



04

SUSTAINABILITY

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to continuously monitor our environmental, social and governance-related performance against the set goals. The aim of these goals is to become a local industrial ESG role model in Saudi Arabia while contributing to the Kingdom's ESG objectives.



See our full Sustainability Report.

63	Sustainability at Ma'aden
65	Environmental
69	Social
75	Governance

SUSTAINABILITY AT MA'ADEN

Ma'aden is committed to delivering on our commercial mandate while also fulfilling our broader responsibility as a national champion and leading corporation in Saudi Arabia. The organization is founded on strong governance principles, which extend from the central role of the Board of Directors down to the everyday practices of our employees and contractors. As such, we manage our business activities each day in line with our sustainability commitments and corporate values through our Sustainability Framework.








This comprehensive approach underlines Ma'aden's deep commitment to proactively minimizing our environmental footprint and maximizing our positive impact on the community, thereby contributing positively to sustainable development. Through this commitment, we aim to balance our operational objectives with our responsibilities to our people, our society and the environment.

Our sustainability footprint

Ma'aden established a "sustainability footprint" in 2021, to continuously monitor our environmental, social and governance-related performance against the set goals. The aim of these goals is to become a local industrial ESG role model in Saudi Arabia while contributing to the Kingdom's ESG objectives.

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

-  **SCOPE 1 AND 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 25% by 2040**
-  **INCREASE ESG SCREENING OF SUPPLIERS to 75% by 2040**



Ma'aden Sustainability Framework

Our Company-wide Sustainability Framework was developed in 2019, providing the foundation for our sustainability focus. It adopts leading global practices, standards, frameworks and guidelines. It also outlines our commitment and approach to sustainability management.

Building on our strategic focus and activities, we have prioritized the well-being, health and safety of our employees, invested in the socio-economic development of our local communities, and endeavored to protect our natural environment.

Our Sustainability Framework provides clear guidance for commitments, policies and expectations to improve governance, disclosure and our impact on ESG issues. This allows us to strengthen our contribution to both Vision 2030 and UNSDGs, and to align with the International Council on Mining and Metals (ICMM) and other relevant international mining standards.

Ma'aden's Sustainability Framework demonstrates our commitment to eight major sustainability goals.

These include:

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 well-being.
3. Be a welcome 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, making certain 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 impact associated with our sourcing, operations and materials across our value chain and throughout our products' lifecycles.
8. Gain international recognition for being a sustainable company, driven by robust business practices, innovation and values.

To achieve these goals, Ma'aden is:

- 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.
- Empowering and holding each business accountable to have the capacity to implement sustainable practices that fit its scale, nature and risk profile.

ENVIRONMENTAL

Environmental protection is at the heart of every decision we make. Ma'aden manages environmental concerns by timely identifying and proactively mitigating significant environmental risks.



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We are committed to complying with all applicable laws, regulations and obligations. Our environmental management is benchmarked against international standards and best practices, which are periodically assessed to ensure continual improvement. Our sites are certified by an international standard organization for occupational health, safety and environmental management systems.

In addition, all the licensed mines, construction sites and operational units must obtain environmental permits from regulators before commencing any activity. In 2023, we obtained 23 new environmental permits to construct for new phosphate mining licenses and 8 environmental authorizations for conducting exploration activities. The National Center for Environmental Compliance has also renewed our permits for the construction of 7 operating sites.

In line with our commitment to maintain a healthy and sustainable environment for our employees and host communities, a comprehensive environmental monitoring program has been established at all

operational locations. The program monitors and reports air, water, soil, noise and groundwater quality, using a combination of internationally approved methodology and specialized monitoring equipment operated by trained professionals. In 2023, all environmental monitoring reports were submitted to the relevant regulatory authorities.

GHG emissions and energy usage

Mitigating our greenhouse gas emissions is a priority for us, and because of this we are engaged in the ongoing exploration of novel technologies aimed at CO₂ capture and emission reduction. We are also delving into innovative carbon capture solutions for smelter exhaust streams and charting a strategic roadmap for our fleet's electrification.

By optimizing processes across the business units, we have seen an overall improvement in emissions reduction as well as a reduction in our electricity emission factor. Going forward, we are planning to engage in groundbreaking trials of more energy-efficient comminution techniques.

