products. For example, our phosphate business unit is pioneering a solution to calcine phosphogypsum, a solid waste byproduct from the processing of phosphate ore to make phosphoric acid typically used in fertilizers. In 2023, we signed an MOU with Metso Outotec and thyssenkrupp Uhde to design and develop a novel integrated complex for the sustainable processing of phosphogypsum. Building on this collaboration, our phosphate business unit is working to obtain a patent for Ma’aden to recycle gypsum. The new circular process will be incorporated into our phosphate operations, enabling the reduction of solid waste produced and the capture of CO₂ emissions. This marks a significant milestone, not only for Ma’aden but also for the entire phosphate industry.

We are also exploring technologies to valorize red mud waste, a form of bauxite residue generated during the processing of bauxite into alumina and assessing alternatives for leaching agents in our gold processing operations to create value while adhering to sustainable practices. For more information on how Ma’aden is innovating waste-to-value solutions, please refer to the Sustainable Innovation section of this report.

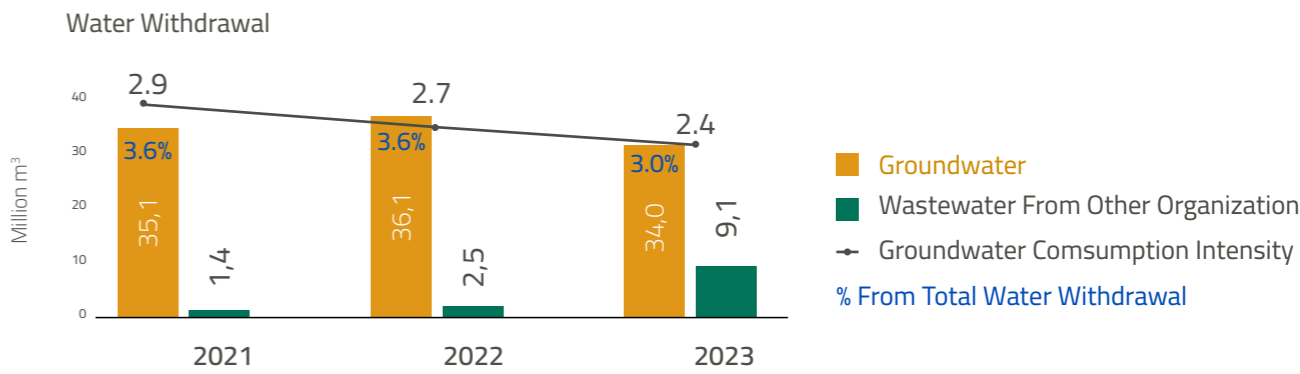
WATER STEWARDSHIP

As one of the driest countries in the world, nearly 2.25 million km² of Saudi Arabia is arid, with no perennial rivers or other ongoing bodies of water. This makes groundwater the only freshwater resource for sites and an invaluable resource which should be carefully preserved. At Ma’aden, we implement water stewardship through the strict management of our withdrawal from natural water sources, our water consumption, and our water discharge. Wherever possible, we empower our business units to minimize water withdrawal and maximize water recycling in ways that are most suitable and effective for their respective operations.

WATER WITHDRAWAL

Ma’aden withdraws water from four main sources. Seawater from the ocean is our primary water source, making up approximately 95% of our total water withdrawn over the past three years. This is followed by groundwater (freshwater), municipal water supply or water utility (desalinated water sourced from the ocean), and wastewater from other organizations. By relying primarily on the ocean, we reduce our overall operational risk given that we operate in a water-scarce country.

WATER WITHDRAWAL BY SOURCE ⁵	UNIT	2021	2022	2023
Municipal Water Supply or Water Utility (Desalinated Water sourced from Ocean)	m ³	6,244,850	8,124,926	7,640,799
Wetlands, Rivers, and Lakes	m ³	-	-	-
Oceans (seawater) ⁶	m ³	923,854,810	951,616,265	1,087,907,989
Groundwater (freshwater)	m ³	35,137,898	36,098,160	34,005,978
Wastewater from other organizations	m ³	1,416,008	2,543,483	9,077,219
Total water withdrawal	m ³	966,653,566	998,382,834	1,138,631,985



The increase in our total water withdrawal from 2021 to 2023 stemmed from Ma’aden’s recent expansion in line with our 2040 growth strategy. Nonetheless, the portion attributed to fresh water, that is groundwater withdrawal remained low below 4% of total water withdrawal. This showcases our success in operationalizing our water stewardship commitment. Furthermore, none of the water sources we used were significantly affected by our withdrawal.

Ma’aden withdraws water from four main sources. Seawater from the ocean is our primary water source, making up approximately

95%

of our total water withdrawn over the past three years.

⁵Within the scope of this report’s disclosures, municipal water supply or water utility covers desalinated water sourced from oceans, oceans cover seawater, and groundwater covers freshwater. There are no wetlands, rivers, or lakes in or around Ma’aden’s operational sites. Therefore, withdrawal values for wetlands, rivers, and lakes have been 0 m3 across all three years.

⁶ Historical performance data on water withdrawal from the ocean have been revised to include seawater used for the purpose of once-through cooling. This more accurately reflects water usage in Ma’aden’s phosphate operations.

SUCCESS STORY

REDUCING GROUNDWATER WITHDRAWAL THROUGH OUR PARTNERSHIP WITH NATIONAL WATER COMPANY

As part of Ma'aden's efforts to reduce the use of Saudi Arabia's scarce water resources, Ma'aden has been in multi-year partnerships with the Kingdom's National Water Company (NWC) to expand our capacity to use treated wastewater rather than extract new groundwater or withdraw from other natural water sources. This partnership involves the development of infrastructure to supply our phosphate industrial complexes in Wa'ad Al-Shamal with treated sewage effluent (TSE) through water pipelines spanning over 300 km. As part of the infrastructure developed, a system of transmission lines links all components of the TSE project together, connecting the cities of Sakaka, Arar, Tarif, and Wa'ad Al-Shamal.

By December 2023, MWSPC's TSE utilization capacity was in the process of increasing, with a target to reach a maximum utilization rate of 1,500 m3/h soon. This is projected to reduce Ma'aden's phosphate-related aquifer groundwater use by 50% in 2024. This partnership not only reduces our reliance on our nation's scarce water resources but it also provides an additional stream of water supply which diversifies and reduces our overall operational risk.

WATER DISCHARGE

Besides our effort to minimize water scarcity risk, we adhere to the highest water quality standards relevant to our business to ensure that the water systems of our neighboring communities are not affected by the effluents we discharge. Our approach to effluent management focuses on minimizing water discharge while enhancing the treatment and recycling of our effluents.

Over the past three years, the quantity of water we discharge to seawater has increased. This stems from our recent expansion in line with our 2040 growth strategy. However, we have not been involved in any events relating to negative impacts on the destinations that we have discharged water to.

WATER DISCHARGE BY DESTINATION ⁷	UNIT	2021	2022	2023
Discharge to surface water	m ³	-	-	-
Discharge to groundwater	m ³	-	-	-
Discharge to seawater	m ³	895,662,808	943,770,112	1,074,062,176
Discharge to third-party - from disposals	m ³	-	2,586	-
Total water discharge	m ³	895,662,808	943,772,698	1,074,062,176

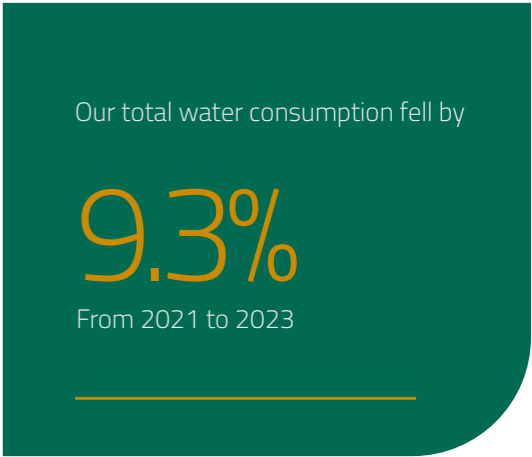


⁷Ma'aden does not discharge water to surface water or groundwater. Therefore, there are no discharge values for the two destinations.



WATER CONSUMPTION & RECYCLING

Despite a decline in our water recycling and reuse performance between 2021 and 2023, it more than doubled from 2022 to 2023. We also anticipate a continued increase in our water recycling rates going forward as we have increased our effluent recycling efforts through external partnerships which will produce positive results in subsequent years. Our total water usage, which is the sum of our total water withdrawal and total water recycled and reused, rose only by 3.0% from 2021 to 2023. Conversely, our total water consumption, which is the difference between our total water withdrawal and our total water discharge, fell from 2021 to 2023 by 9.3%. This reflects an overall improvement in our water efficiency to save our nation's limited water supply.



WATER CONSUMPTION & RECYCLING	UNIT	2021	2022	2023
Volume of water recycled and reused	m ³	5,138,333	1,601,205	3,385,789
Percentage of water recycled and reused from total water withdrawal	%	0.5%	0.2%	0.3%
Total water usage	m ³	971,791,899	999,984,038	1,141,800,086
Total water consumption	m ³	70,990,759	54,610,136	64,569,809

In our corporate HQ located in Riyadh, we also carry out water saving initiatives alongside our energy saving ones. These include replacing conventional faucets with automatic ones that have sensors so that they turn off when not in use and during other resting hours. This alone has brought tremendous reduction in our HQ building's water consumption from 1.64 m3/head in 2022 to 0.92 m3/head in 2023 – a 43.9% reduction. We will continue to implement effective water use reduction initiatives in our HQ building as well as across our mining operations, fulfilling our responsibility to be good stewards of our environment and society.

NURTURING OUR SOCIETY



NURTURING OUR SOCIETY

Ma’aden is committed to fostering a work environment where zero harm is not just an aspiration but a core part of our ethos, aiming to enhance the safety culture among our employees, contractors, customers, and the communities in which we operate.

SAFETY & SECURITY MANAGEMENT FRAMEWORK

EMPLOYEE HEALTH, SAFETY & SECURITY

At Ma’aden, we acknowledge the inherent risks associated with mining and mineral processing. Our aspiration is unwavering towards cultivating a work environment where safety is not merely a policy but a fundamental prerequisite. This commitment is evident in our efforts to nurture a pervasive safety culture across all levels – employees, contractors, customers, and the communities we engage with. Our goal to achieve a zero harm workplace and bolster the safety ethos is central to our operations. By managing health, process safety, and safety risks effectively, we aim not only to avert severe incidents, injuries, and illnesses but also to enhance productivity, asset reliability, and societal wellbeing, thereby contributing to economic growth and societal justice.

Our goal to achieve a zero harm workplace and bolster the safety ethos is central to our operations

EHSS MANAGEMENT FRAMEWORK

Our comprehensive health, safety, security, and environmental management system, Ma’aden SHE Management (MSHEM), sets out our firm-wide approach to employee health, safety, and security. It is our primary system for raising awareness, building capabilities, and promoting the safety integrity of our operations for our employees and contractors. Additionally, its delivery is overseen, driven, and monitored by the employees within our safety governance structure.

Environment, Health, Safety, and Security (EHSS) is at the heart of every decision we make. Understanding the inherent risks of the mining and mineral processing industry, we place utmost importance on robust EHSS management as a cornerstone of our operations. We hold the conviction that with proactive risk management, all incidents can be prevented. This is underpinned by a culture of EHSS that permeates every level of our organization, fueled by leadership and the collective responsibility embraced by each member of our workforce. Our guiding principles, encapsulated in our MSHEM System Framework and EHSS Policy, serve as a blueprint for operational excellence at Ma’aden, guiding us towards not just compliance but leadership in EHSS practices. Through our EHSS Policy, we are dedicated to not only protecting our workforce and our environment but also setting new and improved standards in sustainability and safe mining practices.

Please see the EHSS Policy [here](#).

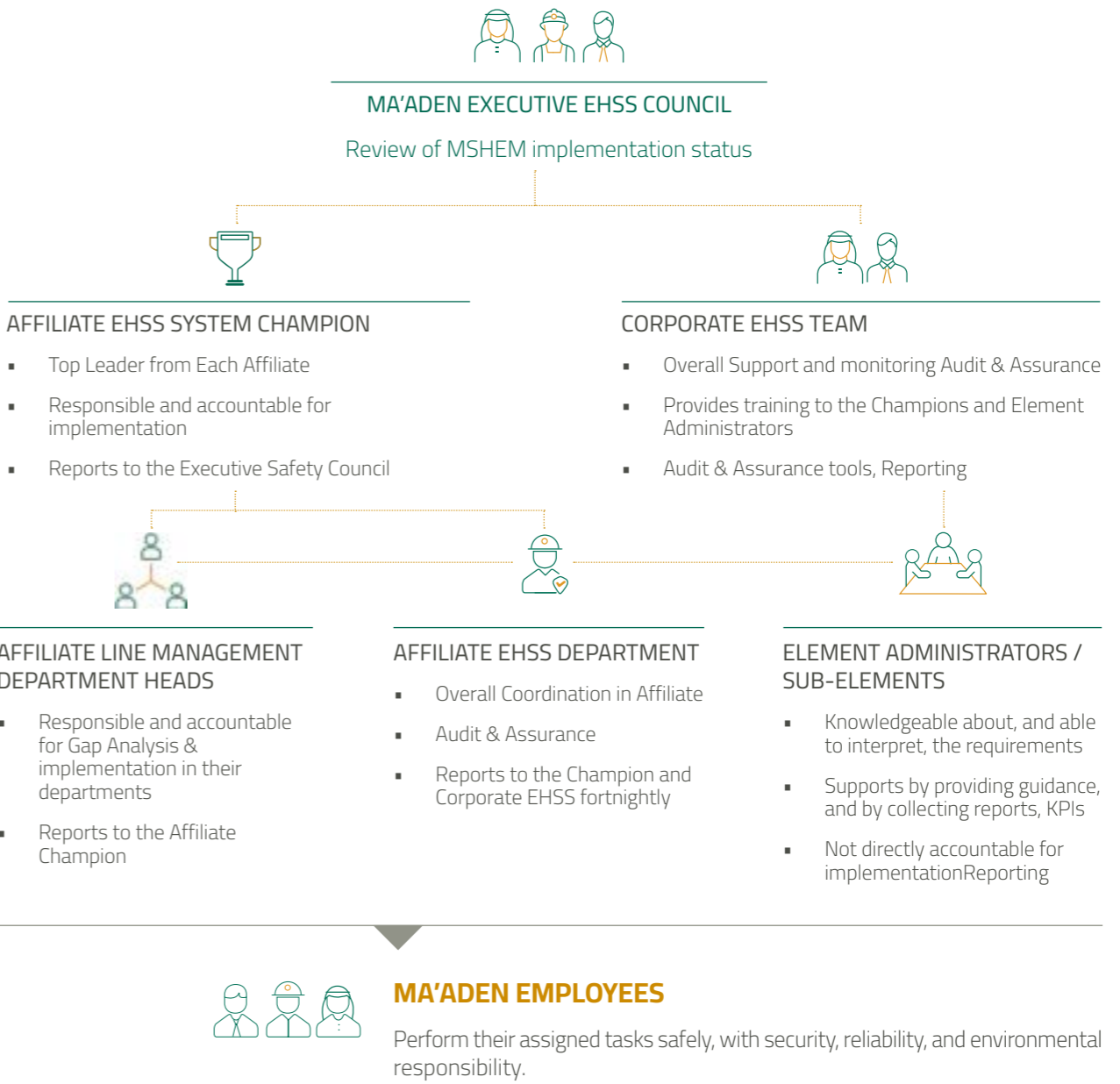


SAFETY GOVERNANCE

Our governance approach to safety is meticulously structured, starting with our board-level Safety and Sustainability Committee. This committee operates in tandem with other board-level committees, forming a critical part of Ma’aden’s corporate governance framework and ensuring an elevated level of vigilance and management of safety and risk throughout the organization. The Safety and Sustainability Committee oversees the implementation and efficiency of Ma’aden’s safety strategies to ensure they meet our desired performance outcomes.

Reporting to the Safety and Sustainability Committee, the Executive EHSS Council assesses Ma’aden’s safety and risk management implementation, ensuring that relevant systems and processes are adequately in place across the business. To foster firm-wide alignment, our corporate and affiliate safety teams work together to design and implement processes and systems aimed at performance enhancement, guided by our risk-based approach to safety.

MSHEM GOVERNANCE STRUCTURE



CRISIS & EMERGENCY MANAGEMENT

At Ma'aden, crisis and emergency management are taken extremely seriously. We proactively test and refine our crisis response procedures to ensure that they not only meet but exceed our evolving needs for emergency preparedness. This ongoing evaluation and enhancement of our crisis management system are pivotal in aligning our operations with global best practices and ensuring the longevity of our business and safety of our employees. Our crisis management priorities are threefold – preserving lives, preserving the environment, and preserving Ma'aden's property, reputation, and production. We achieve these priorities by conducting training, drills, and other relevant exercises quarterly and annually. In 2023, Ma'aden continued to implement several exercises.

