

# SUSTAINABILITY REPORT

BUILDING SUSTAINABLE  
MINING IN SAUDI ARABIA  
AND BEYOND

**2019**



## ABOUT THIS REPORT

This is Ma’aden’s 2019 sustainability report. It details the company’s approach to managing material economic, environmental, social, and governance topics and sustainability performance, including Ma’aden’s sustainability objectives and 2025 Strategic Plan.

Ma’aden owns and operates phosphate, aluminum, and gold mines across the Kingdom of Saudi Arabia and internationally through our affiliates. We are one of the world’s largest mining companies, and are active at multiple stages of the commodity supply chain, operating in all geographies.

This sustainability report complies with the core level of the Global Reporting Initiative (GRI) Standards. This report covers all of Ma’aden’s operations during 2019, including affiliates and corporate offices located in the Kingdom of Saudi Arabia.

A summary of our alignment with the GRI Standards can be found in the Index on pages 78-86.

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## LEADERSHIP STATEMENT

Economic and business uncertainty is rising across the world.

These changes bring significant opportunities as well. In response, companies in multiple sectors are already transforming their products, processes, and business models.

With multiple variables in play, however, the challenge for many organizations will be to learn how to thrive in a world of continual turbulence.

Ma'aden is continuing to make structural, strategic, and operating decisions that will dramatically improve our ability to perform in the face of volatility and uncertainty. This will help us build greater resilience into our value chains which will, in turn, help us generate economic profit through cyclical and structural changes in supply and demand.

As our home market of Saudi Arabia pursues economic diversification, growth, and stability under its Vision 2030 initiative, we remain committed to supporting the Kingdom's economic, social, and environmental development objectives. Mining is a key component – the “third pillar” – of the Kingdom's National Industrial Development and Logistics Plan, the largest of the Vision Realization Programs designed to actualize Vision 2030, and Ma'aden has taken the lead in advancing the industry. We will continue to play this role in Saudi Arabia and to build sustainable socioeconomic and communities as we grow and expand into new markets worldwide.

Ma'aden is committed to showing the world that the natural resources we all rely on can be extracted, produced, refined, and

distributed without compromising the wellbeing of our people or our planet. We take this commitment and our responsibility to our stakeholders seriously.

It is with this in mind that we are delighted to be publishing our *2019 Sustainability Report in alignment with the Global Reporting Initiative (GRI) Standards, the International Council on Mining & Metals (ICMM), the United Nations Sustainable Development Goals (SDGs), and other leading practice frameworks for sustainability and responsible mining. This report seeks to highlight our sustainability achievements in 2019 and the two years prior to that, and to demonstrate our commitment to advancing sustainable solutions for the mining sector moving forward, both in the Kingdom and beyond.*

This report details our management approach, performance review, and future ambitions for our eight sustainability priorities: Business Excellence; Health, Safety & Security; Employee Wellness; Community & Human Rights; Economic Contribution; Water Stewardship; Climate Change & Biodiversity; and Tailings & Materials Management.

We are proud to share our achievements in these areas and recognize that there is yet work to be done to strengthen our capabilities as a company, improve the policies, tools, and systems we have in place, and innovate to create sustainable long-term value for our shareholders, our communities, our employees, and the world we live in.

We are proud to have launched our Safety Culture Transformation Program in 2019.





## LEADERSHIP STATEMENT

Our people and their safety remain at the heart of our sustainability efforts and our business, and we are investing in this multi-year program to strengthen our culture of safety across the company and meet our goal of maintaining a **“zero harm”** work environment for all our employees and contractors.

Ma’aden is committed to a culture of operational and business excellence. We hold ourselves to world-class performance standards and leverage robust and relevant metrics and key performance indicators to track, manage, and disclose our performance in a range of Environmental, Social, and Governance (ESG) issues that are material to our business and central to our growth strategy.

In 2019, we developed a company-wide *Sustainability Framework* which adopts leading global practices, standards, frameworks, and guidelines, and outlines our commitment and approach to sustainability management. In an industry wrought with inherent sustainability challenges, we have prioritized the wellbeing, health, and safety of our employees, invested in the socioeconomic development of our local communities, and endeavored to protect our natural environment.

In the coming year we will be implementing our *Sustainability Framework*, publishing the relevant and related policies and position statements, and investing in sustainability culture and capacity building across all our affiliates. We plan to use this report as a baseline with which to benchmark our future achievements, establish new targets and strategies, and hold ourselves accountable to our stakeholders.

In today’s climate of heightened economic uncertainty and unprecedented sustainable development challenges, we will continue to take a responsible, measured, and collaborative approach to strengthening our business, our local economies, and our global industry and supply chains.

I am confident that our efforts to build a strong and sustainable operating platform will enable Ma’aden to serve as a leader for the Kingdom and the global mining and minerals industry, as we work collectively to fortify the stability of our economy, not just to weather the unpredictable challenges that lie ahead, but in the pursuit of enduring prosperity for the long term.

CHIEF EXECUTIVE OFFICER



## OUR APPROACH TO SUSTAINABILITY

### MA'ADEN VISION

A sustainable mining champion with global presence

### MA'ADEN MISSION

Champion the responsible development of the mining sector as the third pillar of the Saudi economy by maximizing the value of the mineral resources for our stakeholders and adopting best in class practices.

### MA'ADEN VALUES

Through our four values—Ownership, Integrity, Teamwork, and Care—Ma'aden promotes sustainability and reaffirms our commitment to contribute to economic development and our own long-term performance, responsibly managing the Environmental, Social, and Governance (ESG) issues that are most material to our operations. Sustainability is in Ma'aden's DNA, is central to our 2025 Strategic Plan, and will continue to be at the heart of Ma'aden's evolving local and global business.