23
New environmental permits obtained

Highlights in 2023

Ma'aden signed a deal to use the Kingdom's first hydrogen-powered trucks for its logistic operations. The firm has reached an agreement with Dammam-based Almajdouie Logistics Co. to deploy the heavy goods vehicles. The vehicle was unveiled by the Saudi Transport General Authority, and runs on hydrogen fuel, with a capacity of 35 kg and a gas pressure of up to 350 bar.

We will use the hydrogen-powered vehicle to transport aluminium products from Jubail and Ras Al-Khair. The initiative aims to build an ecosystem for hydrogen-powered vehicles within Saudi Arabia, offer integrated solutions to interested parties, and enhance hydrogen transportation within the Kingdom.

The agreement is part of a larger feasibility study that aims to operate in line with the Kingdom's Vision 2030 and the Saudi Green Initiative, which aims to reduce carbon emissions.

Biodiversity, afforestation and mangroves

Ma'aden is acutely aware that mining and processing activities have the potential to disrupt local ecosystems, which is why we are steadfast in our efforts to either mitigate or offset ecological impact. Our commitment extends to preserving or improving the condition of land, water and natural habitats in all areas where our operations are present.

Ma'aden Mangrove Park



MoU with RCJY to develop Ma'aden Mangrove Park at Gurmah Island

Imam Turki Royal Natural Reserves

120K trees and 10M seeds to be planted in Imam Turki Royal Natural Reserves



Highlights in 2023

In 2023, we made significant strides and efforts to combat climate change. Ma'aden launched an afforestation initiative that aims to protect the environment, improve the vegetation cover, enhance biodiversity and generate carbon credits to offset its carbon footprint. Ma'aden's ambitious target is to plant 10 million native trees and 10 million mangroves by 2040. This is in alignment with the Kingdom's Saudi Green Initiative (SGI).

At the COP28 Conference and during the Saudi Green Initiative Forum in the UAE, we solidified our commitment to environmental sustainability by signing a Memorandum of Understanding (MoU) with the Royal Commission for Jubail and Yanbu. This partnership is aimed at raising awareness within the community and promoting biodiversity conservation initiatives across the Kingdom in addition to the establishment of Ma'aden Mangrove Park at Gurmah Island within Jubail Industrial City.

Moreover, Ma'aden signed an MoU with the National Center for Wildlife, which reflects our dedication to contributing to the protection of Saudi Arabia's natural landscape. Furthermore, we will launch initiatives to preserve wildlife and biodiversity, build community activities, and collaborate for solutions to environmental challenges.

At Ma'aden, we recognize that environmental sustainability is not just a commitment but a fundamental aspect of our corporate principles. Through our collective efforts, we are forming a path towards a greener, more resilient future, where environmental conservation and economic prosperity go hand in hand.

ENVIRONMENTAL (CONTINUED)

Water stewardship

Water stewardship relates to water consumption, usage efficiency, quality and wastewater discharge in the communities in which Ma'aden operates to ensure community water systems are not adversely affected by our operations.

In partnership with National Water Company (NWC), Ma'aden has developed an infrastructure to supply our industrial complexes in Wa'ad Al-Shamal with treated sanitary effluent from treatment facilities through a pipeline that is over 300 km long.

Besides our effort to minimize the risk of water scarcity, Ma'aden adheres to the highest viable water quality standards to make sure the water systems of our neighboring communities are not affected by effluents we discharge through our business activities.