- **Emergency Training:** Through an extensive training program, we hosted over 100 emergency management sessions, engaging more than 2,000 employees across various sites. This initiative underscores our dedication to equipping our workforce with the knowledge and skills to effectively manage emergencies.
- **Emergency Response Drills:** As an integral component of our emergency preparedness strategy, major drills are regularly performed to evaluate the efficacy of our emergency response plan implementation, to test our emergency response speed, and to identify and address any additional vulnerabilities.
- **Comprehensive Emergency Management Strategy:** Our strategy encompasses crisis response protocols within a robust emergency management system, ensuring quick and coordinated response to any emergency scenario.
- **Automated Crisis Management Notification Program:** This program guarantees immediate communication across Ma'aden's extensive network, from our headquarters to remote operational sites, enhancing our ability to act swiftly in critical situations.

SAFETY & SECURITY INITIATIVES

Under our 2025 strategy, Ma'aden is advancing towards establishing a culture and environment where safety and security are paramount, aiming for an incident- and injury-free workplace. Central to this transformation is our SafeSTEPS program, a multi-year journey to transition from a performance-based approach to safety management to a risk-based one. A performance-based approach relies on finding and fixing deficiencies that have been identified through incidents, near misses, and unsafe conditions and actions. On the other hand, a risk-based approach focuses on building organizational resilience by proactively predicting and preventing what may cause incidents to happen.



Underpinned by the core principle of 'Stop, Think, Evaluate, and Proceed Safely', the program guides every employee to assess EHSS risks meticulously before any action, thereby preventing any incidents before they occur. The program's objective is twofold – to foster a communal culture of mutual care and safety awareness, and to ensure every employee embodies a 'safety first' mentality, both at work and at home. We are cultivating leaders who prioritize safety above all and serve as active exemplars of this principle, alongside a workforce that takes collective responsibility for safeguarding their peers and sharing knowledge to enhance safety across Ma'aden. This strategic direction not only seeks to protect but also to inspire a firm-wide behavioral evolution, setting new benchmarks for a safe workplace.



OTHER SAFETY & SECURITY INITIATIVES

Throughout the year, we carry out a variety of initiatives to continuously improve our employee safety and security performance. Several of these initiatives run for days or months to complement the longer-term, multi-year flagship programs that we already have in place.

DATE	INITIATIVE	DESCRIPTION
Safety		
August 2023 – Present	Safety Transformation Program	The program aims to transform Ma’aden’s safety culture from a reactive-based one to a proactive, risk-based one. It involves the integration of stringent EHSS protocols into every facet of Ma’aden’s business operations.
8th–16th October 2023	Cold Eye Assessment	An assessment of the implementation of four safety focus areas – contractor management, work permit systems, leadership and culture, and serious injury and fatality prevention.
June 2023	Fatality Prevention Rapid Intervention	Conducted fatality prevention rapid intervention audits at three key sites, as part of Ma’aden’s Fatality Prevention Rapid Intervention Audit Plan, to verify the implementation of safety recommendations for preventing workplace fatalities.
October 2022 – March 2023	Safety Leadership Development Program	A training and coaching program for Ma’aden’s leaders to foster a self-sustaining safety culture across the firm, emphasizing safety as a core value within leadership roles.
Security		
December 2023	Pilot of Industrial Security Supervisory Course at Saudi Mining Polytechnic (SMP)	<div>Performed a trial run of Ma’aden’s first custom-designed five-day course addressing the firm’s unique security challenges and operational needs, offering practical and applicable knowledge and tools for supervisory staff.</div> <ul style="list-style-type: none">Enhances cohesion among supervisors across business units.Creates a platform for the exchange of ideas and best practices.Promotes a culture of unity and shared learning.Strengthens Ma’aden’s overall industrial security capabilities.
November 2023	Emergency and Crisis Training for Civil Defense Officers	<div>A collaboration with the Directorate General of Civil Defense to run a three-day training session on emergency and crisis management.</div> <ul style="list-style-type: none">Strengthens the partnership and coordination between the two entities.Raises awareness of mining sector risks.Facilitates mutual knowledge exchange between the civil defense officers and Ma’aden’s emergency response teams.

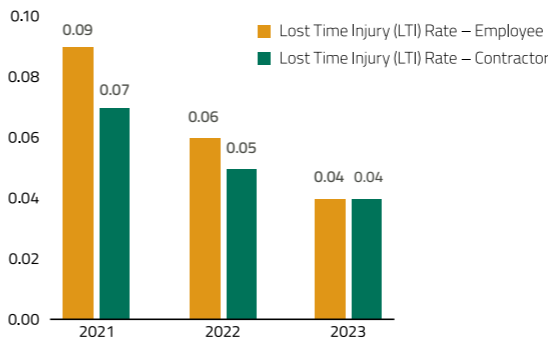
SAFETY & SECURITY PERFORMANCE

Over the past three years, we have seen year-on-year fluctuations in our workplace safety performance. However, we have achieved an overall improvement in all safety-related metrics from 2021 to 2023 apart from contractor fatalities and employee medical treatment injuries which remained the same. We are proud to have achieved zero reported incidents of employee fatalities and restricted duty injuries.

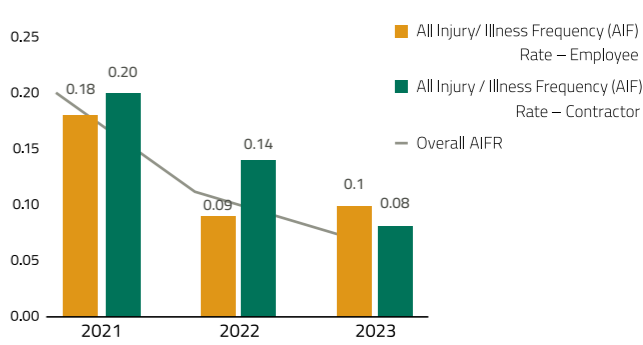
Despite our improvements and achievements, we acknowledge that further progress still needs to be made for us to be able to achieve our zero harm goal. The journey towards an incident-free workplace for any organization is complex but we have managed to significantly reduce our safety and health event rate and all injury/illness frequency rate, which cover both our employees and contractors. They decreased by 55.8% and 60.0% respectively between 2021 and 2023, demonstrating our commitment towards instilling safety measures and culture among our workforce.

WORKFORCE SAFETY ^{8,9}	UNIT	2021	2022	2023
Fatalities (FAT) - Employees	#	-	-	-
Fatalities (FAT) - Contractors	#	1	-	1
Lost Time Injury (LTI) - Employees	#	6	4	3
Lost Time Injury (LTI) - Contractors	#	12	10	8
Restricted Duty Injury (RDI) - Employees	#	2	-	-
Restricted Duty Injury (RDI) - Contractors	#	6	4	3
Medical Treatment Injury (MTI) - Employees	#	4	2	4
Medical Treatment Injury (MTI) - Contractors	#	18	13	5
Total HSE Incidents (Reportable) - Employees	#	12	6	7
Total HSE Incidents (Reportable) - Contractors	#	37	27	17
Total Hours Worked - Employees	Hours	13,085,459	13,387,961	13,836,662
Total Hours Worked - Contractors	Hours	36,682,555	38,897,319	44,877,778

LOST TIME INJURY (LTI) RATE



ALL INJURY / ILLNESS FREQUENCY (AIF) RATE



⁸ A lost time injury is defined as a work-related injury whereby the employee requires one or more days away from work to recover beyond the day of the injury. A restricted duty injury is defined as a work-related injury whereby the employee is unable to perform the full range of normally assigned duties for one or more days beyond the day of the injury. A medical treatment injury is defined as a work-related injury whereby the employee requires medical care beyond first aid from a professional physician or qualified paramedic.

⁹ The formulae used for calculating workplace injury rates followed those outlined by the GRI Standards. LTI rate = LTI / Total hours worked * 200,000. AIFR = Total HSE incidents / Total hours worked * 200,000. SHER = [(50 * Class 1 HSE incidents) + (5 * Class 2 HSE incidents) + (1 * Class 3 HSE incidents)] / Total hours worked * 200,000. Overall AIFR = Total employee and contractor HSE incidents / Total employee and contractor hours worked * 200,000.

WORKPLACE DIVERSITY

Diversity in the mining sector is vital for fostering innovation, driving sustainable growth, and reflecting the rich tapestry of the communities we serve to shape the future of the mining industry. As put forth in our Code of Conduct, Ma’aden’s policies on diversity, equality, and non-discrimination are designed to make individuals feel welcomed and respected regardless of race, nationality, religion, gender, disability, ancestry, social origin, political, or other opinions. Ma’aden recognizes the opportunity to improve business performance by drawing on the talents, experiences, viewpoints, and ideas of a diverse and inclusive workforce. We are therefore focused on equal opportunity in hiring, developing, training, and retaining the best people.

Since 2021, our total full-time employee (FTE) workforce has consistently increased, with a growth of 18.2% from 2021 to 2023. This underscores our ongoing efforts to bolster our workforce with skilled individuals and showcases our progress towards a tenfold growth in business by 2040. With female FTEs notably increasing by more than triple between 2021 and 2023, of which 18 are in managerial or executive roles, we are continuously working towards greater female representation in our workforce.

We also believe that investing in local talent can help to build a strong pipeline of skillful and capable workforce. The portion of local nationals in our workforce consistently increased for both male and female FTEs, by 15.0% and over triple respectively from 2021 to 2023. The overall percentage of Saudi nationals in our total FTE workforce also remained high at 76.5% in 2023, illustrating our investment in local talent development and contribution to regional growth. This commitment to local empowerment extends to our preferential engagement of local vendors and contractors.

WORKFORCE BREAKDOWN – GENDER	UNIT	2021	2022	2023
Total FTEs (Full Time Employees)	People	5,818	6,494	6,877
No. of FTEs (Full Time Employees) - Males	People	5,706	6,306	6,508
No. of FTEs (Full Time Employees) - Females	People	112	188	369
Global Contractors - Males	People	932	934	814
Global Contractors - Females	People	-	-	-
Managers - Males	People	195	250	283
Managers - Females	People	-	5	10
Directors - Males	People	92	107	129
Directors - Females	People	-	1	5
VPs - Males	People	19	26	66
VPs - Females	People	-	-	3
Local Nationals - Males	People	4,258	4,649	4,896
Local Nationals - Females	People	112	188	364
Non-local Employees - Males	People	1,448	1,657	1,612
Non-local Employees - Females	People	-	-	5

WORKFORCE BREAKDOWN

GENDER DIVERSITY IN WORKFORCE

Our dedication to fostering a diverse and inclusive workforce is evident in the significant strides we have made in staff recruitment and development. In 2023, we experienced remarkable growth and diversification in our employee base, reflecting our dedication to embracing talent across various demographics in Saudi Arabia.

Ma’aden’s policies on diversity, equality, and non-discrimination are designed to make individuals feel welcomed and respected regardless of race, nationality, religion, gender, disability, ancestry, social origin, political, or other opinions



AGE DIVERSITY IN WORKFORCE

In addition to gender diversity, we also value age diversity within our organization. We employ professionals based on their qualifications, ranging from fresh graduates to industry veterans. The majority of our FTEs are within the age range of 25-40 years old, followed by the age range of 40-60 years old. In line with our talent development strategies, we are making a deliberate effort to provide younger employees who have demonstrated a high level of leadership and competence potential with opportunities to undertake supervisory and managerial roles. This allows us to expose these high-potential and high-performing individuals to more responsibility and leadership opportunities earlier in their careers.

WORKFORCE BREAKDOWN - AGE	UNIT	2021	2022	2023
Age Group <25	%	4	2	3
Age Group 25-40	%	61	66	65
Age Group 40-60	%	34	32	31
Age Group >60	%	1	0	1

GENDER DIVERSITY IN RECRUITMENT

Cognizant of the value of diversity in driving organizational performance as creativity and innovation are fostered by encouraging a multitude of perspectives and opinions, we strive to ensure the influx of diverse talent into our organization through our recruitment practices. Our total FTE recruitment increased significantly from 2021 to 2023, with male FTE new hires growing by 73.2% and female FTE new hires growing by nearly fourfold. Although the departure of female FTEs increased from 2021 to 2023, the portion of total FTE departures from total FTEs experienced a consistent year-on-year decline from 5.6% to 4.2%. Despite this progress in overall employee retention, we will continue to make bold and strategic efforts in retaining our female employees.

FTE RECRUITMENT BREAKDOWN – GENDER	UNIT	2021	2022	2023
Employees hired – Males	People	380	743	658
Employees hired – Females	People	54	96	208
Employees left – Males	People	318	332	265
Employees left – Females	People	10	20	24

Ma’aden is committed to fostering an environment whereby all employees feel valued and respected. This commitment is foundational not just for enhancing employee retention, satisfaction, and performance but also for our contribution to national and global socioeconomic development objectives. We maintain a strict zero tolerance policy for discrimination of any kind, including race, gender, religion, age, and disability.



FEMALE EMPOWERMENT

In 2023, a new Diversity and Inclusion (D&I) team was established to increase the number of female employees at Ma’aden. This is in line with our goal to increase the employment of female nationals to 6% and 15% of total FTEs by 2030 and 2040, respectively, from a 2020 baseline of 1%. As part of the D&I team’s mandate, it has developed and is responsible for a holistic approach to building a robust infrastructure at Ma’aden that supports attraction and retention, the approach’s two focus areas, of women in the mining industry.

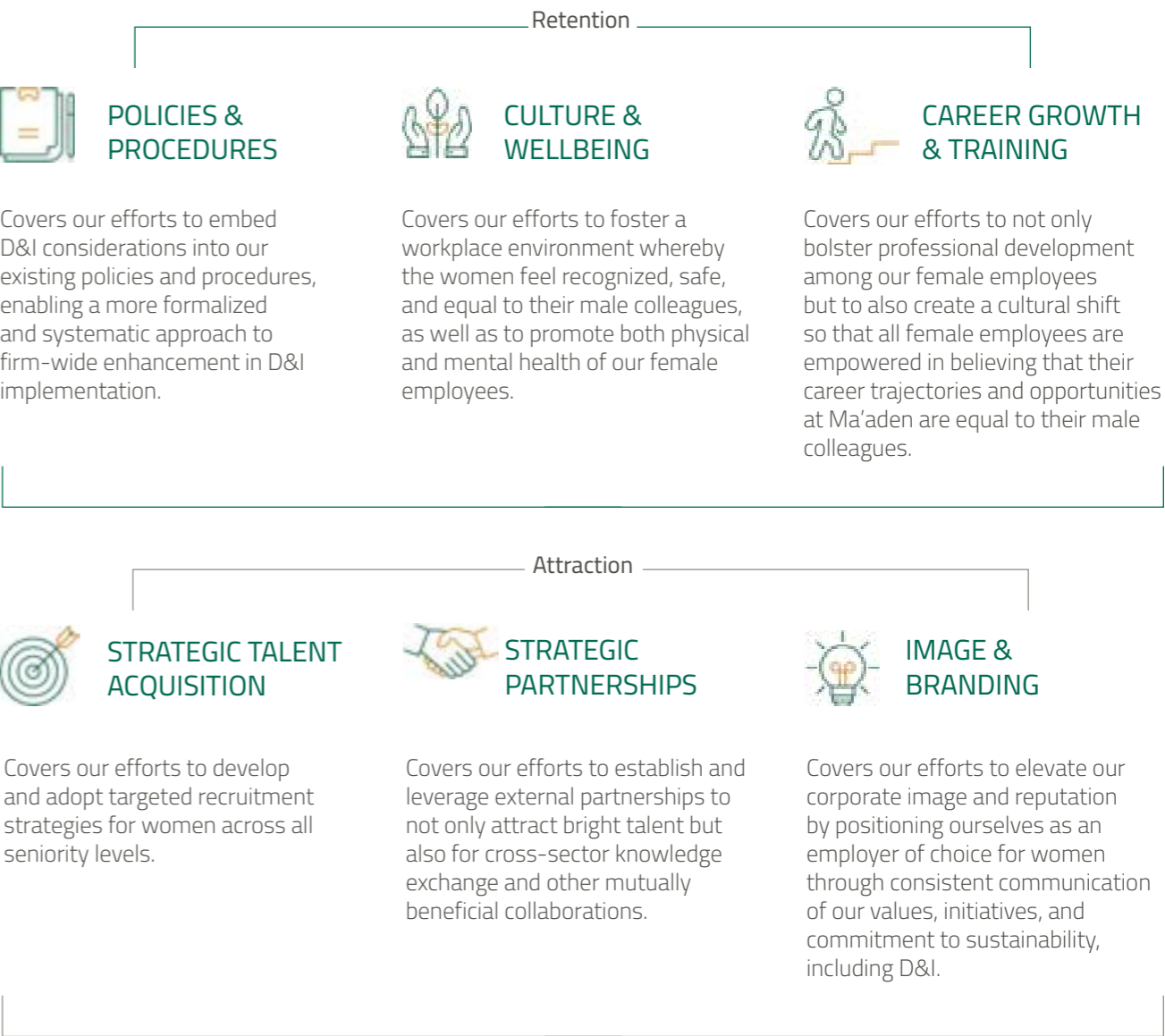
As we have already seen success in the growth of our recruitment of female employees but our performance in female employee retention has greater room for improvement, the D&I team’s priority since its establishment has been on the retention focus area. This is underpinned by three pillars for retention – policies and procedures, culture and wellbeing, and career growth and training. On the other hand, the D&I team’s attraction focus area is underpinned by three pillars – strategic talent acquisition, strategic partnerships, and image and branding.