Personal responsibility and empowerment of others for quality results in pursuit of our collective goals.



Honesty, fairness and the highest ethical and business standards in our relationships with each other and with our stakeholders.



Communication and collaboration with each other and with our partners to achieve success together.



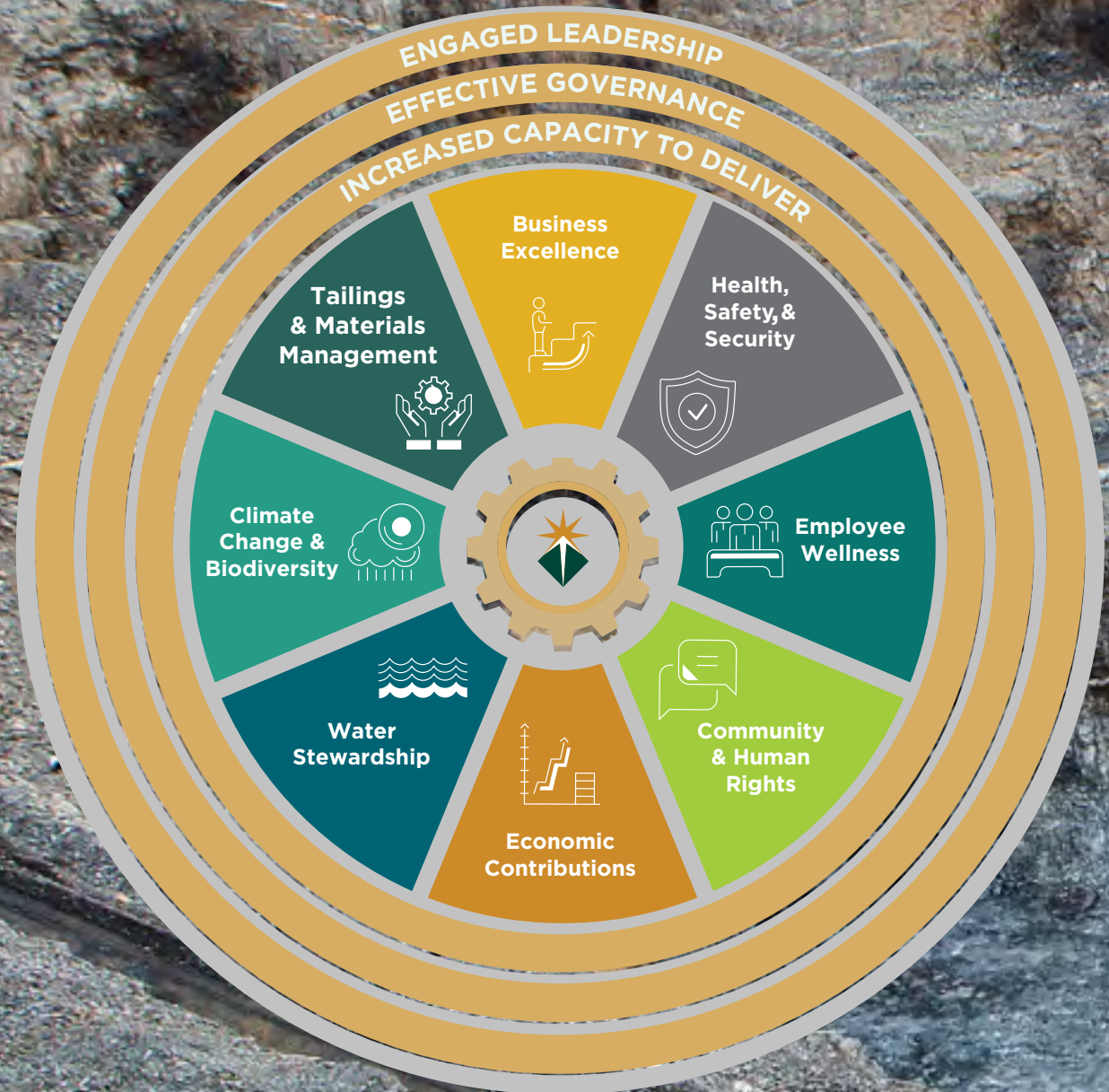
Concern and respect for our people, the communities we touch and the environments we operate in.

## SUSTAINABILITY FRAMEWORK

Ma'aden's Sustainability Framework integrates sustainable business practices into each of our operations.

Ma'aden's *Sustainability Framework* (2019), which was developed in alignment with leading responsible mining standards and sustainability frameworks, aggregates and organizes our sustainability management practices under a single company-wide Framework.

Our *Sustainability Framework* provides clear guidance for commitments, policies, and expectations to improve governance, disclosure, and impact of ESG issues. This allows us to continue to strengthen our contribution to the achievement of Vision 2030 and United Nations Sustainable Development Goals (UN SDGs), 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:

- 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 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 WILL:

- Adopt a leadership model that inspires a culture of sustainability internally and creates informed leaders who actively represent the company as a sustainability champion.
- Implement our sustainability framework through promoting transparency, consistency, and accountability.
- Empower and hold each business accountable to have the capacity to implement sustainable practices that fit its scale, nature, and risk profile.







## OUR APPROACH TO SUSTAINABILITY

### RESPONSIBLE MINING INITIATIVES AND SUSTAINABILITY FRAMEWORKS

By applying our *Sustainability Framework*, Ma'aden aspires to align with numerous leading global, national, and regional frameworks, standards, and initiatives in our journey to develop sustainability strategies, policies, programs, and metrics. We pledge going forward to meet the highest standards of environmental, social, and governance performance.