Spotlight on: Blue ammonia

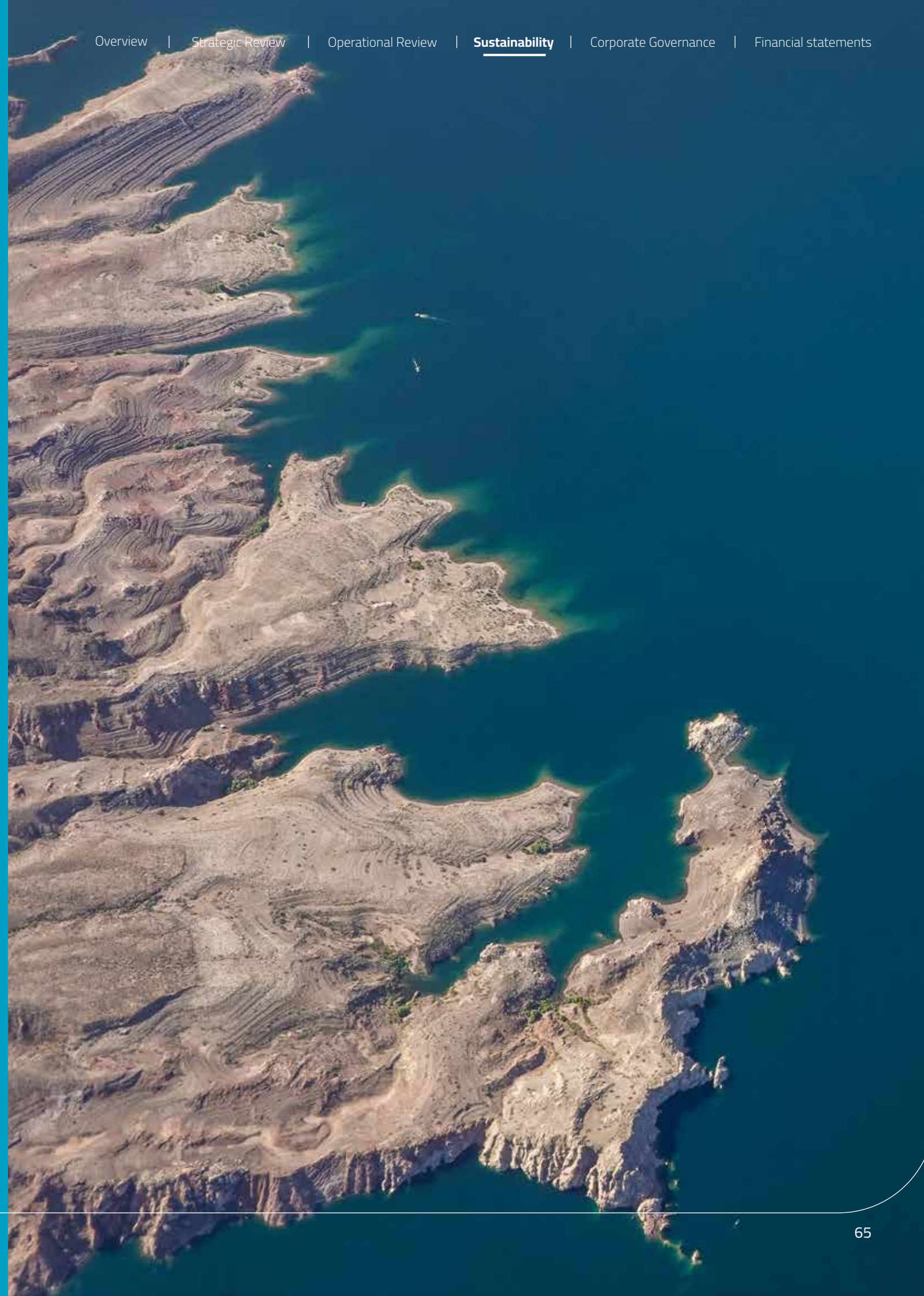
The production of ammonia, one of the key materials of fertilizer manufacturing and a widely used industrial gas, consumes hydrogen, which is often gathered from fossil-fuels-based methodologies. Therefore, technologies to reduce or even avoid carbon emissions in ammonia production are globally researched.

Ma'aden has made strides in the use of blue ammonia, which is a low-carbon, sustainable energy solution. We are currently the world's largest exporter of blue ammonia, having received certification to export 138,000 tons as per last year's report.

This year, we signed agreements with various partners to supply blue ammonia:

- Taiwan Fertilizer Co. Ltd. – Completed first commercial shipment to Taiwan.
- Mitsui & Co. Ltd. – Chosen to be the first commercial supplier to Japan.
- Shenghong Petrochemicals – Exported 25,000 metric tons to China.
- Coromandel International Limited – Signed joint agreement to provide supply to India.
- Agropolychim – Provided first shipment to Europe, enabling ambitions of low-carbon production for the European market.

These achievements are in line with our efforts to supply global markets with blue ammonia, as we drive the adoption of greener energy sources on a global scale. We will continue our efforts to reduce carbon emissions from supply chains across the globe.



SOCIAL

Our aim is to establish a “zero-harm” work environment and bolster the safety culture among our employees, contractors, customers and host communities.