The D&I team was established to increase the employment of female nationals to

6%
by 2030
and
15%
by 2040



Diversity and Inclusion’s holistic approach to build a robust infrastructure that supports attraction and retention of women in the mining industry



2023 ACHIEVEMENTS

Within just a few months since its establishment, the D&I team has already made several large achievements. These are primarily driven by the broad-ranging initiatives that the team has implemented with support and collaboration from the women in our organization.

D&I Initiative Category	Achievement
Initiatives covering female employees	<ul style="list-style-type: none">Female champions have been nominated at our corporate HQ and at each site to drive the implementation of our D&I approach, including conducting weekly alignment meetings.The D&I team continuously works with our business units and facilities management to ensure optimal facilities are available for our female employees, including uniforms, accommodations, gyms, recreation centers, canteens, and nurseries.A dedicated female grievance portal was launched and grievance cases were dealt with in collaboration with our grievance committee.Partnerships with external organizations were established to provide mentorship and training opportunities for our female employees.<ul style="list-style-type: none">International Women in Mining (IWIM): Focuses on mentoring women in the mining sector with male experts in the field.Mohammad Bin Salman College (MBSC): Focuses on offering a three-day leadership program specifically designed for female executives, featuring expert-led sessions on leadership development, action learning, and critical reflection.Multiple female wellbeing initiatives, including paddle, yoga, breast cancer awareness campaigns, were conducted across all sites.
Initiatives covering all employees	<ul style="list-style-type: none">The D&I team visited sites to engage with female employees directly.A D&I policy was drafted and D&I considerations were incorporated into Ma'aden's existing HR policies and procedures based on results from gap analyses and industry peer benchmarking.
D&I change management	<ul style="list-style-type: none">D&I modules were added into leadership development programs.D&I awareness sessions were conducted for all employees.D&I Glimpses' were periodically shared with employees to highlight elements of our D&I policy
Career growth	<ul style="list-style-type: none">Seven female employees enrolled in MBSC's first female leadership program.High-potential female employees increased from 9% in 2022 to 12% in 2023, of which 73% were enrolled in Ma'aden's fully integrated talent tool (FITT), an internal career planning platform.Overall female employees enrolled in training programs nearly doubled from 113 in 2022 to 243 in 2023.

We are proud to support female representation in the mining industry through global and novel partnerships, including with our industry competitors. We recognize that a lack of female representation is a systemic issue in the mining industry and it requires the collective effort of all industry players in order to reap the rewards of an enhanced and larger female talent pool. Our ground-breaking partnership with IWIM is an example of this.















SUCCESS STORY

IWIM PARTNERSHIP

2023 marked a significant milestone for Ma’aden as we forged a strategic partnership with International Women in Mining (IWIM), a global not-for-profit organization dedicated to advancing gender equity in the mining sector. As the first company in the Middle East to partner with IWIM, Ma’aden is setting a new benchmark for leadership in D&I within the mining industry regionally.

IWiM develops and carries out action-oriented global initiatives and projects aimed at various stakeholders throughout the global mining industry. It operates through three strategic pillars – Industry Change Agent, WIM Champion, and Diversity Trendsetter.



Industry Change Agent	WIM Champion	Diversity Trend Setter	Industry Change Agent	WIM Champion	Diversity Trend Setter
 IWRMP International cross-company mentoring programme building a pipeline of future leaders	 INTERNATIONAL DAY OF WOMEN IN MINING Celebrate women's contributions globally	 THOUGHT LEADERSHIP Research addressing the global women in mining data gap	 D&I SHARING NETWORK DEI knowledge sharing space	 MINING JOBS PORTAL Increase and improve visibility and recruitment of female talent	 POLICY AND ADVOCACY Participation in international working groups on gender
 INCLUSIVE WORKPLACE DESIGN Redesigning the workplace for the industry of the future	 INTERNATIONAL WIM ALLIANCE Open to 100+ WIM organisations worldwide. promote a strong, unified global WIM voice	 RESPECT AT WORK A platform where survivors of GBVH can share their stories and be heard	 WIM GLOBAL EXCHANGE International policy organisations in extractives and UNSDGs	 INTERVIEW SERIES Highlighting inspirational women as role models from across the globe	 GENDER AND MINING LIBRARY Collection of reports focused on gender and mining

Within these pillars, Ma’aden’s partnership with IWIM involves its mentorship program whereby male experts in IWIM’s global network of mining companies, including platinum, lithium, and nickel, are mentors for Ma’aden’s female employees who are in Ma’aden’s Professional Development Program or newly hired. Not only are the female mentees trained on how to make the most out of their mentorships, but the male mentors are also trained on how to be effective mentors, thereby enhancing the quality of each mentorship experience.

Looking ahead to 2024, Ma’aden will continue to build on this partnership through dedicated efforts to:

- Enhance workplace inclusivity, supporting the entry, advancement, and success of more women in the global mining sector;
- Promote knowledge-driven policies, impactful decisions, and measurable progress for the industry at large;
- Cultivate a diverse network of local WiM organizations, harnessing their collective strengths for transformative impact; and
- Strengthen existing relationships, foster new connections, maximize relevance, and amplify our reach to bring about meaningful change.

STAFF TRAINING & DEVELOPMENT

We are taking practical steps to set our people up to succeed as the future leaders of Saudi Arabia’s mining industry. Training and professional development programs are an integral part of Ma’aden’s strategy and infrastructure to create a pool of highly talented, skilled, and qualified candidates to support our continued growth. We empower our people through opportunities for continuous professional growth and the tools and resources needed to strengthen their skills and capabilities.

DEVELOPMENT PROGRAMS

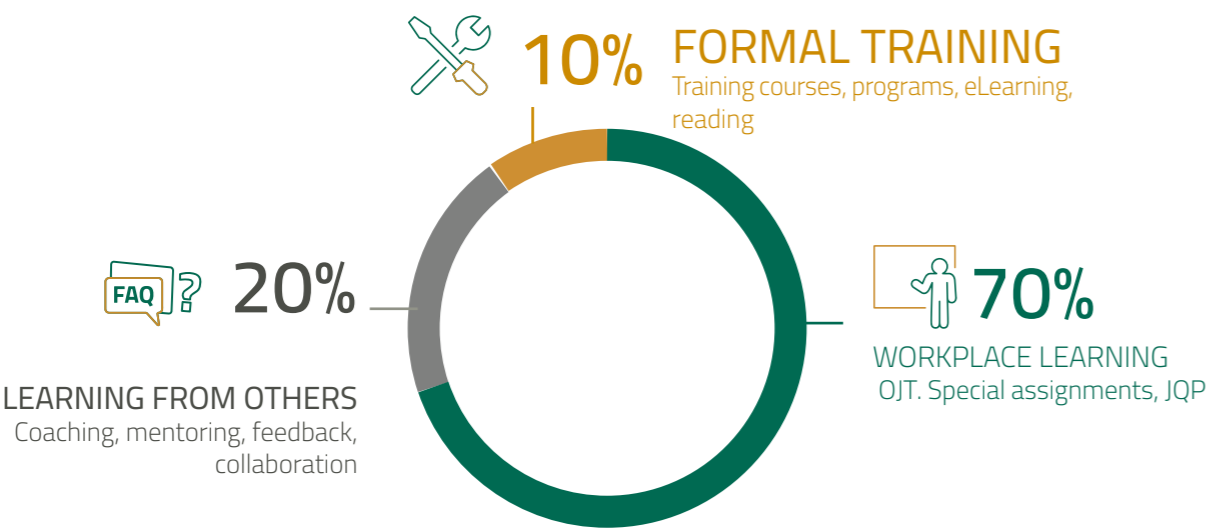
Ma’aden’s long-term success is deeply rooted in our people, who are our most valuable asset. Our human capital development programs have been carefully designed to attract, develop, motivate, and retain competent, dedicated, and engaged employees. One of our goals is to position ourselves among the top three employers in Saudi Arabia and a top employer in other regions of the world where we operate.

To realize this goal, we have ongoing programs to support the career and skills development of our employees. Our three key programs are our Professional Development Program (PDP), our Leadership Development Program (LDP), and our newly launched e-learning platform.

PROFESSIONAL DEVELOPMENT PROGRAM

Ma’aden’s PDP is designed to nurture young talent and build promising future leaders in the Kingdom’s mining and minerals industry. It is made up of a one-year non-technical stream and a two-year technical stream which involve two rotations and four rotations respectively. After each rotation, participating employees undergo performance evaluation to ensure continuous self-reflection and performance improvement. Both streams employ workplace learning, peer-based learning, and formal training to maximize the effectiveness of the Program’s learning methodology. Participating employees are also offered mentoring and coaching opportunities as well as a certification award for completing the program.

MAXIMIZING THE EFFECTIVENESS OF LEARNING METHODOLOGY



By leveraging proven professional development methods and offering hands-on opportunities, PDP is tailored to cater to various types of learners, equipping them with key skills needed to impact Ma’aden’s business and the wider industry. It not only fosters professional growth but also enhances collaboration and knowledge sharing among our employees.

MA’ADEN LEADERSHIP DEVELOPMENT PROGRAM

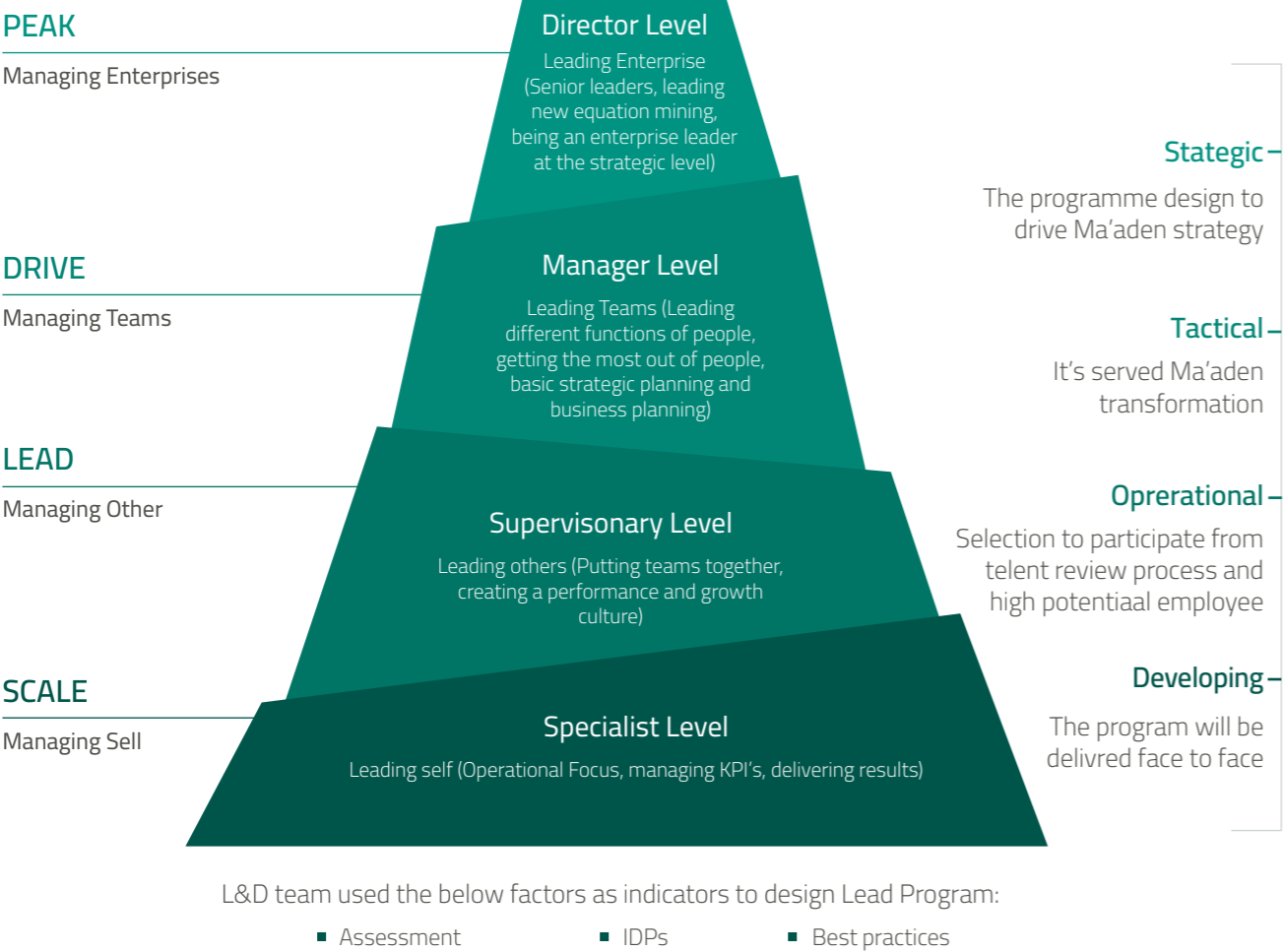
At Ma’aden, not only do we promote the development of our non-managerial employees, but we also have a dedicated program for our leadership employees to strengthen their capabilities for driving their respective teams to success. Ma’aden’s LDP has been designed specifically to Ma’aden, customized based on our corporate strategy, assessment data, and the developmental needs of the organization. Housed in Ma’aden’s FITT online platform, participating employees are provided with courses created in collaboration with renowned academic institutions like the University of Cambridge and Harvard University.

LDP has four levels – SCALE, LEAD, DRIVE, and PEAK – each of which is tailored to a specific seniority level. PEAK is for Ma’aden’s most senior leadership employees whereas SCALE is for Ma’aden’s lowest level of leadership employees. As a leadership employee progresses to the next stage of his or her career at Ma’aden, he or she also progresses to the next LDP level.



MA'ADEN LEADERSHIP DEVELOPMENT PROGRAMS

To develop leaders and successors which helps expand their capacity to perform their roles within the organizations



PEAK – Exclusive to Ma'aden's senior leaders, this LDP level provides a toolkit to be an effective executive leader. It comprises five modules covering connecting with others, task orientation, analytical thinking, leadership style and branding, and work-related wellbeing. Throughout the program, participating employees also receive personal coaching and support on specific management resources needed for their day-to-day activities. PEAK has a faculty team from four continents, is specific to the global mining environment, and employs a blended learning approach. Thus far, it has achieved significant success and received glowing reviews from participants.

SINCE ITS INCEPTION, PEAK HAS:

- Received a 97% overall recommendation rating from surveyed participants.
- 94% of surveyed participants felt that the program directly prepared them for the next stage of their career.
- The first cohort experienced an 86% completion rate (50 senior leaders).
- 80% of surveyed participants felt that the program would significantly support their on-the-job performance.

DRIVE – This program trains Ma'aden's senior-level employees on how to be a good tactical leader who links Ma'aden's 2040 strategy with the day-to-day activities of their respective teams. This includes how to explain big-picture business plans to front liners, how to make team members understand the business impact of their work, and how to get the most out of their employees. Beyond team performance, DRIVE also trains its participants on how to manage work stress to ensure their wellbeing, how to create a healthy work environment for their teams based on forward thinking and future solutions, and how to develop both their teams and themselves as a leader.

LEAD – This program focuses on providing training on what it means to be a leader and how to build the DNA of a winning team by shaping objectives and goals. According to LEAD's curriculum, team improvement involves 70% job experience, 20% exposure to others, and 10% self-education. It fosters collaboration with colleagues from other business units through in-person sessions and training topics covering how to build a growth culture and implement the value of teamwork.

SCALE – As the entry level program to LDP, SCALE trains new leaders on how to have individuals in a team work towards one common goal rather than in aimless directions. It delivers its training by focusing on Ma'aden's core values of integrity, care, teamwork, and ownership.

We are proud to have a total of 373 LDP graduates in 2023 and look forward to seeing this number grow in the coming years.