#### SUSTAINABILITY STANDARDS AND FRAMEWORKS



Vision 2030



UN Sustainable Development Goals (UN SDGs)



Voluntary Principles on Security and Human Rights



UN Global Compact



Sustainability Accounting Standards Board (SASB)



IFC's Environmental and Social Performance Standards (ESS)



Carbon Disclosure Project (CDP)



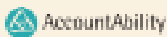
Task Force on Climate-Related Financial Disclosure (TCFD)



Global Reporting Initiative (GRI)



United Nations Guiding Principles on Business and Human Rights



AccountAbility

#### INDUSTRY FRAMEWORKS AND ASSOCIATIONS



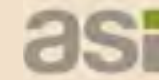
International Council on Mining and Metals



International Fertilizer Association (IFA)



World Gold Council



Aluminum Stewardship Initiative



Responsible Care



Extractive Industries Transparency Initiative



IMA Europe



Gulf Petrochemicals & Chemicals Association



Gulf Aluminium Council



## SUSTAINABILITY GOVERNANCE

### MA'ADEN SUSTAINABILITY GOVERNANCE

Sustainability Function	BOARD	<b>Board Committee</b>	<ul style="list-style-type: none"> <li>Oversee and govern the Sustainability Framework and its implementation</li> <li>Monitor overall company sustainability performance</li> </ul>
		<b>CEO</b>	<ul style="list-style-type: none"> <li>Chair the corporate Sustainability Committee</li> <li>Actively engage stakeholders and ensure visibility by promoting sustainability practices</li> <li>Report overall sustainability performance to the Board of Directors by promoting sustainability practices</li> </ul>
	CORPORATE	<b>Corporate Committee</b>	<ul style="list-style-type: none"> <li>Own sustainability risk</li> <li>Integrate Sustainability Framework in the overall business model and strategy</li> <li>Oversee performance of the businesses</li> <li>Allocate resources</li> <li>Promote a culture of sustainability across Ma'aden and its affiliates</li> </ul>
		<b>Affiliates Committee</b>	<ul style="list-style-type: none"> <li>Integrate Sustainability Framework in the business model</li> <li>Prepare strategy, business plan, organizational architecture, and budget</li> <li>Oversee businesses performance</li> <li>Allocate resources</li> <li>Report sustainability KPIs and metrics to Ma'aden's Corporate Committee</li> </ul>
	AFFILIATES	<b>Business Unit Management</b>	<ul style="list-style-type: none"> <li>Continually improve the organizational capacity to deliver</li> <li>Implement Sustainability Framework</li> <li>Engage relevant stakeholders</li> <li>Manage and maintain sustainability data</li> <li>Prepare periodic reports</li> </ul>
<ul style="list-style-type: none"> <li>Engage corporate stakeholders</li> <li>Advise the Board and management on sustainability strategy and practices</li> <li>Assure the performance of businesses</li> <li>Manage annual sustainability reporting and disclosure</li> </ul>			

ASSURE

ADVISE

### How We Manage Sustainability

The importance of sustainability for Ma'aden's future success is reflected in our comprehensive sustainability governance structure, where responsibility for sustainability begins with our Board of Directors and CEO and extends to every employee.

In 2018, the company created the Board- level Safety and Sustainability Committee (SSC) that gives the Board transparency into and oversight of all our sustainability efforts. The remit of the SSC includes the safety and health of our employees and contract workers, security of our people and assets, environmental affairs and stewardship, stakeholder and community engagement, and the development, tracking, and reporting on key metrics related to our ESG goals. The SSC is also responsible for reviewing all policies, management processes, and business plans related to sustainability and ensuring that appropriate financial and human resources are allocated to EGS initiatives and reporting.

In 2020, Ma'aden's *Sustainability Framework* will be implemented across all our business

units. Responsibility to effectively manage sustainable practices will fall on managers at every Ma'aden affiliate to take an active role in integrating sustainability into their core businesses going forward.

Ma'aden's business units are expected to assign clear roles and responsibilities for the implementation of pertinent environmental, social, and governance initiatives, to analyze and report on ESG risks specific to their operation, and to continually engage and communicate with all stakeholders on material ESG issues.

Metrics will be established for managers and employees at every level to measure performance against the company's sustainability objectives and governance protocols.

## Living Up to the Highest Standards

Ma'aden follows the highest ethical standards in all its business activities including meeting or exceeding the expectations set out in applicable laws

and regulations in every region where we operate.

Ma'aden's expectations of all its employees and partners are explicitly spelled out in our comprehensive Code of Conduct (the "Code"), all signatories are required to reaffirm their compliance annually. We conduct multiple face-to-face training sessions every year on the Code and emphasize any new or updated features. We have recently automated the annual affirmation process, which resulted in 100% compliance with this important task.

The Code itself provides a framework and important guidelines for carrying out Ma'aden's business ethically in accordance with our values and all applicable laws and regulations. This Code sets out our mutual obligations toward our employees, business partners, customers, and the communities in which we operate, so that these responsibilities are clearly understood and it agreed upon by all stakeholders.

It describes in detail the ways we expect our staff and trading partners to exercise good judgment, care, and consideration in conducting our business. We recognize that the long-term



success of our operations critically depends on building and maintaining positive relationships, respect, and trust with communities.

Local and global regulations and guidelines constantly change, impacting Ma'aden's business. Ma'aden, likewise, continually reviews and upgrades the code to reflect those changes.

Recent initiatives, including Ma'aden's independent whistleblower hotline, enhanced due diligence reports, and the compliance page on the Ma'aden website, have strengthened controls surrounding compliance while reducing related risk exposure. We continue reviewing, developing, and drafting Ma'aden's policies to ensure they remain aligned with international best practices on ethics, relevant compliance risks, and current national and international regulations.