Health, safety and security

Health, safety and security (HSS) are foundational pillars at Ma'aden, where our unwavering commitment to the well-being of our employees is paramount. We do not just view HSS as a business necessity; it is a core aspect of our culture. By fostering a positive safety culture, we engage stakeholders to create an optimal workplace environment where everyone can thrive – including employees, contractors, business partners and the communities we serve. Together, we pursue excellence in HSS, driving Ma'aden's growth while ensuring everyone's safety.

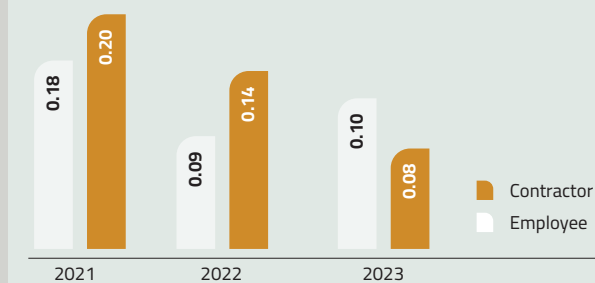
Our aim is to establish a “zero-harm” work environment and bolster the safety culture among our employees, contractors, customers and host communities. Through effective health management, process safety measures and risk management practices, we mitigate the risk of incidents, injuries and illnesses.

Embracing cutting-edge technology, we are exploring solutions like operator alertness systems, collision avoidance systems, and advanced detection methods for potential hazards like sinkholes, enhancing the safety of our mining operations. Moreover, the integration of drone technology for surveying not only boosts operational efficiency, but also minimizes personnel exposure to high-risk environments.

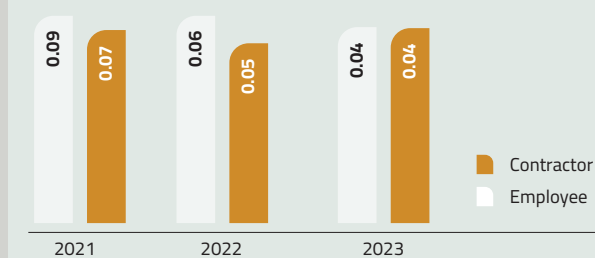
Highlights in 2023

Highlights from 2023 underscore our dedication to the health and safety of our workforce. Thanks to our ongoing efforts, we achieved significant improvements in our health and safety performance indicators. Our all injury/illness frequency rate (AIFR) and lost time injury rate (LTIR) for both employees and contractors decreased compared to the previous year, reflecting our commitment to continuous improvement in HSS practices.

All injury/illness frequency rate (AIFR)



Lost time injury rate (LTIR)



Engagement and rewards

Ma'aden is on a journey to become an employer of choice in the Kingdom, with the goal of attracting and retaining the very best talent from within Saudi Arabia and globally. Our leadership supports employees wishing to advance in their careers by offering leadership training, team-building workshops and free college courses. We are committed to improving the lives of our team and helping them grow as people and as professionals.

This year, we have furthered our commitment to our employees by enhancing our employee value proposition. Our focus has been on implementing new and improved benefits, allowances and recognition programs. By adopting this comprehensive approach, we are fostering a corporate culture that prioritizes care and provides our employees with the confidence, security and freedom to pursue their goals. These efforts will assist Ma'aden in attracting, retaining and nurturing talent, ultimately helping us achieve our objective of becoming one of the leading employers in the global mining industry.

Diversity and inclusion

As put forth in our Code of Conduct, Ma'aden's policies on diversity, equality and non-discrimination are designed to make individuals feel welcome and respected regardless of race, nationality, religion, gender, disability, ancestry, social origin, or political or other opinions. Ma'aden recognizes the opportunity to improve business performance by drawing on the talent and distinct 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.

In addition, Ma'aden is creating employment and educational opportunities for Saudi citizens in remote areas. The

development of our mines not only boosts the local economy, but also opens up a range of jobs and professional development opportunities for Saudi citizens and local communities.

Investing in our employees

The quality of our people is the cornerstone of Ma'aden's success. Our employees are the driving force behind the organization's growth and enable us to make the biggest impact on the people and communities of Saudi Arabia.

Throughout 2023, we constantly invested in our team to support the delivery of our business objectives.

We are focused on increasing the size of our workforce, with the highest quality of people. Hiring the right people, providing them with training and development opportunities, and creating a positive and inclusive work environment are delivering higher productivity, lower turnover rates and increased profitability.