PERCIPPIO – In September 2023, Ma'aden launched Percipio, a comprehensive e-learning platform, to offer a broad spectrum of digital learning resources to our employees. With 3,000 licenses embedded in the platform, Percipio has successfully facilitated over 7,263 learning hours in just a few months, demonstrating our dedication to employee development and continuous learning. The creation of Percipio was a strategic decision driven by our recognition of the importance of workforce empowerment through accessible and effective digital learning solutions. By embracing technology, we aim to enhance our employees' skills, knowledge, and competencies, ensuring they remain at the forefront of the mining industry.

According to LEAD's curriculum, team improvement involves



	COURSES	VIDEOS
HOURS	6,678	4,302
LEARNERS	2,247	2,227
UNIQUE TITLES	2,021	10,804
COMPLETIONS	8,275	44,208

TRAINING PERFORMANCE

In line with the successes seen in our employee development programs, we have also seen strong performance in employee training over the past three years. Total training hours and number of employees trained for both our male and female employees increased significantly from 2021 to 2023, with the greatest improvement being a growth of nearly eight times in total training hours among our female employees. This aligns with our holistic approach to D&I in which career growth and training are a strategic priority for female talent retention.

EMPLOYEE TRAINING	UNIT	2021	2022	2023
Training Hours - Men	Hours	136,959	149,609	297,956
Training Hours - Women	Hours	3,438	9,868	26,493
Training Hours - Local	Hours	124,757	135,885	274,821
Training Hours - Expat	Hours	15,640	23,592	49,628
# of Employees Trained - Men	People	2,060	2,652	4,537
# of Employees Trained - Women	People	57	113	242
# of Employees Trained - Local	People	1,807	2,249	3,747
# of Employees Trained - Expat	People	310	516	1,032
Avg. Training Hours per Employee - Men	Hours	66.48	56.41	65.67
Avg. Training Hours per Employee - Women	Hours	60.32	87.33	109.48
Avg. Training Hours per Employee - Local	Hours	69.04	60.42	73.34
Avg. Training Hours per Employee - Expat	Hours	50.45	45.72	48.09

PERFORMANCE RECOGNITION

Beyond dedicated training and development programs, we strive to foster the drive of our employees to continue improving both in terms of their individual careers at Ma’aden but also in terms of their teams’ collective performance. We believe recognizing our employees bolsters the internal drive to develop and grow as professionals in the mining sector.

This dedication manifested notably in 2022 through the successful implementation of the KUFU recognition program, an initiative that stands as a testament to Ma’aden’s commitment to becoming the employer of choice in Saudi Arabia. Designed to acknowledge and celebrate the extraordinary efforts of our teams, the KUFU program accentuates those who exemplify Ma’aden’s core values – Integrity, Care, Teamwork, Ownership, and Continuous Improvement – as well as contribute significantly to our strategic pillars, reinforcing the foundational elements of Ma’aden’s 2040 strategy.

The program focuses on recognizing initiatives that promote our values and contribute to transformative

outcomes in organizational health and business performance. Resonating across Ma’aden, it received an impressive amount of 55 submissions in its first year. This enthusiasm carried into 2023, in which the KUFU Selection Committee evaluated these submissions. 21 teams were distinguished as finalists, with their accomplishments celebrated at a dedicated event during Ramadhan in 2023. They were honored by our CEO for their pivotal roles in driving Ma’aden forward and strengthening our community of professionals dedicated to excellence and innovation.

Through initiatives like the KUFU program, not only is Ma’aden acknowledging individual and team achievements but we are also fostering a culture whereby excellence is recognized and every contribution towards our strategic goals is valued. This approach is integral to our mission as we continue to enhance our workplace culture and solidify our position as a leading employer in the mining industry, both in Saudi Arabia and globally.



COMMUNITY ENGAGEMENT

As a forward-thinking leader within the mining industry and a dedicated participant in the UN Global Compact, Ma'aden is deeply committed to advancing international human rights and nurturing the well-being of communities where we operate. Our robust Community Management System showcases our commitment to sustainable growth and ethical responsibility. With initiatives aimed at upholding human and indigenous rights, engaging with communities, and enhancing social performance, Ma'aden is setting a new standard for corporate citizenship in the mining sector. This introduction lays the groundwork for our comprehensive strategy towards responsible and inclusive business practices, emphasizing our dedication to making a positive impact on society and the environment.

SUPPORT FOR HUMAN & INDIGENOUS RIGHTS

As a participating company of the UNGC, Ma'aden commits to upholding the ten principles of the UNGC, including, Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and Principle 2: make sure that they are not complicit in human rights abuses.

Additionally, Ma'aden fully endorses the International Council on Mining and Metals' (ICMM) position that companies have an absolute responsibility to respect the human rights of the communities they affect and the people they employ. Furthermore, Ma'aden supports all human rights recognized by Islamic Sharia, United Nations human rights conventions, and the conventions of the International Labor Organization (ILO), to the extent adopted by Saudi Arabia. We fully comply with all the laws of Saudi Arabia, as promulgated by the Kingdom of Saudi Arabia Human Rights Commission which include, but are not limited to, The Arab Charter on Human Rights, the Cairo Declaration on Human Rights in Islam, and The International Convention on the Elimination of All Forms of Racial Discrimination.

Ma'aden respects indigenous peoples' rights, interests, aspirations, culture, and natural resource-based livelihoods wherever we do business, including taking any necessary steps to protect and preserve critical historical and cultural heritage artifacts and sites.



Ma'aden fully endorses the International Council on Mining and Metals' (ICMM) position

Our approach to community engagement is guided by international best practices, designed to enhance our social performance, equip our employees to adeptly navigate community-related challenges, and foster an environment of widespread learning and collaboration across the organization. This systemic approach guarantees a uniform strategy in the design and execution of community-focused initiatives, ensuring they reflect Ma'aden's values and objectives.

Embedded within our Community Policy are clear goals aimed at optimizing the social and economic impact of our activities:

- Minimize adverse social and community impacts and maximize potential opportunities;
- Contribute to the social and economic development of the communities in which Ma'aden operates, and to the wider development of Saudi Arabia;
- Support the development and enhancement of a national workforce;
- Engage with all stakeholders in a fair, transparent and inclusive manner;
- Implement an effective and transparent communication process across the business that informs and engages with internal and external stakeholders;
- Conduct regular review and audit of community policies, procedures, and performance;
- Undertake routine reporting to internal and external stakeholders on Ma'aden's community engagement and social performance activities.



Our interactions with local communities are characterized by frequent dialogues aimed at fostering mutual understanding and accurately gauging local needs – these insights of which inform the development of Ma'aden's community-oriented programs. Prior to initiating new projects, we conduct comprehensive social impact assessments to fully grasp the dynamics of host communities, engage them on key concerns, and identify potential opportunities for integrating local talent and suppliers into our operations. This holistic approach illustrates Ma'aden's focus to nurturing positive, impactful relationships with the communities that surround us, reflecting our broader commitment to sustainable development and social responsibility.

Since we launched our Community Management System (CMS), we've been dedicated to ensuring our contributions to the Saudi Arabian economy

COMMUNITY MANAGEMENT SYSTEM

At Ma'aden, our ambition extends beyond industrial leadership to becoming a valued and respected neighbor in every community we have a presence. Since we launched our Community Management System (CMS), we've been dedicated to ensuring our contributions to the Saudi Arabian economy also translate into tangible benefits for local communities surrounding our operations. This commitment is pivotal to Ma'aden and central to realizing our 2025 Strategy, where the trust and endorsement of local communities form the cornerstone of our social license to operate and expand.

MA'ADEN COMMUNITY MANAGEMENT SYSTEM

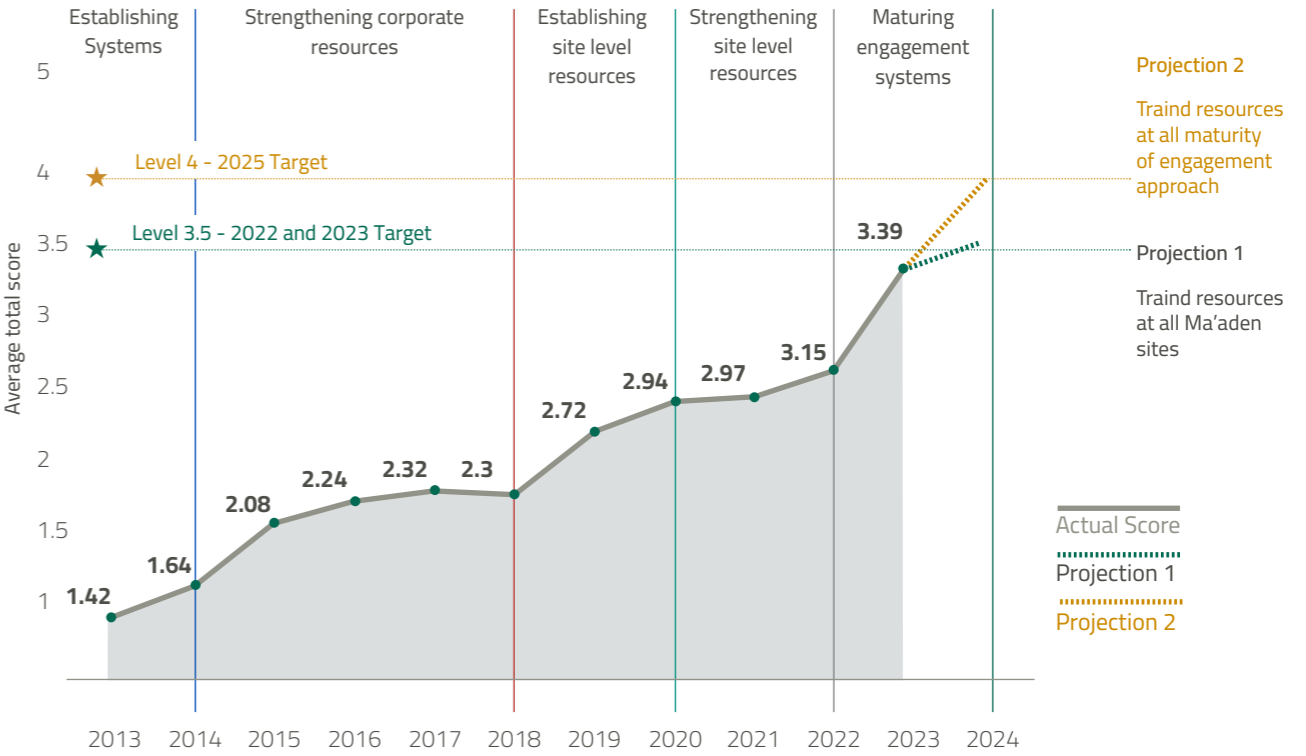


PERFORMANCE MONITORING & EVALUATION

Every year, Ma'aden conducts an assurance process to assess the effectiveness with which our affiliates are implementing the CMS and improving their adherence to our standards. During this evaluation, all affiliates undergo a review based on the following criteria:

- 1 Integration of social performance/CSR into the business
- 2 Impact and risk management
- 3 Community engagement
- 4 Complaints management
- 5 Local content (short and long-term)
- 6 Social investment

Then, the assessment results are distilled into a five-point scoring scale. We believe this affiliate social performance assurance procedure drives continuous improvement among our businesses in contributing to the sustainable development of our neighboring communities, by providing our affiliates with clear recommendations of how they should improve their social performance.



In 2023, we aimed for a target average social performance score of our affiliates at 3.5, with the actual outcome being 3.4. Although we fell slightly short of our target, the year was marked by noteworthy performance highlights:

- Four sites scored above 3.5; all of them demonstrated meaningful engagement with stakeholders, dedicated resources to impactful social initiatives, and increased recruitment and procurement opportunities through coordination between HR and different departments.
- Most other sites made progress in social investment by increasing the number of initiatives with a high impact on stakeholders.
- The monitoring and evaluation of the impacts of social initiatives are evolving towards more formalized processes.
- Good progress has been made in recordkeeping and documenting stakeholder engagements across many sites.
- CSR champions across most sites notably involved stakeholders in decision-making processes through the development of community committees.

COMMUNITY DEVELOPMENT INITIATIVES

Children with Disabilities

In 2023, Ma'aden and the Children with Disabilities Association (CDA) signed two MOUs which aim to bolster the capabilities of Prince Sultan Center in AlMadinah and King Salman Center in Hail, enhancing the care for over 100 children in each center. Demonstrating solidarity, Ma'aden committed to a SAR 3.3 million donation through the Ehsan platform, earmarked for the provision

of advanced medical equipment and the development of comprehensive rehabilitation clinics in both cities. The allocation includes SAR 2.6 million for Al Madinah and SAR 700,000 for Hail, supporting a range of services from physiotherapy to psychological therapy, aimed at advancing the wellbeing and rehabilitation of children with disabilities. The inauguration of the clinic will take place in the first quarter of 2024.

SUCCESS STORY

SCHOOL OF EXCELLENCE PROGRAM

Ma'aden's Schools of Excellence (SOE) program provides a world-class STEM education to students in Saudi Arabia's Northern Borders Province, helping develop the Kingdom's next generation of mining champions. Located in Arar and Turaif, the SOEs are designed to equip the next generation of leaders with top-tier education and prepare them to join elite universities, both in the Kingdom and across the globe. This high-quality education is provided in partnership with Saudi Arabia's Ministry of Education, Dhahran Techno Valley Company, Ajial Al-Mawahib, and Qias.

By cultivating critical thinking, intellectual curiosity, and a deep understanding of the natural sciences through the SOEs, Ma'aden and the Northern Borders communities are empowering talented youths to become leaders in engineering, medicine, nursing, and pharmaceuticals, making significant contributions to the mining industry and beyond.

Ma'aden's SOEs are investing in Saudi Arabia's Northern Borders Province through the following initiatives:

- **Teacher Professional Development:** The SOEs facilitate annual professional development courses for local teachers, helping support their development and elevate the overall quality of education in the Northern Borders Province. The SOEs freely share their strategies, operations, KPIs, and general best practices with the local Education Directorate and other schools in the community, uplifting the Northern Borders' educational reporting standards. In 2023, over 120 teachers benefited from this program, in addition to the teachers from the Schools of Excellence.
- **Student Academic Improvement:** To help prepare the community's middle school students to apply for the SOE program, the SOEs conduct periodic reviews and diagnostic tests to identify areas of academic strengths and weaknesses. These students are then given remedy plans, which have a positive impact on their academic achievement.

- **STEM Talent in Saudi Universities:** Graduates from the SOEs frequently go on to study at Saudi universities, including the Northern Borders University's School of Medicine. This helps increase the annual intake at local universities and ensure their incoming classes include top-tier STEM talent.

2023 MILESTONE

In a landmark expansion of our commitment to gender equality in education, Ma'aden inaugurated a new School of Excellence for girls in Ar'ar in August 2023. This pioneering initiative successfully onboarded the first 100 female students, marking a significant step toward scaling up class intake over the next five years by threefold. This expansion not only underscores our dedication to fostering academic excellence among Saudi women but also to contributing sustainably to the local and national educational landscape.

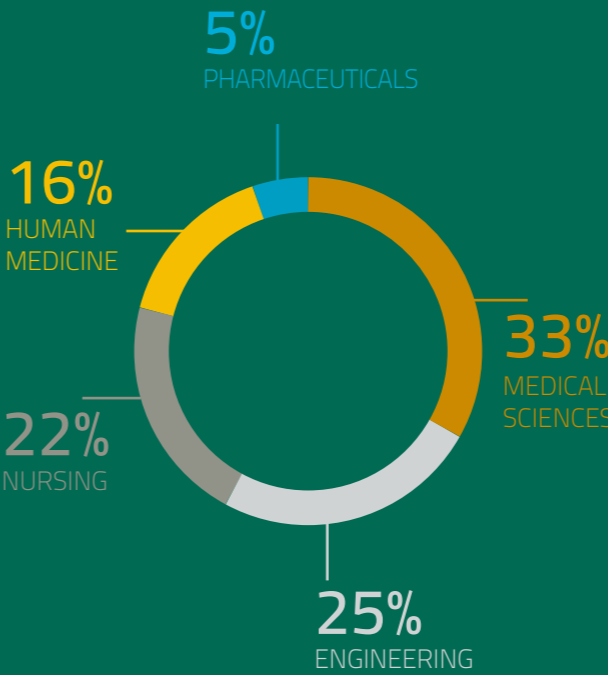
Every year, the SOEs welcome 100 new students to their state-of-the-art campuses, which include English labs, computer labs, chemistry labs, biology labs, classrooms, offices, a gym, and a football ground. Ma'aden has invested SAR 158 million into the SOEs since 2016.