## ENGAGING STAKEHOLDERS

### Listening to all Affected Stakeholders

Ma'aden creates opportunities for constructive, inclusive conversation with members of communities in which we do business, as well as our employees, partners, shareholders, the media, and other interested parties. These discussions are conducted in alignment with the AccountAbility AA1000 Stakeholder Engagement Standard as well as the International Association for Public Participation (IAP2) standards. Every affiliate company is expected to participate. While this formal stakeholder engagement process, conducted in the course of developing our 2018 materiality assessment, was the first of its kind undertaken by Ma'aden, the results were so important to our business that we plan to follow the model on an ongoing basis. With our employees, we discuss ways for them to best be advocates for, and acts on, Ma'aden's sustainability commitments.

With our suppliers and partners, we work together on ways to develop and maintain transparency and accountability across the value chain through active stakeholder engagement and timely reporting and disclosure.

With local communities, we discuss together the best ways we can help them, give priority to local Saudis in hiring, and invest in economic development, education, and the development of local supply chains.

These engagement commitments reflect our values, allow internal and external stakeholders to hold us accountable, and are an essential element in making our business sustainably competitive.





## IDENTIFYING KEY STAKEHOLDERS AND ENSURING ONGOING ENGAGEMENT

Stakeholders	Engagement Methods	Stakeholder Priorities			
		Economy & Governance	Employee	Environment	Social
<ul style="list-style-type: none"> <li>• Board</li> <li>• Investors</li> <li>• Ministry of Industry &amp; Mineral Resources</li> <li>• Ministry of Energy</li> <li>• Royal Commission (RC)</li> <li>• General Authority for Meteorology &amp; Environmental Protection (GAMEP)</li> <li>• Partners</li> <li>• Ministry of Commerce</li> <li>• Public Investment Fund (PIF)</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews</li> <li>• Regular Meetings</li> <li>• Annual General Assembly</li> <li>• Board of Directors Meetings</li> <li>• Compliance requirements</li> <li>• Regulatory frameworks</li> <li>• Regular reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory &amp; Legal Compliance</li> <li>• Economic Development</li> <li>• Local Content Development</li> <li>• Business Integrity</li> <li>• Senior Executive Remuneration</li> <li>• Site Closure</li> <li>• Payments to Producing Countries</li> </ul>	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• Engagement &amp; Satisfaction</li> <li>• Gender Equity</li> </ul>	<ul style="list-style-type: none"> <li>• Water Resource &amp; Quality Management</li> <li>• Air Quality</li> <li>• Climate Change &amp; Energy Efficiency</li> <li>• Hazardous Materials Management</li> <li>• Biodiversity &amp; Ecosystem Services</li> <li>• Tailings Management</li> <li>• Waste</li> </ul>	<ul style="list-style-type: none"> <li>• Social Initiatives</li> <li>• Community Engagement</li> <li>• Community Health &amp; Safety</li> <li>• Grievance &amp; Remedy</li> <li>• Human Rights</li> </ul>
<ul style="list-style-type: none"> <li>• Employee</li> <li>• Communities</li> <li>• Regional Governorates</li> <li>• Media</li> </ul>	<ul style="list-style-type: none"> <li>• Employee Surveys</li> <li>• Daily, Weekly, &amp; Quarterly Meetings</li> <li>• Questionnaires</li> <li>• Representatives Engagement</li> <li>• Community Engagement Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory &amp; Legal Compliance</li> <li>• Economic Development</li> <li>• Local Content Development</li> <li>• Business Integrity</li> <li>• Shared Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• Engagement &amp; Satisfaction</li> <li>• Development &amp; Training</li> <li>• Fair Compensation</li> </ul>	<ul style="list-style-type: none"> <li>• Water Resource &amp; Quality Management</li> <li>• Air Quality</li> <li>• Hazardous Materials Management</li> <li>• Biodiversity &amp; Ecosystem Services</li> </ul>	<ul style="list-style-type: none"> <li>• Social Initiatives</li> <li>• Community Engagement</li> <li>• Community Health &amp; Safety</li> <li>• Grievance &amp; Remedy</li> <li>• Resettlement</li> </ul>
<ul style="list-style-type: none"> <li>• Customers</li> <li>• Vendors</li> <li>• Ministry of Human Resource &amp; Social Development</li> <li>• Ministry of Environment, Water, &amp; Agriculture (MEWA)</li> <li>• Shareholders</li> <li>• Capital Market Authority (CAM)</li> </ul>	<ul style="list-style-type: none"> <li>• Surveys</li> <li>• Executive Engagement</li> <li>• General Assembly Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory &amp; Legal Compliance</li> <li>• Economic Development</li> <li>• Local Content Development</li> <li>• Business Integrity</li> <li>• Senior Executive Remuneration</li> <li>• Innovation</li> <li>• Responsible Procurement &amp; Supplier Assessment</li> <li>• Beneficial Ownership</li> </ul>	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• Gender Equity</li> <li>• Development &amp; Training</li> <li>• Fair Compensation</li> <li>• Non-Discrimination &amp; Equal Opportunity</li> <li>• Worker Grievance</li> <li>• Recruitment &amp; Retention</li> <li>• Elimination of Forced Labor &amp; Child Labor</li> </ul>	<ul style="list-style-type: none"> <li>• Water Resource &amp; Quality Management</li> <li>• Air Quality</li> <li>• Climate Change &amp; Energy Efficiency</li> <li>• Hazardous Materials Management</li> <li>• Biodiversity &amp; Ecosystem Services</li> <li>• Waste</li> </ul>	<ul style="list-style-type: none"> <li>• Social Initiatives</li> <li>• Community Engagement</li> <li>• Community Health &amp; Safety</li> <li>• Grievance &amp; Remedy</li> </ul>
<ul style="list-style-type: none"> <li>• Public</li> <li>• Ministry of Economy &amp; Planning</li> <li>• Designated National Authority for Clean Development Mechanism (CDM/DNA)</li> <li>• Non-Profit Organizations (NPOs)</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Meetings</li> <li>• Representatives Engagement</li> <li>• Regular Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory &amp; Legal Compliance</li> <li>• Economic Development</li> <li>• Local Content Development</li> <li>• Business Integrity</li> <li>• Innovation</li> </ul>		<ul style="list-style-type: none"> <li>• Water Resource &amp; Quality Management</li> <li>• Air Quality</li> <li>• Climate Change and Energy Efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Social Initiatives</li> <li>• Community Engagement</li> </ul>