This is the result of comprehensive recruitment and retention strategies, employee training and development programs, and our commitment to creating a diverse and inclusive workplace culture.

Ma'aden will continue to invest in employees, building a talented and motivated workforce that can help us achieve our business objectives and drive growth and success in the years ahead.

SOCIAL

(CONTINUED)

Our people in numbers

5,691

Employees attended different training programs

1,363

Mine workers

776

Engineers and geologists

262

Corporate management

422

Security officers

91

Mine supervisors/superintendents

1,524

Administrative staff

815

Contractors

Gender distribution

371

Number of female employees

3.56%

Leadership positions

6,504

Number of male employees



Local Content development

Local Content, which is a core component of KSA's Vision 2030, means the portion of total expenditure in the Kingdom through the participation of Saudi components in the workforce, goods, services, production and technical assets that remain in the economy.

In 2022, Ma'aden's CEO launched the Tharwah Local Content program to support local entrepreneurs, suppliers and businesses. This program represents Ma'aden's commitment to maximizing the mining industry's contribution to the Saudi Arabian economy through investments in labor, goods, services, assets and technology. Ma'aden expects these efforts will drive Ma'aden's contribution to the achievement of the national Vision 2030.

5 Local Content strategy objectives

We are achieving this vision by focusing on these 5 objectives:



SAUDI EMPLOYMENT

Maximize employment opportunities for KSA nationals Responsible Care Awards



LOCAL BUSINESS

Maximize participation of local businesses in our supply chain



LOCAL SMEs

Maximize opportunities for Local SMEs



REMOTE REGION

Maximize economic opportunities for communities in remote regions



MINING INDUSTRY

Drive Local Content throughout the mining industry supply chain

Spotlight on: Tharwah Local Content program

Key Local Content achievements in 2023:

- Obtained first Local Content certificate with a Local Content score of 50.39% for the year 2022.
- Increased on-shore spend percentage to 76% (this is a 3% increase from the previous year) and our off-shore percentage decreased by 2.2% to 23%.
- Launched the Supplier Development Program (SDP), a long-term partnership between Ma'aden and its suppliers, with the purpose of enhancing the business performance of both parties.
- Increased work with national partners to provide support for Ma'aden's suppliers in areas of industrial consultation and land facilitation, funding arms, regulatory and enablers, and workforce.
- Fostered relationships with promising private sector players to localize valuable opportunities and increase local content.

MoUs signed in 2023:

- SME Bank and Arar Chamber of Commerce to fund and enable our suppliers.
- Italmatch and NAMI to explore localization opportunities in chemicals and 3D printing.

SOCIAL (CONTINUED)

Community and human rights




To create shared value, our investments are aligned with the local needs and business interests of each host community. These investments include skills development such as education and training to ensure our young men

and women are equipped for future jobs, particularly within the mining sector.

In addition, we develop partnerships with governments and NGOs to leverage local expertise, build meaningful relationships, and foster social development in our

host communities to enhance socio-economic benefits and alleviate poverty. Lastly, we invest directly and indirectly in communities to promote the resilience of local economies beyond the operational lifespan of our mines.

Highlights in 2023

<p>Mining Science and Engineering</p> <p>Partnership with</p>  <p>SAR ~120 mn investment</p> <p>Establishment of Mining and Engineering Program</p> <p>Focus on developing human competencies and innovation capabilities in the mining industry</p> <p>Sponsorship of 20 undergraduate students per year in the mining science and engineering program and 10 undergraduate students per year in Geosciences programs for 10 years.</p> <p>Total of 30 students annually</p>	<p>Saudi Mining Polytechnic</p> <p>Partnership with</p>  <p>SAR 200+ mn investment</p> <p>Establishment of the Saudi Mining Polytechnic (SMP), a non-profit institution</p> <p>Dedicated to qualifying and training young Saudis for technical jobs at the mining industry</p> <p>Inaugural class of female students in 2023</p> <p>~800 graduates</p>	<p>Schools of Excellence</p> <p>Partnership with</p>  <p>SAR 10+ mn investment</p> <p>Establishment of Ma'aden's flagship Schools of Excellence program</p> <p>Established third School of Excellence for girls in Arar region in Q3-2023</p> <p>Arar boys' school was ranked 7th in KSA (among 4,878)</p> <p>Schools operated by the Dhahran Techno Valley Company and Ajyal Al-Mwaheb.</p>
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Signed two MoUs

With the Children with Disabilities Association

CDA Al Madinah Center with a total amount of **SAR 2,600,000**

SAR 3.3 million

Committed through the Ehsan platform

CDA Hail Center with total amount of **SAR 700,000**

Schools of Excellence Awards



Arabia CSR Award

16th edition of the Arabia CSR Awards

Community Awareness Award



King Khalid Foundation Award

3rd edition of GPCA Responsible Care Awards



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, we are committed to protecting the rights of shareholders and other stakeholders.