To date, Ma'aden's SOEs have collectively achieved the following:

- Over 1,200 male and female students supported;
- Over 850 graduates in the past four years;
- 693 graduates enrolled in elite universities; and
- 569 graduates enrolled in university programs specializing in medical sciences and engineering.

Distribution of SOE Graduates Enrolled in Elite Universities



We are proud to announce that we won second place for our SOE program in the Gulf Petrochemicals and Chemicals Association's (GPCA) third annual Responsible Care Excellence Awards which took place on the sidelines of the fifth annual GPCA Responsible Care Conference held in Bahrain. We also won first place at the Arabia CSR Awards, which recognized the scientific and societal impacts of our SOEs in Arar and Tarif. These awards are a testament to the strength and success of not only our SOE program but also our broader community development and engagement efforts.



SUCCESS STORY

KFUPM DEGREE PROGRAM

In November 2023, Ma'aden launched Saudi Arabia's first mining-specific science and engineering bachelor's program at King Fahd University of Petroleum & Minerals (KFUPM), a major step in developing the next generation of talent in the Kingdom's mining sector. Ma'aden is supporting the establishment of the bachelor's program with KFUPM in partnership with the Ministry of Industry & Mineral Resources to help equip Saudi students with critical skills needed to become leaders and changemakers in the sector. Over the next ten years, Ma'aden will sponsor 30 students annually through the program, with 20 students pursuing degrees in mining engineering and 10 students pursuing degrees in geology.

The program will provide students with proficient training and the necessary knowledge and tools of artificial intelligence, machine learning, big data, programming, and entrepreneurship. Students will also access diverse technical courses on subjects ranging from processing mineral ores to sustainability and will gain wider commercial expertise through courses on minerals economics and the business feasibility of mineral production.



GOOD GOVERNANCE PRACTICES



The trust and partnership of stakeholders is imperative to any business' success. To build our stakeholders' confidence and trust in us, Ma'aden leads with a robust governance structure, responsible business practices, adherence to all applicable laws and regulations, and promotion of sustainable practices across our value chain. We have a clear set of governance policies and procedures that are regularly updated in line with any new regulations and best practices. These policies make up the framework of how Ma'aden does business and interacts with external and internal stakeholders.

For more information on our corporate governance performance in 2023, please refer to our 2023 annual report.

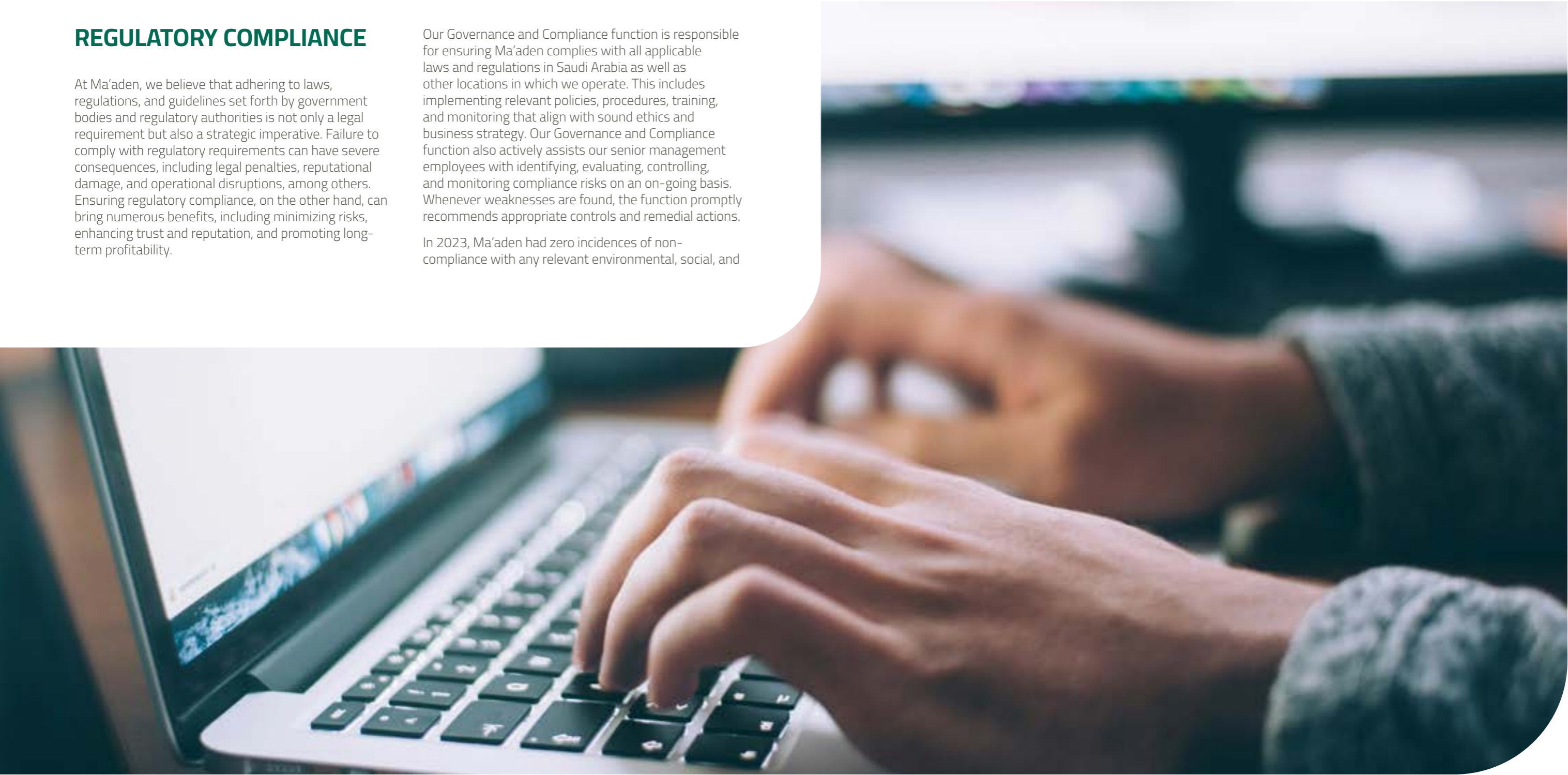
REGULATORY COMPLIANCE

At Ma'aden, we believe that adhering to laws, regulations, and guidelines set forth by government bodies and regulatory authorities is not only a legal requirement but also a strategic imperative. Failure to comply with regulatory requirements can have severe consequences, including legal penalties, reputational damage, and operational disruptions, among others. Ensuring regulatory compliance, on the other hand, can bring numerous benefits, including minimizing risks, enhancing trust and reputation, and promoting long-term profitability.

Our Governance and Compliance function is responsible for ensuring Ma'aden complies with all applicable laws and regulations in Saudi Arabia as well as other locations in which we operate. This includes implementing relevant policies, procedures, training, and monitoring that align with sound ethics and business strategy. Our Governance and Compliance function also actively assists our senior management employees with identifying, evaluating, controlling, and monitoring compliance risks on an on-going basis. Whenever weaknesses are found, the function promptly recommends appropriate controls and remedial actions.

In 2023, Ma'aden had zero incidences of non-compliance with any relevant environmental, social, and

economic laws and regulations that resulted in monetary fines or non-monetary sanctions. Furthermore, we have not engaged in any activities that violate regulations governing anti-bribery, anti-competitive behavior, anti-trust, or monopoly practices throughout our business operations. We remain committed to upholding ethical business practices and will continue to prioritize compliance in all areas of our business operations



ENVIRONMENTAL COMPLIANCE

In line with our vision of being a sustainable mining champion with a global presence, Ma’aden is dedicated to adhering to all applicable laws, regulations, and obligations. Our approach to environmental compliance ensures the visibility of environmental concerns at every stage of our mining projects. All stages of our projects undergo independent reviews by internal subject matter experts and external consultants, which is one of the critical checkpoints for any project to move forward.

All our business units and their regulated operational sites undergo comprehensive environmental baseline studies and environmental impact assessments (EIAs) before the start of a project. The EIAs identify potential environmental impacts that the project may generate and recommend mitigation solutions to address the impacts. Additionally, all our business units and their regulated operational sites are required

to obtain environmental permits to construct (EPC) and environmental permits to operate (EPOs) before constructing or operating a project respectively. The permitting process involves an assessment by independent experts. In 2023, 100% of our mining sites have valid EPCs and EPOs from regulators. 12 EPCs were also obtained for our exploration projects. As of 2023, we have 26 valid EPOs and 32 valid EPCs, with an additional EPCs in the application process.

We also track the number of notice of violations (‘NOVs’) we receive from environmental regulators, most notably Saudi Arabia’s National Center for Environmental Compliance (‘NCEC’) and the Royal Commission. While we maintained low numbers of NOVs in 2021, in 2022 we recorded a total of six. Each NOV is taken seriously, with both short- and long-term mitigation measures swiftly identified and implemented to address the underlying issues. We continue to engage closely with the NCEC and the Royal Commission to monitor the effectiveness of our mitigation efforts and demonstrate our ongoing commitment to environmental stewardship and compliance, even as our business grows.

NOTICE OF ENVIRONMENTAL VIOLATIONS BY REGULATOR	UNIT	2021	2022	2023
NCEC	#	1	0	0
Royal Commission	#	1	6	2
Total NOV	#	2	6	2

We have **26** valid EPOs and **32** valid EPCs, with an additional EPCs in the application process

BUSINESS ETHICS & CONDUCT

CODE OF CONDUCT

Our Code of Conduct is not just a set of rules, it is a testament to our belief that ethical standards are the cornerstone of our organizational ethos. It sets out the guiding principles for our interactions with all our stakeholders and provides clarity on what is acceptable conduct for all employees, including our Board of Directors and board-level committees. It has led to new policy initiatives within Ma’aden, such as an Anti-corruption Policy that complements Ma’aden’s Whistleblowing Policy.

Employees are assured that continued and strict observance of these standards, even at the risk of

adverse business consequences, will be supported by Ma’aden’s senior management. Deviations from them, on the other hand, will be grounds for appropriate disciplinary or other action. This may include termination of employment and referral of such conduct to the concerned authorities. Our Code of Conduct can be accessed via our [website](#).

ETHICAL BUSINESS CULTURE

At Ma’aden, fostering a culture of business ethics is fundamental to maintaining the highest standards of integrity and accountability. Beyond adhering to our Code of Conduct, we actively monitor ethical practices within our operations. Regular consultations with project managers help us ensure that ethical considerations are integral to our day-to-day activities and that our standards are effectively applied.

We also strive to ensure that our stakeholders – including regulatory bodies, investors, and customers –have continuous, equal, and timely access to all externally available information issued by us. To achieve this, we have put in place a Disclosure and Transparency Policy. We are also proud to announce that Ma’aden did not receive any legal actions regarding anti-competitive behavior and/or violations of anti-trust and monopoly legislation in 2023.

ANTI-CORRUPTION

Ma’aden has a zero-tolerance stance on bribery and corruption. We are committed to acting professionally, fairly, and with integrity in all our business dealings and relationships wherever we operate while implementing and enforcing effective parallel systems to counter bribery and corruption. To that end, we have an Anti-corruption Policy which requires all employees and stakeholders to conduct

all business with us in an honest and ethical manner. The Policy also ensures that we abide by the stipulations of Saudi Arabia’s Combating Bribery Law and the National Strategy for Protecting Honesty and Combating Corruption. Our Anti-corruption Policy can be accessed [here](#).

In 2023, there were no incidences of corruption at Ma’aden. We have several controls in place to prevent any incidences of corruption from occurring. Notably, we hold ISO 37001:2016 certification on anti-bribery management systems, which includes requirements on the prevention, detection, and addressing of bribery.

WHISTLEBLOWING

Ma’aden’s Whistleblowing Policy, developed in 2013, was the first of its kind in Saudi Arabia. It was developed with an aim to encourage all employees and third parties who work with Ma’aden to provide information that will help us detect, report on, and correct any irregularities, unethical behavior, and potentially illegal actions, and other actions which may violate our policies, procedures, and ethical standards. The Policy is consistent with Article 10 of the Corporate Governance Regulations issued by the Capital Market Authority in Saudi Arabia.

In 2017, Ma’aden also set up the first independent whistleblower hotline in Saudi Arabia. By providing confidential channels for employees, suppliers, customers, or any other stakeholders to report violations or possible violations, the independent whistleblower hotline supports the integrity of our wider compliance policies and adherence to all applicable laws and regulations. These channels include an online portal, email service, and phone number which are available 24/7. Our whistleblowing website can be accessed [here](#).

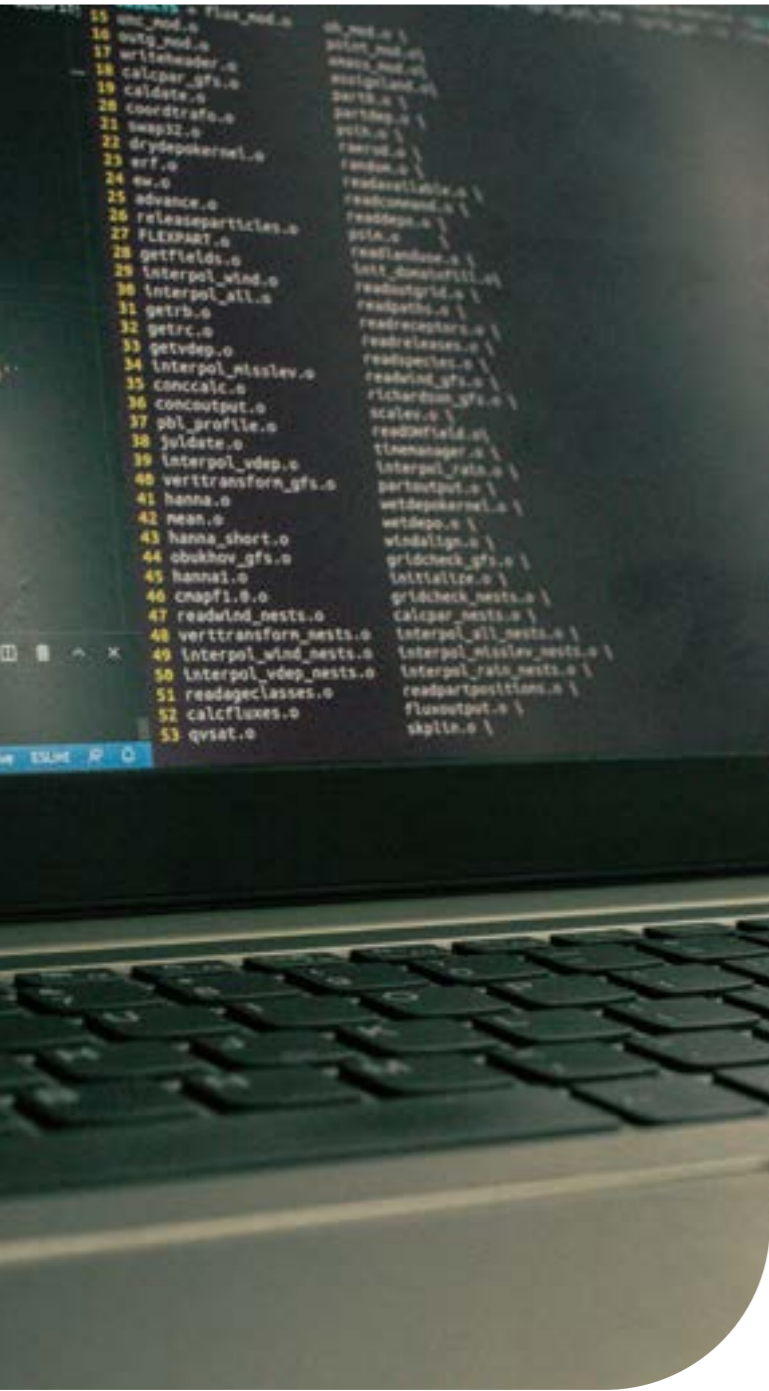
APPROACH TO CYBERSECURITY

At Ma’aden, we use data as one of our main pillars for decision making and business growth to sustain our competitive position in the mining industry. Data security also helps to safeguard confidential information, maintain compliance with laws and regulations, build trust and reputation on mitigating cyber risks and data breaches. Therefore, data privacy and protection are essential aspects of our approach to cybersecurity.

We have developed and implemented a strict governance model supported by internal policies and procedures to adhere to the highest international standards and global best practices. This model also incorporates comprehensive risk assessments across all facets of our business, ensuring a robust defense against cyber threats. We control our systems through 24/7 monitoring, managed by artificial intelligence (AI), in order to be able to act and respond in a timely manner to anything suspicious, whether in relation to information systems, networks, or industrial control systems. The implementation of the governance model and our overall cybersecurity-related performance are monitored by our management-level Cybersecurity Steering Committee, chaired by our CEO. Cyber risk is also a fixed agenda item for our board-level Executive Committee.