## MATERIALITY ASSESSMENT

### Determining What Really Matters

In 2018, Ma'aden completed its first materiality assessment. It was based on exhaustive consultations with selected internal (e.g., managers, employees) and external (e.g., community, regulatory)

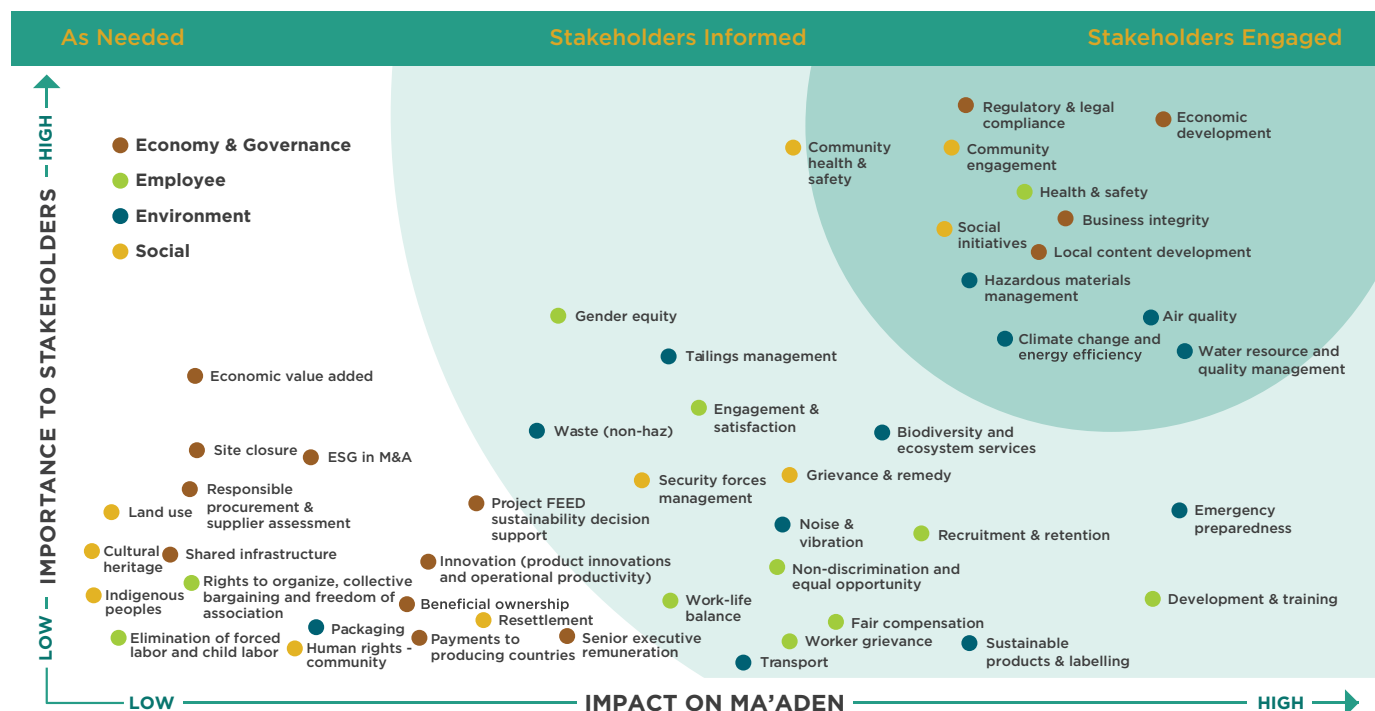
stakeholders. The resulting materiality analysis shortlisted the 10 most important issues for Ma'aden. The results gave us a current, relevant, and meaningful picture of the impacts of our business on our stakeholders, and will serve to guide our decision-making, strategic planning, and

reporting going forward. They point to a range of sustainability issues concerning the economy, our corporate governance, employee relations, the environment, and community development where Ma'aden has, and will continue, to best direct its attention.

### MATERIALITY ASSESSMENT MATRIX: MA'ADEN'S MOST CRITICAL MATERIAL ISSUES

- Economic development
- Business integrity
- Health & safety
- Regulatory & legal compliance
- Local content development
- Air quality
- Water resource & quality
- Management
- Community engagement
- Climate change & energy efficiency
- Hazardous materials management
- Social initiatives

### ENGAGEMENT STYLE





# 02

## BUSINESS EXCELLENCE

Ma'aden strives to be internationally recognized as a sustainable brand, driven by robust business practices, innovation, and values.



UN Sustainable Development Goals





## BUSINESS INTEGRITY & ETHICS

### A Culture of Integrity

Integrity is one of Ma'aden's four guiding core values and a foundational issue for the company. Accordingly, we seek to maintain a culture committed to honesty, fairness, and the highest ethical and business standards in our relationships with each other, our customers, and our other stakeholders. We conduct our business in compliance with all applicable laws, local regulations, and our values, including anti-corruption practices and regulations, codes of conduct donations, data privacy, and transparency. We have consistently fostered an ethical corporate culture focused on our core values.