Corporate Governance Framework

Ma'aden established the Corporate Governance Framework by adopting the Corporate Governance Regulations issued by the Capital Market Authority (CMA) of Saudi Arabia. The framework provides Ma'aden's Board, management and stakeholders with a structure along with clear policies and guidelines to make certain the Company's objectives are realized, its stakeholder expectations are managed, and the requirements are met.

Our commitment to strong corporate governance is also critical to our future and our growth plans. As we grow, our corporate governance structures must adapt with us and provide the necessary checks and balances to protect our business, our people and the communities we work with. At Ma'aden, sustainability topics – including our business excellence, environmental footprint and social impact – are among the highest priority and are overseen by the Board.

Awards and recognition



This year, we were awarded the King Khalid Foundation Sustainability Excellence Award, in line with our ambition to become an ESG role model.

We also earned the Makkah Region Economic Excellence Award in recognition of our positive impact on the economic growth of the Makkah region, and through our support and launch of several economic and social projects in the region.

We received Public Investment Fund's (PIF) Organizational Excellence Award, recognizing our positive company culture, driving exceptional results.

Key partnerships in 2023

UN Global Compact Initiative	Ma'aden joined the United Nations Global Compact Initiative, which is the largest corporate sustainability initiative in the world. In line with this commitment, we will continue to implement responsible practices, promote transparency and help achieve the UNSDGs.
Elessent Clean Technologies	Signed an agreement with Elessent Clean Technologies, a Dussur company, that aims to drive innovation and sustainability in Ma'aden's phosphate operations.
Manara Mineral's partnership with Vale Base Metals Ltd.	The partnership is a pivotal step to create a profound impact on the growth and sustainability of the mining industry. The agreement will help expand the global production of critical minerals including nickel, copper and cobalt, powering a sustainable future.
Bangladesh Agricultural Development Corporation (BADC)	Renewed our partnership to supply BADC with 600,000 tons of phosphate fertilizers, reaffirming Ma'aden's leadership in the field of agricultural fertilizers and our commitment to enhance global food security.
CNTXT	Signed a partnership with CNTXT. With the help of AI and machine learning solutions, this will reduce emissions and boost access to resources, thereby strengthening the Kingdom's mining sector. The collaboration also signifies our commitment to new technologies that support Ma'aden's growth.
WAVE	Signed an agreement with WAVE at FII7, an innovative initiative launched by HRH Reema Bandar Al Saud with FII Institute and the Ministry of Energy, to help ocean regeneration.
Saudi Food Bank	Three-year partnership with Saudi Food Bank delivering safe and sustainable food in the Kingdom.
Monsha'at	Signed an agreement with Monsha'at during the Biban23 Forum to join the Jadeer portal, supporting SMEs. This is an extension of the Tharwah initiative to support local content, which was launched within the framework of the strategy to improve the local product.
Children with Disabilities Association	Signed two MoUs, investing over SAR 3 million in physiotherapy clinics to provide medical equipment, supplies and care for children with disabilities.

GOVERNANCE (CONTINUED)

Moving forward

Building on the considerable progress and solid sustainability foundation established over the past few years, Ma'aden has set forth an ambitious ESG agenda to position itself as a leading entity in Saudi Arabia by 2040.

Ma'aden in 2040...

We have bold ESG ambition to become a leading KSA player by 2040

Our goal: Become a local ESG role model

60%

Reduction in scope 1 and 2 GHG emissions intensity

25%

Local female employees

20%

Renewable energy in electrical energy mix

4

Community Eng. Maturity Score

65%

Reduction in groundwater usage intensity

75%

Of suppliers screened for ESG

85%

Of workforce are local employees

Aspiration to achieve carbon neutrality by 2050 and be among the ESG champions in KSA