CYBERSECURITY

As the world becomes more technologically advanced and interconnected, the security risks associated with information technology and digital infrastructures are also increasing and expanding. The mining industry, in particular, is vulnerable to cyber threats and attacks due to the high degree of digitization, interconnection, and automation in its supply chains and business ecosystem. As a cyber breach could compromise our digital infrastructure, industrial control systems, and fundamental ability to conduct business, cybersecurity is regarded as a key priority at Ma'aden.



POLICY #	
CSP-01	Cybersecurity Human Resources
CSP-02	Cybersecurity Risk Management
CSP-03	Cybersecurity Awareness and Training
CSP-04	Asset Management
CSP-05	Data Protection
CSP-06	Acceptable Use
CSP-07	Identity and Access Management
CSP-08	Cybersecurity Incident and Threat Management
CSP-09	Physical Security
CSP-10	Infrastructure Security
CSP-11	System Development and Maintenance
CSP-12	Configuration, Change & Capacity Management
CSP-13	Third Party and Supplychain Cybersecurity
CSP-14	Cloud Computing and Hosting Cybersecurity
CSP-15	Cybersecurity Legislation and Regulations Compliance
CSP-16	Business Continuity Security
CSP-17	Mobile Devices & Bring-your-own-device (BYOD)
CSP-18	Cybersecurity Social Media Accounts

To maintain strong resiliency and on-time incident response to any cyber breaches, we continuously invest in our capabilities to proactively detect and identify potential cyber threats, with a greater focus on our critical information and digital assets. We have also developed response playbooks for each potential attack which have been tested through cyber crisis management drills and simulations.

Recognizing our employees and contractors as the first line of defense against cybersecurity threats, Ma'aden emphasizes the importance of continuous training and development in cybersecurity for all staff. Mandatory training programs are in place to enhance our collective cybersecurity resilience, including e-learning modules covering various subjects available in multiple languages, weekly awareness campaigns offering quick guidelines on critical cybersecurity details, and specialized programs for technology professionals managing critical digital assets. Additionally, we prioritize the strategic recruitment of experienced cybersecurity personnel to fortify our defenses further.

2023 ACHIEVEMENTS

In 2023, we continued to enhance our cybersecurity capabilities and implement improvements through the following initiatives:

- Adopted generative AI and machine learning to improve our cybersecurity capabilities in proactively identifying and detecting potential attack attempts and minimizing the probabilities of successful cyber-breaches. Our 2023 cybersecurity detection performance improved by 65% compared to 2022.
- Achieved a 95% compliance level against government mandates and regulations on cybersecurity.
- Carried out our fifth cybersecurity awareness program to improve our employees' awareness of and culture around cyber-threats. The program utilized world-class training methods, cyber-tests, cyber-drills, and simulations.
- Received ISO/IEC 27001:2022 certification on information security, cybersecurity, and privacy protection. The certification provides independent validation that we follow the leading practices and principles on establishing, implementing, maintaining, and continually improving information security management systems.
- Achieved a 6% reduction in our cybersecurity assets through standardization and architecture review which resulted in the optimization of our cybersecurity infrastructure and a decrease in the run and maintenance efforts for operations.

We will continue to invest in AI technologies to improve our business resiliency, digital infrastructure, and the capabilities of our workforce. We will also seek to foster partnerships with leading cybersecurity and government agencies, both locally and internationally, to pool experience, share knowledge, and mutually bolster our protection against cybercrime. Finally, in line with our commitment to contribute to Saudi Arabia's economy and society, we aim to achieve 100% Saudization in our cybersecurity functions.

Our employees and contractors are the first line of defense against cybersecurity threats

VALUE CHAIN ENGAGEMENT

Given the size of our organization, the industry we operate in, and our collaborative work with a broad range of businesses and other stakeholders, we believe that we are in a unique position of influence to shape the sustainability landscape in Saudi Arabia through our value chain.

At Ma’aden, we understand that improving the sustainability of our operations is merely the starting point for achieving overall business sustainability. Therefore, we are committed to responsible procurement and expect our business partners and suppliers to adhere to our ESG standards. Where possible, we also procure goods and services locally and encourage transparency among our suppliers. Two ways we act on this are through our supplier ESG screening questionnaires and our Supplier Code of Conduct.

SUPPLIER ESG ALIGNMENT

In 2022, we began performing ESG screenings of our suppliers through annual questionnaires which were designed to collect their self-answered information regarding their management and performance of a predefined set of ESG topics across four sections. In 2023, we revised the questionnaire to expand the range of ESG topics covered.

QUESTIONNAIRE SECTION	TOPIC COVERED
General information	<ul style="list-style-type: none">Company profileRespondent detailsBusiness relationship with Ma’aden
Environmental	<ul style="list-style-type: none">Environmental management systemEnergy management performance and targetsGHG emissions management performance and targetsWater consumption management performance and targetsWaste management performance and targetsEnvironmental regulatory compliance
Social	<ul style="list-style-type: none">Health and safety management systemOccupational health and safety policyWorkplace accidents, injuries, and fatalitiesHuman rights and labor rightsRegulatory compliance on occupational health and safety, human rights, and labor rights
Governance	<ul style="list-style-type: none">Anti-bribery and anti-corruption policy, performance, and trainingResponsible sourcing policyConflict minerals use and policyESG risk assessment and managementStakeholder grievance mechanism

A total of 386 leading suppliers were engaged, corresponding to a 28.7% questionnaire response rate. The range of suppliers engaged included project-based contractors, manufacturers, consultants, service providers, training providers, remote area subject matter experts, and material suppliers. A summary of the results is outlined below.



Beyond the questionnaires, our suppliers are also screened for their performance on three ESG criteria – health and safety management system, environmental management system, and responsible business in our supply chain. In 2023, 14.6% of our suppliers underwent ESG screening, which is over four times higher than our supplier ESG screening rate of 3.3% in 2022. We will continue to work to increase our supplier ESG screening rate in order to meet our 2040 target of 75%.

SUPPLIER CODE OF CONDUCT

Ma'aden has a zero-tolerance stance on conflicts of interest, or even the appearance of one, in any dealings. We require all of our suppliers to always conduct themselves with the highest standards of honesty, fairness, and personal integrity. All suppliers are therefore required to sign a commitment to our Supplier Code of Conduct as part of their supplier onboarding process. Our Supplier Code of Conduct details our expectations for our suppliers on business ethics, lawful behavior, Saudization, risk management, health and safety, the environment, and other pertinent issues that ensure we our competitive standing and reputation are protected. In doing so, we are only working with suppliers who uphold the same sustainability standards and values as us.

Our Supplier Code of Conduct can be accessed [here](#).

In 2023, we made strides in improving our Supplier Relationship Management (SRM) portal to our over 3,000 suppliers. To digitize the process, Ma'aden has a SRM portal which stores data on the suppliers' organizational profile, bidding participation, and invoice submissions, among others. However, the information stored in the portal is limited which hinders communication between Ma'aden and the suppliers.

Ma'aden's SRM function produced 10 new supplier manuals and tips which were designed to assist suppliers in speeding up and simplifying their business processes. The SRM function also collaborated with the Governance & Compliance function to increase Ma'aden's awareness of supplier non-compliance by providing a new whistleblowing channel, called Speak Up, through the portal and actively encouraging our suppliers to report any incidents that could be considered a violation of our values, policies, or applicable regulations. In line with that, the SRM function also developed a feedback form to assist suppliers in filing any issues related to their business with Ma'aden. This process reduced superfluous communication by over 70% internally and externally, increased team productivity, and enabled the team to concentrate on other SRM objectives and goals.

SUSTAINABLE INNOVATION

In today's rapidly changing business landscape, technology and innovation are key to delivering quality products that can meet our customers' evolving needs and to enhancing our operational processes to maintain our strong market position in the long run. Innovation at Ma'aden is spearheaded by our Technology and Innovation (T&I) function which actively monitors market and customer needs and works closely with our business units to pinpoint operational challenges and prioritize opportunities for transformation towards sustainable mining.

Our approach to technology focuses on leveraging existing mature technologies to enhance the efficiency and sustainability of our processes. Simultaneously, our approach to innovation revolves around identifying, nurturing, and implementing cutting-edge and emerging technologies. This enables us to be at the forefront of sustainable mining practices and reach untapped markets. We invest in research and development (R&D) to anticipate future needs and seize growth opportunities. Furthermore, we continue to deepen our expertise in specific areas to strengthen our competitive advantage.

Through strategic partnerships with startups, technology solutions providers, and scientific institutions, we continuously push the boundaries of traditional mining practices. We aim to minimize our environmental footprint, maximize resource efficiency, and contribute to the wellbeing of local communities. Our unwavering commitment to innovation and the application of next-generation technologies underscores our dedication to positioning Saudi Arabia as a leader in sustainability within the global mining industry.

At Ma'aden, we recognize that successful innovation extends beyond technical collaboration. It requires a comprehensive approach involving close, ongoing collaborations that provide not only the technical expertise but also the financial capital and ancillary resources needed to transform budding innovations into large-scale commercial solutions. This holistic strategy of engaging with multiple stakeholders is critical to growing our innovation capabilities and achieving significant commercial success.

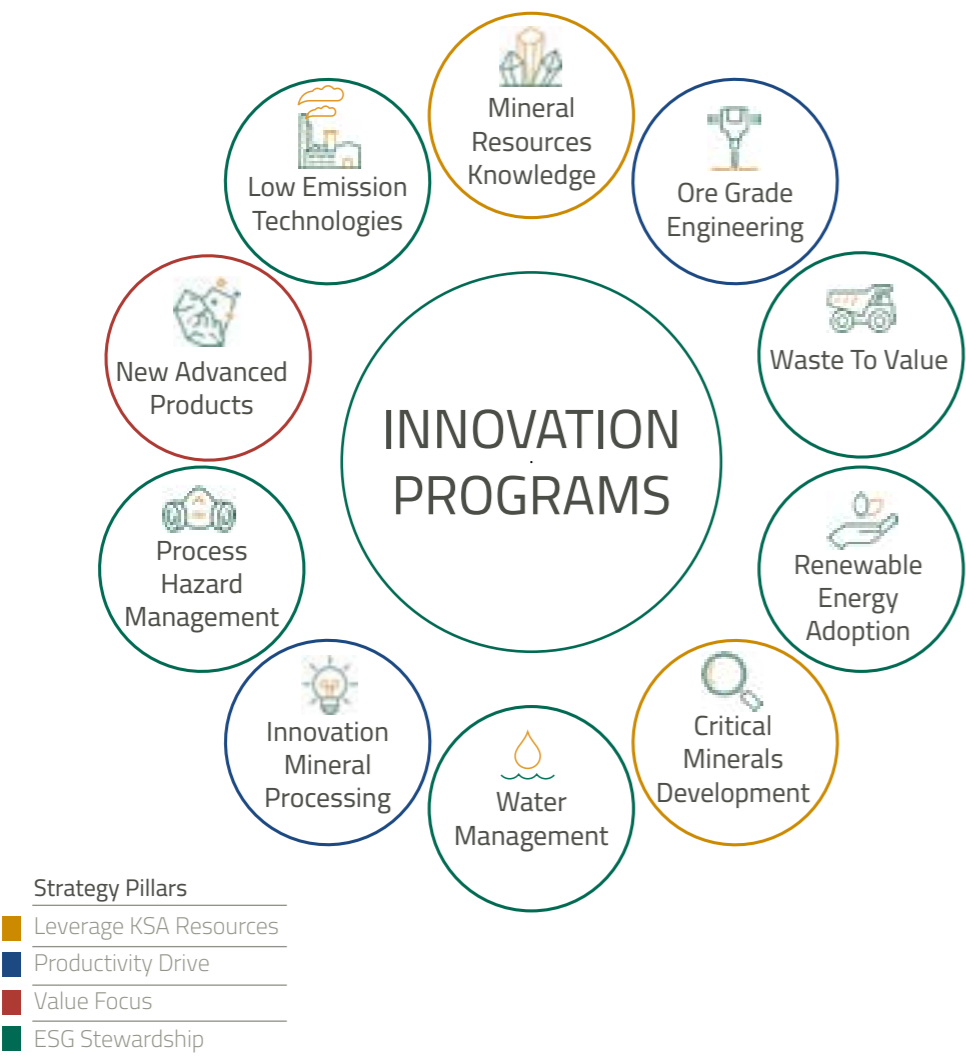


MAPPING THE FUTURE OF INNOVATION AT MA'ADEN

A large priority for us in 2023 was to grow our efforts in innovation so that a culture of innovation is more deeply embedded across the organization and the outcomes of our R&D programs are being applied at a commercial level to more areas of our operations. To achieve this, our T&I function performed a mapping exercise to identify current and future innovation programs, driving sustainable mining efforts throughout Ma'aden.

These innovation programs target critical areas impacting Ma'aden's business performance and long-term sustainability. Each program aligns with one of Ma'aden's strategic pillars, including leveraging Saudi Arabia's resources, driving productivity, focusing on value, and demonstrating ESG stewardship. A significant focus in 2023 was the valorization of mineral processing residues, represented by the Waste to Value program.

To shape potential innovation projects under these program areas, our T&I function runs open innovation campaigns. These campaigns source new solutions, capacities, and competencies globally, securing our pipeline of innovative technologies and other solutions. The winners of these campaigns become Ma'aden Innovation Partners, receiving support from Ma'aden to further develop and apply their solutions.



WASTE TO VALUE

Ma'aden's Waste to Value program represents our commitment to minimizing waste and embracing circularity in our operational processes. This program focuses on identifying technologies that can convert mining residues into valuable materials for use in other production processes. In 2023, several projects were initiated under this program to explore the potential of different mining residues.

These projects include the recovery of critical minerals from bauxite residue, the incorporation of residues into construction materials such as bricks, and the utilization of residues in cement manufacturing. Additionally, we are testing the combination of various residues for soil beneficiation. These ongoing projects aim to develop and evaluate processes and technologies for the sustainable utilization of mining residues. Our goal is to achieve zero-waste mining in the Kingdom and contribute to a more sustainable mining industry. For more information about our successful application of red mud, please refer to the Success Story spotlight on p.143 of this report.

SUCCESS STORY

INNOVATION CAMPAIGN – WASTE TO VALUE USING RED MUD

The minimization of waste generation is a priority for Ma’aden and, as part of this, we believe that additional value can be extracted from our operational byproducts and residues. We launched an innovation campaign in 2023 which targeted our T&I function’s Waste to Value program area. This challenge focused on finding innovative solutions to convert red mud, a waste product of our alumina extraction processes, into usable resources. While there have been previous research attempts to recover materials from red mud, Ma’aden sought more effective and efficient solutions to address this challenge.

‘Waste to Value’ Challenge participants were encouraged to propose innovative solutions that go beyond traditional approaches, such as repurposing red mud for construction materials used to develop buildings, for soil quality improvements in agricultural lands, or for other value-added products. As of 2023, four pilot projects are being implemented to explore these innovative solutions. By finding and incubating the appropriate innovations, Ma’aden aims to achieve the following:

- Introducing circularity in tailings management by utilizing bauxite residues for the extraction of pig iron, rare earth elements, and unextracted alumina;
- Reducing the need for extensive investments in containment areas for red mud disposal;
- Minimizing the expansion of tailings dams in the future;
- Creating new revenue streams by developing supplementary cementitious materials and valuable byproducts from red mud that have a strong market demand; and
- Mitigating environmental degradation caused by long-term storage of red mud in containment areas.



INNOVATIVE MINERAL PROCESSING

At Ma'aden, we recognize the growing importance of critical minerals in enabling the functioning of modern and low-carbon technologies. To address this, we are actively exploring innovative approaches to extract these essential minerals while minimizing the depletion of natural resources. One notable project we are piloting in collaboration with a startup involves the use of a direct lithium extraction technique to recover lithium from local resources within the Kingdom. This initiative aims to leverage advanced extraction methods to unlock the potential of in-Kingdom lithium resources. By adopting this innovative approach, we not only contribute to the global supply of critical minerals but also reduce the environmental impact associated with traditional extraction methods.

AI APPLICATIONS

AI-POWERED DIGITAL ASSISTANT TO DRIVE EFFICIENCIES

Ma'aden has been integrating cutting-edge generative artificial intelligence (AI) solutions into our digital infrastructure. In 2023, this resulted in the development of a unique digital assistant. This advanced assistant goes beyond typical functionality by incorporating an application that integrates group-wide data sets for sustainability management and reporting. Using the combination of dynamic dashboards and interactive generative AI report contents, this application optimizes analyses, provides actionable insights, and streamlines reporting processes. It also revolutionizes information accessibility and utilization within our organization, empowering us to achieve a safer and more productive workforce while optimizing the tracking and reporting of our sustainability goals and performances.