### Code of Conduct

Ma'aden has a comprehensive Code of Conduct that provides a framework and a set of guidelines for carrying out the company's business ethically and is administered by a corporate-level Compliance Department comprised of senior Compliance Officers who monitor and evaluate operational and employee conformity. The Code of Con-



**Zero incidents of discrimination  
were reported at Ma'aden in 2017, 2018, and 2019**

duct is applicable and distributed to all Ma'aden employees and everyone with whom Ma'aden does business. It sets forth the company's policies, standards, and norms of behavior for workplace conduct, business practices, the safeguarding of information and property, and for communicating with the government, local communities, and the media. We have a similar code of conduct

for suppliers and partners which is integral to the supplier onboarding process and sets out expectations for integrity and ethical behavior. Regulatory compliance is managed and monitored through a robust Compliance Management System, and an independent compliance hotline is maintained through a partnership with a leading global provider of integrated risk and compliance management platforms.





## SUPPLY CHAIN MANAGEMENT

Responsible supply chain management is critical to Ma'aden's success. To ensure the resiliency of our operations, Ma'aden insists that our suppliers meet our standards for ethics and integrity, as well as industry benchmarks related to environmental, social, and governance issues.

Ma'aden's Procurement Policy and Supplier Code of Conduct cover both affiliates and third-party suppliers, and detail our expectations related to lawful behavior, business ethics, Saudization, risk management, health, safety, the environment, and other pertinent issues that ensure Ma'aden's competitive standing and reputation are protected.

Ma'aden actively encourages suppliers and affiliates to adopt leading environmental practices as we incorporate environmental criteria in all our procurement decisions.

The company maintains a Supplier Management Relationship (SMR) system to track and report on our supplier and affiliate compliance to these standards and has processes in place to help it efficiently identify and mitigate shortcomings. At the corporate level, Corporate Procurement and due diligence when onboarding suppliers, and oversee strong, ongoing supply chain risk management processes.

Ma'aden leverages its supply chain whenever possible to drive Saudi economic growth both within and beyond the mining industry.

Our Local Content program provides a formalized operating model for preferencing spending on Saudi labor, goods, services, assets, and technology, as a way of maximizing the mining industry's contribution to the overall Saudi economy. (For more information on our Local Content program, see Economic Contribution: Local Content on page 44.)



# 100%

of Ma'aden's operations were assessed for risks related to corruption with **no incidents identified.**



## INNOVATION

### Digitalization and R&D

For Ma'aden, as one of the fastest growing mining and metals conglomerates in the world, innovation, digitalization, and research and development (R&D) are at the forefront of our business. We invest regularly in innovative technologies, systems, processes, and practices to improve yields and efficiencies, to reduce the environmental impacts of our operations, and to enhance the lives of our employees and local communities.

### Innovation and the Environment

At Ma'aden, we strive on a daily basis to reduce water usage and intensity and to cut carbon emission, while finding innovative ways to extend the life cycles, recycling, and reuse of both mined products and tailings. We promote the use of recycled or secondary materials over virgin materials wherever possible, and we leverage innovation in manufacturing and design to increase the circularity of our products and explore and prioritize new opportunities to promote the use of recycled materials through design and innovation in technology and business models.

#### Current ongoing initiatives focus on four main goals:

- Enhancing ore-body knowledge and mine planning with real-time data
- Optimizing yield, energy, throughput, and quality at all operating sites
- Implementing digital predictive maintenance programs
- Adopting digital ways of working across the company

To maintain our world-class competitive position across a number of commodities, Ma'aden is pursuing partnerships to capture the opportunities found in digitalization and innovation and will invest in the application of pioneering technologies in our operations to remain an industry leader in the Kingdom and abroad.

### Ma'aden Suggestions System (MASS)

We also encourage all employees to take the initiative to improve operating policies and procedures. The Ma'aden Suggestion System

(MASS) is a web- based system available to all Ma'aden employees to submit and implement non-cash related ideas that generate identifiable improvements.

To date, employees in our aluminum operations have been the most active on the MASS system, and we are taking steps to encourage employees from our gold, phosphate, and metals operations to participate more collaboratively.



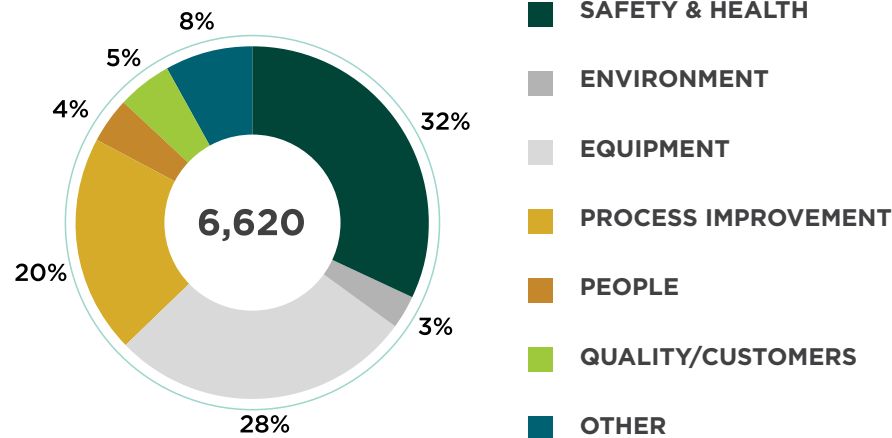
## OVERVIEW OF SUGGESTIONS ACROSS THE YEARS 2016-2019