PHOSPHATE FLOTATION AI ADVISOR

In 2023, we conducted a comprehensive reassessment of our AI modeling for phosphate flotation operations at the Wa'ad Al Shamal plant. Through this process, we uncovered valuable insights within existing data sets, which served as the foundation for developing a groundbreaking flotation advisory tool. Known as the Operators Assistance Application, this innovative tool utilizes prediction models to optimize phosphorus pentoxide (P2O5) recovery. By generating operational set points, the application enhances operational efficiencies and minimizes waste, ultimately leading to improved performance in phosphate flotation operations.

By harnessing the power of AI and predictive models, we drive operational excellence, improve resource utilization, and contribute to a more sustainable future



APPENDICES



Appendices

NUMERICAL DATA USED IN THIS REPORT

ABOUT MA'ADEN

DATA	UNIT	2021	2022	2023
Financial Performance				
Sales	SAR Mn	26,769	40,277	29,272
EBITDA	SAR Mn	12,347	19,397	9,264
Net income for the year	SAR Mn	6,481	12,129	1,698
Net income attributable to shareholders' of the parent company	SAR Mn	5,228	9,319	1,577
Sales by segment				
Phosphate	SAR Mn	14,583	26,723	17,417
Aluminium	SAR Mn	9,890	11,280	8,810
Base metals and new minerals	SAR Mn	2,297	2,252	2,987
Net income / (loss) by segment				
Phosphate	SAR Mn	2,413	8,919	2,071
Aluminium	SAR Mn	2,012	396	(1,191)
Base metals and new minerals	SAR Mn	1,192	631	967

This section has been prepared for readers who need to collect and use the quantitative elements of our sustainability performance. We have presented our numerical performance over the last three years to allow for year-on-year comparisons. All performance-related statements, infographics, and graphs included in the other sections of this report are based on the numerical performance data summarized in this section, except our proprietary performance indicators.

We are dedicated to continuously improving the accuracy and comprehensiveness of the data we disclose publicly. In instances of data restatements from prior disclosures, the figures in this report reflect the most up-to-date and accurate data for our organization

DATA	UNIT	2021	2022	2023
Production				
Total Production	Ton	12,018,745	13,479,706	13,921,274
Aluminium BU	Ton	4,059,694	3,868,505	3,743,348
Alumina	Ton	1,879,261	1,745,091	1,825,106
Cast Aluminium	Ton	990,889	950,786	893,437
CRU	Ton	93,537	88,894	75,703
Molten Aluminium	Ton	805,057	775,012	701,357
Rolling Mill	Ton	290,950	308,721	247,745
Recycled Aluminium Calculations				
Recycled Aluminium (CRU+Remelt)	Ton	397,900	189,662	182,538
% of Recycled Aluminium / total production of Aluminium	%	9.8%	4.9%	4.9%
BMNM BU	Ton	6,911	5,433	4,237
Gold	Ton	10	9	12
Silver	Ton	3	4	5
Copper	Ton	1,411	1,076	1,067
Zinc	Ton	5,487	4,343	3,154
Phosphate BU	Ton	7,952,140	9,605,768	10,173,689
DAP	Ton	5,079,131	5,151,313	5,898,907
Ammonia	Ton	1,811,476	3,205,197	3,200,029
Industrial Minerals	Ton	1,061,533	1,249,258	1,074,753
Total production	Ton	12,018,745	13,479,706	13,921,274

TOWARDS A SUSTAINABLE FUTURE

DATA	UNIT	2021	2022	2023
Energy Consumption				
Total Energy Consumption ¹⁰	GJ	94,776,270	108,300,302	112,217,896
Natural Gas	GJ	39,488,902	52,042,048	52,680,079
Diesel and Heating Fuel	GJ	9,795,734	10,957,347	16,956,694
Crude Oil	GJ	-	-	-
Electricity Use	GJ	45,491,633	45,300,907	42,581,124
Self-Generated (Waste Heat)	GJ	16,049,574	15,106,745	17,033,987
GHG Emissions				
Total Scopes 1 & 2 GHG emissions (includes HQ and Affiliates)	tCO ₂ e	12,337,564	13,900,977	14,236,275
Direct (Scope 1) GHG emissions	tCO ₂ e	7,133,515	9,461,014	10,172,050
Indirect (Scope 2) GHG emissions	tCO ₂ e	5,204,049	4,439,963	4,064,225
tCO ₂ e/ton Aluminium BU production (includes Scopes 1 & 2 for MAC, MRC, MBAC)	tCO ₂ e/ton production	1.760	1.599	1.573
tCO ₂ e/ton Phosphate BU production (includes Scopes 1 & 2 for MPC)	tCO ₂ e/ton production	0.628	0.786	0.792
tCO ₂ e/ton BMNM BU production (includes Scopes 1 & 2 for BMNM)	tCO ₂ e/ton production	39.716	50.521	69.889
Total Scopes 1 & 2 GHG emissions / ton total production	tCO ₂ e/ton production	1.027	1.031	1.023
Non-GHG Emissions				
SO ₂	Ton	22,616	22,080	23,100
NO ₂	Ton	1,627	1,863	1,978
Biodiversity				
Size of operational site in, or adjacent to, protected areas and areas of high biodiversity value	km ²	4.79	9.79	172.16
Operational sites close to protected areas of high biodiversity	Count	1	2	4
IUCN Red List species and national conservation list species with habitats in areas affected by operations	Number of Species	1	1	1
Significant impacts on biodiversity	Qual.	-	-	-

¹⁰Crude oil is not used in Ma'aden's mining operations. corrected for self generated (waste heat)

DATA	UNIT	2021	2022	2023
Material Used for Production				
Total materials used for production	Ton	29,083,145	20,493,948	23,446,373
Non-renewable materials used	Ton	28,888,348	20,279,678	23,297,611
Renewable materials used	Ton	194,797	214,270	148,762
Waste Generated and Recovered				
Total solid waste generated	Ton	2,304,343	2,870,261	2,396,570
Solid hazardous waste generated	Ton	2,255,949	2,848,773	2,356,397
Solid non-hazardous waste generated	Ton	48,394	21,488	40,173
Total liquid waste generated	m ³	11,834	14,628	28,881
Liquid hazardous waste generated	m ³	11,834	14,628	20,025
Liquid non-hazardous waste generated	m ³	-	-	8,856
Total solid waste recovered and recycled	Ton	17,146	15,837	36,937
Solid hazardous waste recovered and recycled	Ton	8,196	5,460	9,863
Solid non-hazardous waste recovered and recycled	Ton	8,950	10,377	27,074
Percentage of solid waste recovered and recycled from solid waste generated	%	0.7%	0.6%	1.5%
Total liquid waste recovered and recycled	m ³	4,161	6,375	3,949
Liquid hazardous waste recovered and recycled	m ³	4,161	6,375	3,949
Liquid non-hazardous waste recovered and recycled	m ³	-	-	-
Percentage of liquid waste recovered and recycled from liquid waste generated	%	35.2%	43.6%	13.7%

DATA	UNIT	2021	2022	2023
Water Withdrawal and Usage				
Water withdrawal by source	m³	966,653,566	998,382,834	1,138,631,985
Municipal Water Supply or Water Utility (Desalinated Water sourced from Ocean)	m³	6,244,850	8,124,926	7,640,799
Wetlands, Rivers, and Lakes	m³	-	-	-
Oceans (seawater) ¹¹	m³	923,854,810	951,616,265	1,087,907,989
Groundwater (freshwater)	m³	35,137,898	36,098,160	34,005,978
Wastewater from other organizations	m³	1,416,008	2,543,483	9,077,219
Water sources significantly affected by withdrawal	Qual.	No	No	No
Volume of water recycled and reused	m³	5,138,333	1,601,205	3,385,789
Percentage of water recycled and reused from total water withdrawal	%	0.5%	0.2%	0.3%
Percentage of Groundwater Withdrawal from Total Water Withdrawal	%	3.6%	3.6%	3.0%
Total water usage	m³	971,791,899	999,984,038	1,141,800,086
Total Water Discharge				
Water discharge by destination	m³	895,662,808	943,772,698	1,074,062,176
Discharge to surface water	m³	-	-	-
Discharge to groundwater	m³	-	-	-
Discharge to seawater	m³	895,662,808	943,770,112	1,074,062,176
Discharge to third-party - from disposals	m³	-	2,586	-
Water consumption from all areas	m³	70,990,759	54,610,136	64,569,809
Groundwater consumption intensity	m³/ton production	2.924	2.678	2.443

¹¹Historical performance data on water withdrawal from the ocean have been revised to include seawater used for the purpose of once-through cooling. This more accurately reflects water usage in Ma'aden's phosphate operations.

TAKING CARE OF SOCIETY

DATA	UNIT	2021	2022	2023
EHSS Performance Rates				
Lost Time Injury (LTI) Rate - Employee	#	0.09	0.06	0.04
Lost Time Injury (LTI) Rate - Contractor	#	0.07	0.05	0.04
All Injury/Illness Frequency Rate (AIFR) - Employee	#	0.18	0.09	0.10
All Injury/Illness Frequency Rate (AIFR) - Contractor	#	0.20	0.14	0.08
Year-Over-Year Performance Rates				
SHER (Safety and Health Event Rate)	#	1.04	0.46	0.46
AIFR (All Injury/Illness Frequency Rate)	#	0.20	0.13	0.08
Recordable Injuries				
Fatalities (FAT) - Employees	#	-	-	-
Fatalities (FAT) - Contractors	#	1	0	1
Lost Time Injury (LTI) - Employees	#	6	4	3
Lost Time Injury (LTI) - Contractors	#	12	10	8
Restricted Duty Injury (RDI) - Employees	#	2	-	-
Restricted Duty Injury (RDI) - Contractors	#	6	4	3
Medical Treatment Injury (MTI) - Employees	#	4	2	4
Medical Treatment Injury (MTI) - Contractors	#	18	13	5
Total HSE Incidents (Reportable) - Employees	#	12	6	7
Total HSE Incidents (Reportable) - Contractors	#	37	27	17
Total Hours Worked - Employees	Hours	13,085,459	13,387,961	13,836,662
Total Hours Worked - Contractors	Hours	36,682,555	38,897,319	44,877,778

DATA	UNIT	2021	2022	2023
Employee Breakdown by Gender				
Total FTEs (Full Time Employees)	People	5,818	6,494	6,877
No. of FTEs (Full Time Employees) - Males	People	5,706	6,306	6,508
No. of FTEs (Full Time Employees) - Females	People	112	188	369
Local Nationals - Males	People	4,258	4,649	4,896
Local Nationals - Females	People	112	188	364
Non-local Employees - Males	People	1,448	1,657	1,612
Non-local Employees - Females	People	-	-	5
% of Local National Employees	%	75.1%	74.5%	76.5%
% of Local Female Employees	%	1.9%	2.9%	5.3%
Managers - Males	People	195	250	283
Managers - Females	People	-	5	10
Directors - Males	People	92	107	129
Directors - Females	People	-	1	5
Managers & Directors - Males	People	287	357	412
Managers & Directors - Females	People	-	6	15
VPs - Males	People	19	26	66
VPs - Females	People	-	-	3
Global Contractors - Males	People	932	934	814
Global Contractors - Females	People	-	-	-
Employee Hire and Turnover by Gender				
Employees hired – Males	People	380	743	658
Employees hired – Females	People	54	96	208
Employees left - Males	People	318	332	265
Employees left – Females	People	10	20	24

DATA	UNIT	2021	2022	2023
Employee Hire and Turnover by Age Group				
Age Group <25	%	4	2	3
Age Group 25-40	%	61	66	65
Age Group 40-60	%	34	32	31
Age Group >60	%	1	0	1
Formal Training Hours per Employee				
Training Hours - Males	Hours	136,959	149,609	297,956
Training Hours - Females	Hours	3,438	9,868	26,493
Training Hours - Local	Hours	124,757	135,885	274,821
Training Hours - Expat	Hours	15,640	23,592	49,628
# of Employees Trained - Males	People	2,060	2,652	4,537
# of Employees Trained - Females	People	57	113	242
# of Employees Trained - Local	People	1,807	2,249	3,747
# of Employees Trained - Expat	People	310	516	1,032
Avg. Training Hours per Employee - Males	Hours	66.48	56.41	65.67
Avg. Training Hours per Employee - Females	Hours	60.32	87.33	109.48
Avg. Training Hours per Employee - Local	Hours	69.04	60.42	73.34
Avg. Training Hours per Employee - Expat	Hours	50.45	45.72	48.09
Community Engagement				
School of Excellence Annual Spend	SAR Mn	23	20	22.5

ECONOMIC CONTRIBUTION

DATA	UNIT	2021	2022	2023
Supply Chain Spend				
On-shore spend	SAR Mn	9,741	14,305	14,042
On-shore spend % of total	%	71.7%	74.0%	76.2%
Off-shore spend	SAR Mn	3,842	5,025	4,384
Off-shore spend % of total	%	28.3%	26.0%	23.8%
Goods Spend				
On-shore spend	SAR Mn	4,711	7,963	6,249
On-shore spend % of total	%	56.0%	64.3%	62.0%
Off-shore spend	SAR Mn	3,695	4,425	3,826
Off-shore spend % of total	%	44.0%	35.7%	38.0%
Community Investment				
Education and Training	SAR	23,110,000	25,749,329	37,188,469
Other social investment or charitable giving	SAR	450,938	453,500	5,766,000
Public & Government Relation and Sponsorship	SAR	340,359	1,501,200	3,420,000
Infrastructure	SAR	288,000	156,522	1,345,200
Enviroment, Energy & Climate Change	SAR	275,220	81,050	1,118,564
Community Development	SAR	207,500	4,177,602	858,795
Health & Welfare; Water & Sanitation	SAR	107,425	219,100	114,500
Total Investment	SAR	24,779,442	32,338,303	49,811,528

ASI PERFORMANCE STANDARD DISCLOSURES

As a company that operates within the metals and minerals value chain, we strive to uphold responsible production, sourcing, and material stewardship.This includes meeting the reporting requirements of the Aluminium Stewardship Initiative (ASI), non-profit standards setting and certification organization for the aluminium industry. This section discloses our performance along several key sustainability metrics outlined by the ASI Performance Standard V3.1. We will continue to improve the accuracy and comprehensiveness of our aluminium business’ sustainability performance public disclosures

ASI 3.3B – PAYMENTS TO GOVERNMENTS

PAYMENTS TO GOVERNMENTS	UNIT	2021	2022	2023
Payments to governmental entities ¹²	SAR	1,480,000	0	0

ASI 5.1 – GHG EMISSIONS & ENERGY USE

DATA	UNIT	MAC	MBAC	MRC	MA TOTAL
GHG Emissions					
Total scopes 1 & 2 GHG emissions	tCO ₂ e	4,731,805.95	1,000,848.72	154,045.47	5,886,700.14
Direct (scope 1) GHG emissions	tCO ₂ e	1,297,816.59	851,860.01	56,927.11	2,206,603.70
Indirect (scope 2) GHG emissions	tCO ₂ e	3,433,989.36	148,988.71	97,118.36	3,680,096.43
Energy Consumption					
Total energy consumption	GJ	39,244,409.77	16,538,097.53	2,064,438.97	57,846,946.28
Natural gas	GJ	1,561,871.23	14,377,176.45	996,485.97	16,935,533.65
Diesel and heating fuel	GJ	220,836.41	524,883.91	7,608.38	753,328.70
Crude oil	GJ	0	0	0	0
Gasoline	GJ	0	10,705.80	871.57	11,577.37
Electricity use	GJ	37,461,702.13	1,625,331.36	1,059,473.06	40,146,506.55
Self-generated (waste heat)	GJ	0	0	0	0

¹²Payments to governmental entities are only made for Ma’aden’s bauxite mine. No payments were made in 2022 and 2023.

ASI 5.2A – ALUMINIUM SMELTER GHG EMISSIONS INTENSITY

Life Cycle Assessment	Unit	2021	2022	2023
1 Ton of Liquid Aluminium	tCO ₂ e/Ton Aluminium Production	9.67	9.28	-
1 Ton of Billet	tCO ₂ e/ton Aluminium Production	9.83	9.89	-
1 Ton of Lngot	tCO ₂ e/Ton Aluminium Production	9.78	9.91	-
1 Ton of Automotive Coil	tCO ₂ e/Ton Aluminium Production	8.76	11.22	-
1 Ton of Can Body	tCO ₂ e/Ton Aluminium Production	9.69	9.79	-

ASI 5.3 – GHG EMISSIONS REDUCTION PLANS

Ma’aden Aluminium’s targets are to reduce its Scopes 1 and 2 GHG emissions intensity by 50% by 2030 and to achieve net zero GHG emissions by 2050. Ma’aden Aluminium will be scaling up production which, with current technology, would result in projected emissions of approximately 23 million tons of CO2 in 2040. Ma’aden’s reduction plan limits Ma’aden Aluminium’s emissions to approximately 3 million tons by 2040. Ma’aden Aluminium is planning to achieve this reduction by increasing recycling (projected to cut 22.7% of emissions), introducing cleaner greenfield operations (projected to cut 43.5% of emissions) and retrofitting brownfield operations (projected to cut 33.8% of emissions).