MASS was launched in Aluminum in 2014 and in the other businesses in Q4 of 2019

### ALUMINUM

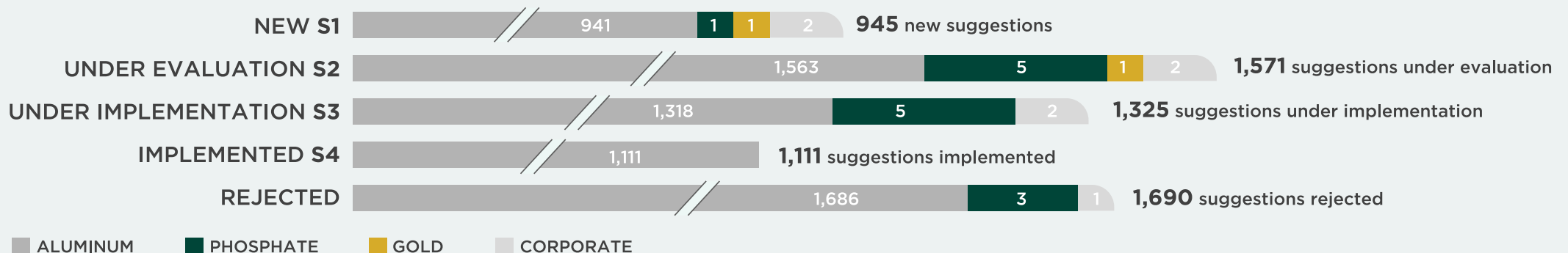
# 6,620

suggestions since 2016



Ma'aden is in the process of rolling out MASS to all affiliates with the intention of promoting innovative products and services that will contribute to the success of Ma'aden.

### SUGGESTION CYCLE





## INNOVATION



## TAKING TO THE AIR TO “SEE” WHAT’S UNDERGROUND

Ma’aden Industrial Minerals Company (IMC) has pioneered the use of drones to expedite and reduce the cost of routine survey activities while improving overall safety. IMC drones are deployed to conduct ore deposit surveys, update topographic maps, perform safety inspections, and provide traffic control, and are prepared to aid search and rescue and help prevent flooding and water harvesting in its mines should the need arise. Surveys that used to take as many as six days can now be completed in six hours, and to a much greater degree of accuracy, creating multiple operational savings. The drones’ ability to potentially perform search and rescue and other risky mine operations without putting any personnel in harm’s way is a critical added benefit and demonstrates

how Ma’aden is putting innovative technology to use in the service of its strong safety culture.

### BENEFIT REALIZED

- **Time Efficiency:** The amount of time spent to complete the survey for ore deposits now only takes six hours to complete without the need for a geologist.
- **Cost Reduction:** The reduction of time, human capital, and other resources required for surveys has significantly reduced cost for underground mining activities.
- **Safety Risk Reduction:** By using a drone to undertake safety inspections, ore deposit surveys and other activities, there is minimal to zero safety risk to the staff at the mine.

## MINE CLOSURE PLANNING

Planning for the future of our sites is core to responsible mining, and we will ensure that all of our assets develop closure plans enabling us to minimize the impacts and risks and to maximize benefits for stakeholders.

Ma’aden has not yet had to decommission or close a mine. We are, however, expecting to need to do so in the coming years. We are developing an integrated strategy to ensure effectiveness in the planning and implementation of our site closure, following the major principles of ICMM guidance on mine closure and land reclamation:

- Clear and timely planning
- Implementing and monitoring against clear success criteria
- Building trust through engagement and collaboration with local communities throughout the process
- Planning to mitigate job losses and other disruptions caused by the closure
- Following careful land rehabilitation practices throughout the process
- Creating and implementing a socially and environmentally sensitive plan for reuse





# 03

## HEALTH, SAFETY, & SECURITY

Ma'aden aims to create a “zero harm” work environment and strengthen the safety culture of our employees, contractors, customers, and host communities.

3 GOOD HEALTH  
AND WELL-BEING



8 DECENT WORK AND  
ECONOMIC GROWTH



UN Sustainable Development Goals

expertise



# HEALTH

At Ma’aden, Health, Safety, and Security is being embedded as a way of living rather than a business imperative. Stakeholders are engaged through a positive safety culture, ensuring that an ideal workplace environment is created in which all employees, contractors, business partners, associated families, and communities can thrive. Together, we strive toward excellence in Health, Safety, and Security while making significant contributions to the growth of Ma’aden.

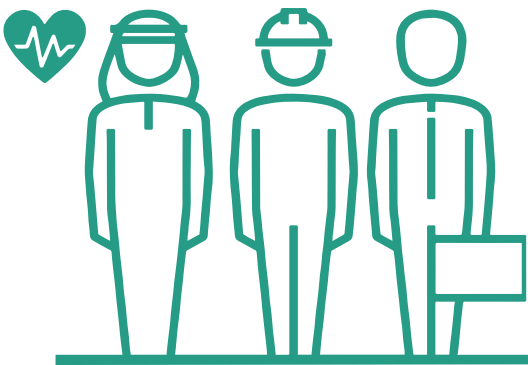
In striving to improve overall employee wellbeing, the physical and mental health of employees and contractors are the foundations of Ma’aden.

Ma’aden is embedding wellbeing requirements into the existing systems and processes. There is a greater emphasis on increasing employee awareness of best practices in health through tailored training and campaigns.

Ma’aden prioritizes employee and contractors health and wellbeing by strengthening the health surveillance system of our operations and by introducing risk-based monitoring of our employees and contractors. We

perform ongoing Occupational Health Risk Assessments in all our work environments to identify potential hazards and risks and develop control measures.