ASI 6.4B – PUBLIC DISCLOSURE OF SPILLS & LEAKAGES

Spills & Leakages	Unit	2023
Number of Spill Incidents	#	30
Volume of spills occurred	Liter	326,844
Type of Spills Occurred	Qual.	Leakages And Spills To Roads And Soil
Impact of spill incidents	Qual.	Soil contamination
Remediation Actions Taken	Qual.	Housekeeping/Removing Contaminated Soil And Disposing It As Per Mshem 15.05

ASI 6.5A – WASTE MANAGEMENT & REPORTING

DATA	Unit	MAC	MBAC	MRC	MA Total
Solid hazardous waste generated	Ton	15,741.8	227.94	4,667.9	2,338,795
Liquid hazardous waste generated	m³	2,927.36	282.78	15,707.38	18,917
Liquid non-hazardous waste generated	m³	0	5,760	0	5,760
Solid waste disposed in landfills	Ton	8,320	1,508	9,144	18,972
Liquid waste disposed in landfills	m³	0	0	0	0
Solid waste recovered and recycled	Ton	25,199.24	371.47	3,472.65	29,044
Liquid waste recovered and recycled	m³	1,981.75	92.55	49.78	2,124.08

ASI 8.1A – BIODIVERSITY & ECOSYSTEM SERVICES RISK & IMPACT ASSESSMENT

Ma’aden Aluminium has completed a biodiversity and ecosystem services impact assessment and a significant risk matrix for Baitha bauxite mine and RAK facilities. A biodiversity and ecosystem services management system will be developed and implemented to mitigate significant impacts through continual improvement cycles.

GRI CONTENT INDEX

Statement of Use	Ma'aden has reported the information cited in this GRI content index for the period 1st January 2023 to 31st December 2023 with reference to the GRI Standards.
GRI 1 Used	GRI 1: Foundation 2021

GRI Standard	Disclosure	Location
GRI 2: General Disclosures 2021	2-1 Organizational details	Company Profile (p.16)
	2-2 Entities included in the organization's sustainability reporting	Report Boundary (p.6)
	2-3 Reporting period, frequency, and contact point	Reporting Period (p.6)
	2-4 Restatements of information	Information restatements and their reasons are disclosed throughout this report, where applicable.
	2-5 External assurance	Independent Assurance (p.166) Report Assurance (p.166)
	2-6 Activities, value chain, and other business relationships	Company Profile (p.16) Operations & Businesses (p.24)
	2-7 Employees	Workplace Diversity (p.104) Numerical Data Used in This Report (p.154)
	2-8 Workers who are not employees	Workplace Diversity (p.104) Numerical Data Used in This Report (p.154)
	2-9 Governance structure and composition	Corporate Governance (p.30) Ma'aden Website (Corporate Governance)
	2-10 Nomination and selection of the highest governance body	Ma'aden Website (Nomination & Remuneration Committee Charter)

GRI Standard	Disclosure	Location
GRI 2: General Disclosures 2021	2-11 Chair of the highest governance body	Corporate Governance (p.30) Ma'aden Website (Board of Directors)
	2-12 Role of the highest governance body in overseeing the management of impacts	Sustainability Governance Structure (p.66)
	2-13 Delegation of responsibility for managing impacts	Sustainability Governance Structure (p.66)
	2-14 Role of the highest governance body in sustainability reporting	Sustainability Governance Structure (p.66)
	2-15 Conflicts of interest	Corporate Governance (p.31) Ma'aden Website (Conflict of Interest Policy)
	2-16 Communication of critical concerns	Ma'aden Website (Corporate Governance Framework)
	2-17 Collective knowledge of the highest governance body	Ma'aden Website (Corporate Governance Framework)
	2-18 Evaluation of the performance of the highest governance body	Ma'aden Website (Corporate Governance Framework)
	2-19 Remuneration policies	Ma'aden Website (Compensation & Remuneration Policy)
	2-20 Process to determine remuneration	Ma'aden Website (Corporate Governance Framework) Ma'aden Website (Compensation & Remuneration Policy)
	2-22 Statement on sustainable development strategy	Sustainability Framework (p.52)
	2-23 Policy commitments	Commitment to Sustainability (p.46) Business Ethics & Conduct (p.132)
	2-24 Embedding policy commitments	Commitment to Sustainability (p.46) Business Ethics & Conduct (p.132)
	2-27 Compliance with laws and regulations	Regulatory Compliance (p.130)
	2-28 Membership associations	Alignment with Global & Local Goals (p.48)
	2-29 Approach to stakeholder engagement	Stakeholder Engagement (p.64)

GRI Standard	Disclosure	Location
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Materiality Assessment (p.55)
	3-2 List of material topics	Materiality Assessment (p.55)
	3-3 Management of material topics	Sustainability at Ma'aden (p.42) Towards a Sustainable Future (p.78) Nurturing Our Society (p.98) Good Governance Practices (p.130)
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Contributions to Our Kingdom (p.32) Numerical Data Used in This Report (p.32-33)
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Contributions to Our Kingdom (p.32) Numerical Data Used in This Report (p.32-33)
	203-2 Significant indirect economic impacts	Contributions to Our Kingdom (p.32)
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Contributions to Our Kingdom (p.32) Numerical Data Used in This Report (p.32-33)
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Business Ethics & Conduct (p.132) Ma'aden Website (Anti-corruption Policy)
	205-3 Confirmed incidents of corruption and actions taken	Business Ethics & Conduct (p.132)
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Business Ethics & Conduct (p.132)
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Materials & Tailings (p.88) Numerical Data Used in This Report (p.151)
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Climate Change (p.80) Numerical Data Used in This Report (p.156)
	302-4 Reduction of energy consumption	Climate Change (p.80)

GRI Standard	Disclosure	Location
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	Water Stewardship (p.90) Numerical Data Used in This Report (p.152)
	303-4 Water discharge	Water Stewardship (p.90) Numerical Data Used in This Report (p.152)
	303-5 Water consumption	Water Stewardship (p.90) Numerical Data Used in This Report (p.152)
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity (p.84) Numerical Data Used in This Report (p.150)
	304-2 Significant impacts of activities, products, and services on biodiversity	Biodiversity (p.84) Numerical Data Used in This Report (p.150)
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	Biodiversity (p.84) Numerical Data Used in This Report (p.150)
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Climate Change (p.80) Numerical Data Used in This Report (p.156)
	305-2 Energy indirect (Scope 2) GHG emissions	Climate Change (p.80) Numerical Data Used in This Report (p.156)
	305-4 GHG emissions intensity	Climate Change (p.80) Numerical Data Used in This Report (p.156)
	305-5 Reduction of GHG emissions	Climate Change (p.80)
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Climate Change (p.80) Numerical Data Used in This Report (p.156)

GRI Standard	Disclosure	Location
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Materials & Tailings (p.88)
	306-2 Management of significant waste-related impacts	Materials & Tailings (p.88)
	306-3 Waste generated	Materials & Tailings (p.88) Numerical Data Used in This Report (p.151)
	306-4 Waste diverted from disposal	Materials & Tailings (p.88) Numerical Data Used in This Report (p.151)
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Value Chain Engagement (p.136)
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Workplace Diversity (p.104) Numerical Data Used in This Report (p.154)
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Employee Health, Safety & Security (p.98) Ma’aden Website (Environment, Health, Safety & Security Policy)
	403-2 Hazard identification, risk assessment, and incident investigation	Employee Health, Safety & Security (p.98)
	403-5 Worker training on occupational health and safety	Employee Health, Safety & Security (p.102)
	403-9 Work-related injuries	Employee Health, Safety & Security (p.103) Numerical Data Used in This Report (p.103)
	403-10 Work-related ill health	Employee Health, Safety & Security (p.103) Numerical Data Used in This Report (p.103)

GRI Standard	Disclosure	Location
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Staff Training & Development (p.114) Numerical Data Used in This Report (p.154)
	404-2 Programs for upgrading employee skills and transition assistance programs	Staff Training & Development (p.114)
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Workplace Diversity (p.104) Numerical Data Used in This Report (p.154)
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Community Engagement (p.120)
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Value Chain Engagement (p.136)

INDEPENDENT ASSURANCE STATEMENT

TO: SAUDI ARABIAN MINING COMPANY (MA’ADEN)

INTRODUCTION AND OBJECTIVES OF THE WORK:

Saudi Arabian Mining Company (MA’ADEN) has engaged Bureau Veritas Certification to provide limited assurance on the following subject matter information (“Subject Matter”). Our objective is to determine whether, based on the procedures performed, anything has come to our attention that would cause us to believe that the Subject Matter has not been prepared, in all material aspects, in accordance with the applicable criteria (“Applicable Criteria”) as specified below.

Subject Matter

The subject matter for our limited assurance engagement includes the selected quantitative indicators outlined below, as presented in Ma’aden’s 2023 Sustainability Report for the year ended 31 December 2023, which was prepared and presented by the Company’s management. These selected quantitative indicators are based on the reporting boundary established by the Company, encompassing the Company itself and its seven affiliated entities under its operational control, as detailed in Annexure 1 of this report.

The selected quantitative indicators are listed below:

#	Selected Indicator	Pages numbers in the Sustainability Report where the indicators are disclosed
1	Lost time injury (LTIs) and Lost time injury rate (LTIR)	p.103
2	Total fatalities	p.103
3	413-1 Operations with local community engagement, impact Total training hours	p.120-125
4	Community investment (total spend value)	p.38
5	Greenhouse gas emissions (scope 1 and scope 2)	p.80
6	Energy consumption	p.82
7	Waste management (hazardous and non-hazardous waste generated and recovered)	p.89
8	Water usage	p.90-95



APPLICABLE CRITERIA

The criteria for this limited assurance engagement were the reporting requirements of the Global Reporting Initiative (GRI) standards, issued by the Global Sustainability Standards Board (GSSB). The applicable criteria for each selected indicator can be found in Annexure 2 of this report.

ASSESSMENT STANDARD

The assurance process was conducted in line with the requirements of the International Standard on Assurance Engagements-ISAIE 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information and International Standard on Assurance Engagements- ISAIE 3410, Assurance Engagements on Greenhouse Gas Statements.

LIMITATIONS AND EXCLUSIONS

Interviews with Ma’aden’s corporate team and data owners at various sites responsible for collecting the necessary data for Subject Matter preparation revealed that they are well-versed in the reporting requirements of GRI standards (Applicable Criteria) and have established control systems to maintain data quality. However, the Subject Matter may still contain errors or irregularities that remain undetected due to fundamental limitations in the internal control systems. Assurance is primarily based on Company-provided documentation and interactions with relevant personnel. Our engagement, conducted on a test basis, is not exhaustive in detecting all internal control weaknesses over Subject Matter preparation.

Additionally, our procedures do not encompass testing, verifying, or auditing the completeness and accuracy of outputs from the Company’s data collecting systems used for the compilation of the Subject Matter information.

Additionally, for the purpose of this limited assurance engagement, we have not performed any procedures around:

- Verifying any assertions or qualitative information within the report beyond the quantitative data relating to the specified indicators mentioned in the subject matter;
- Evaluating the accuracy and completeness of the reporting boundaries defined by the management for the purposes of the Report;
- Verifying or auditing the underlying sources from which the Subject Matter information was derived;
- Reviewing the method utilized by management to conduct materiality assessment;
- Testing, verifying, or auditing the completeness and accuracy of outputs from Ma’aden’s data collecting systems used for the compilation of the Subject Matter information;
- Company position statements (including any expression of opinion, belief, aspiration, expectation, aim or future intent);
- Historic text which was unchanged from previous years and did not relate to ongoing activities;
- Financial data;
- Appropriateness of commitments and objectives chosen by the company;



RESPONSIBILITIES

The preparation and presentation of the Subject Matter in accordance with the Applicable Criteria are the sole responsibility of the management of Saudi Arabian Mining Company (MA'ADEN).

Bureau Veritas Certification was not involved in drafting of the Subject Matter. Bureau Verita's responsibilities include:

- Providing limited assurance as per ISAE 3000 and ISAE 3410' over the accuracy, reliability and objectivity of the information contained within the Subject Matter.
- Forming an independent conclusion based on the assurance procedures performed and evidence obtained.

METHODOLOGY

As part of our independent assurance, our work included:

1. Conducting employee interviews regarding the scope of work involved;
2. Process analysis of collecting and reporting the information/data included;
3. Verifying the completeness of the quantitative data included in the subject matter to ensure it encompasses all sites within the reporting boundary established by management;
4. Review of documentary evidence produced by Ma'aden;
5. Recalculation of examples in accordance with the evidence documents used to prepare the information included;
6. Implementation of analytical procedures on the final reported data.

The work is based on current best practices in independent assurance; It was conducted in accordance with Bureau Veritas Certification standard procedures and ISAE 3000 International Assurance Audits Standard requirements.

LIMITED ASSURANCE CONCLUSION

As a result of the evidence obtained, no contradiction has been detected that the Subject Matter Information in the Company's 2023 Sustainability Report for the year ended 31 December 2023 has not been prepared in all material respects in accordance with the Applicable Criteria.

This assurance report has been prepared for the Company's Board of Directors to assist in the reporting of the Company's activities, including its outcome. We allow this report to be included in the 2023 Sustainability Report for the year ended December 31, 2023, in order to enable the Board of Directors to demonstrate that it has fulfilled its responsibilities on the subject by having a limited independent assurance report on Subject Matter Information prepared.



STATEMENT OF INDEPENDENCE, IMPARTIALITY AND COMPETENCE

Bureau Veritas is an independent professional services company that specializes in quality, environmental, health, safety, and social accountability with over 190 years of history.

Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities. We are particularly vigilant in the prevention of conflicts of interest.

No member of the assurance team has a business relationship with Saudi Arabian Mining Company (MA'ADEN), its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance engagements, understanding systems and processes, and excellent understanding of Bureau Veritas standard methodology for Limited Assurance.

A handwritten signature in black ink, appearing to read 'Haris Muhammad'.

Haris Muhammad,
Certification Manager
9-Jun-24



ANNEXURE 1

Affiliated entities under operational control of the Company:

- 1. Ma’aden Rolling Company (“MRC”)
- 2. Ma’aden Bauxite and Alumina Company (“MBAC”)
- 3. Ma’aden Aluminium Company (“MAC”)
- 4. Base Metals and New Minerals (“BMNM”)
- 5. Industrial Minerals Company (“IMC”)

6. Ma’aden Wa’ad Al Shamal Phosphate Company (“MWSPC”)

7. Ma’aden Phosphate Company (“MPC”)

ANNEXURE 2

Applicable Criteria: reporting requirements of GRI standards as applicable to the respective indicators presented in the Subject Matter:

Selected Indicator	Applicable aspects of the reporting requirements of GRI standards for the selected indicator
Lost time injury (LTIs) and Lost time injury rate (LTIR)	Clause (iii) of Requirement (a) and (b) of Disclosure 403-9 “Work-related injuries” of GRI standard 403 “Occupational Health and Safety 2018”
Total fatalities	Compilation requirement 2.1.4 of Disclosure 403-9 “workrelated injuries” of GRI standard 403 “Occupational Health and Safety 2018”
Total training hours	Clause (i) of Requirement (a) and (b) of Disclosure 403-9 “Work-related injuries” of GRI standard 403 “Occupational Health and Safety 2018”
Community investment (total spend value)	Guidance related to “Community investment” mentioned in Guidance for Disclosure 201 - 1 “Direct economic value generated and distributed” of GRI Standard 201 “Economic Performance 2016”
Greenhouse gas emissions (scope 1 and scope 2)	Compilation requirement 2.1 and 2.2 of Disclosure 305-1 Direct (Scope 1) GHG emissions & compilation requirement 2.3 and 2.4 of Disclosure 305-2 Energy indirect (Scope 2) GHG Emissions of GRI Standard 305 “Emissions 2016”
Energy consumption	Compilation requirements of Disclosure 302-1 Energy consumption within the organization of GRI Standard 302 “Energy 2016”
Waste management (hazardous and nonhazardous waste generated and recovered)	Compilation requirements of Disclosure 306-3 Waste generation and significant waste-related impacts of GRI standard 306 Waste 2020
Water usage	Requirement (a) of Disclosure 303-3 “Water withdrawal” for Water withdrawal by source & Requirement (a) of Disclosure 303-5 “Water consumption” for water usage related to GRI standard 303 “Water and Effluents 2018”