We also provide all employees and contractors with ongoing health and safety training and have invested in numerous programs aimed at maintaining a nurturing environment that improves employee health and wellbeing.



## HEALTH & WELLBEING

Development of organization-wide health and wellbeing standards, procedures, and healthy working practices based on international best practices and standards.

We are focused on improving work-related processes to prevent risks of chronic disease, injury, and other critical elements of everyday health and wellbeing, including:



High levels of stress



Nutritional deficiencies and insufficient sleep



Physically demanding tasks



Long working hours



Hazardous working conditions



## SAFETY



Ma'aden recognizes that mining and mineral processing can be an inherently dangerous industry. Therefore, we are dedicated to fostering a workplace culture where safety is a precondition for work, through the promotion of a positive safety culture among all our employees, contractors, customers, and host communities.

Ma'aden's Board has established a Safety and Sustainability Committee that functions alongside the other Board sub-committees as part of Ma'aden's corporate governance program.

This level of governance provides an increased level of oversight and supervision of safety and risk at all levels of the organization. At a Board level, there is stringent oversight of the company's safety strategy and whether it is delivering the desired performance outcomes.

The Executive Safety Council is assessing safety and risk on a more tactical level, ensuring that the systems and processes that make up the strategy are being implemented within the business.

The corporate and affiliate safety teams are working together to design and implement the processes and systems that will deliver the performance improvements under the risk-based approach to safety.

### HEALTH AND SAFETY

	2017	2018	2019
<b>Lost Time Injury (LTI) Rate</b>	<b>0.05</b>	<b>0.11</b>	<b>0.12</b>
<b>Health and Safety Injury Rate</b>	<b>0.32</b>	<b>0.26</b>	<b>0.37</b>
<b>Total Number of Fatalities</b>	<b>2</b>	<b>2</b>	<b>0</b>





## SAFETY

### SAFESTEPS SAFETY CULTURE TRANSFORMATION PROGRAM

In 2018, Ma'aden embarked on a multi-year journey toward a safer and healthier work environment through the development and implementation of a comprehensive safety culture transformation program, SafeSTEPS, that engages every aspect of the business across all levels.

The SafeSTEPS goals and objectives go hand in hand with Ma'aden's overall vision to be a sustainable, global mining leader that contributes to the growth and prosperity of the Kingdom of Saudi Arabia.

We are also benchmarking against global mining and manufacturing peers with excellent safety performance credentials to support the development of best in class safety practices at Ma'aden.

### SAFESTEPS INITIATIVES



**Health, Safety and Environment (HSE) Governance**



**Life Saving Rules**



**Safety Leadership Program**



**HSE Transformation Digitalization**



**Engagement through Communications**



**HSE Management System**



**Safety Award and Recognition**



**Health and Wellbeing**



**Ambassador Program**



**HSE Competency**



**Risk Identification and Containment**



**HSE Integration**

### The OVERARCHING GOAL is a *shift*

**FROM**  
a reactive,  
performance-  
based approach



**TO**  
a proactive,  
risk-based  
approach



### KEY OBJECTIVES

**Proactive management of risks and hazards  
Implementation of Health, Safety, & Environment (HSE) as a pre-condition for work**

### SAFESTEPS ACHIEVEMENTS

1. Site-specific transformation plan establish, followed on a monthly basis by each site/affiliate
2. SMEs across the group that plan and execute initiatives and support implementation
3. HSE standards were defined for implementation
4. Behavioral coaching for executives (100+)
5. HSE leadership training/HSE specialist training
6. Life Saving Rules training
7. Identification of safety ambassadors (100+)
8. Launch of Health & Wellbeing programs
9. Launch of Employee Engagement Survey (91% participation rate)
10. Visible engagement and commitments from employees and contractors
11. Visible improvement in incident reporting and investigations
12. Increased risk awareness among employees
13. Personalized communication campaigns





## SECURITY

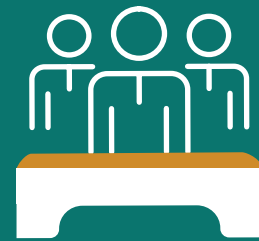
### Ma'aden conducted multiple activities to proactively identify, assess, and mitigate security risks including:

- Conducting compliance audits at different Ma'aden sites to assess and improve compliance with the High Commission for Industrial Security (HCIS) directives.
- Supporting different ongoing projects and coordinating the submittals to HCIS for several security systems packages and fire protection packages.
- Developing security training courses for Ma'aden security personnel in coordination with an accredited training provider.









## 04 EMPLOYEE WELLNESS

Ma'aden strives to provide our employees with a nurturing environment that improves their health and wellbeing.



UN Sustainable Development Goals

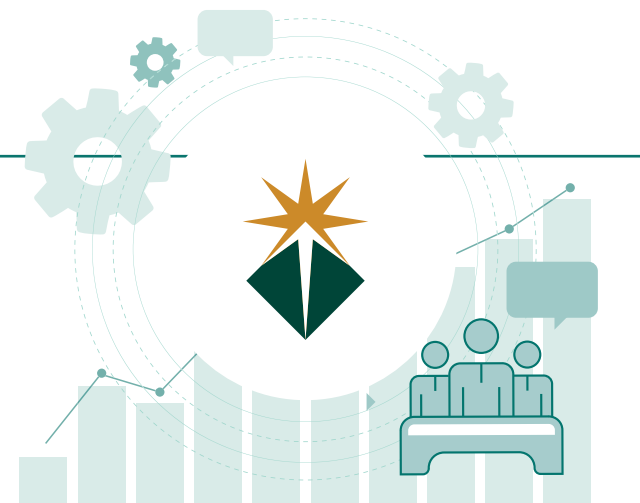


## EMPLOYEE WELLNESS

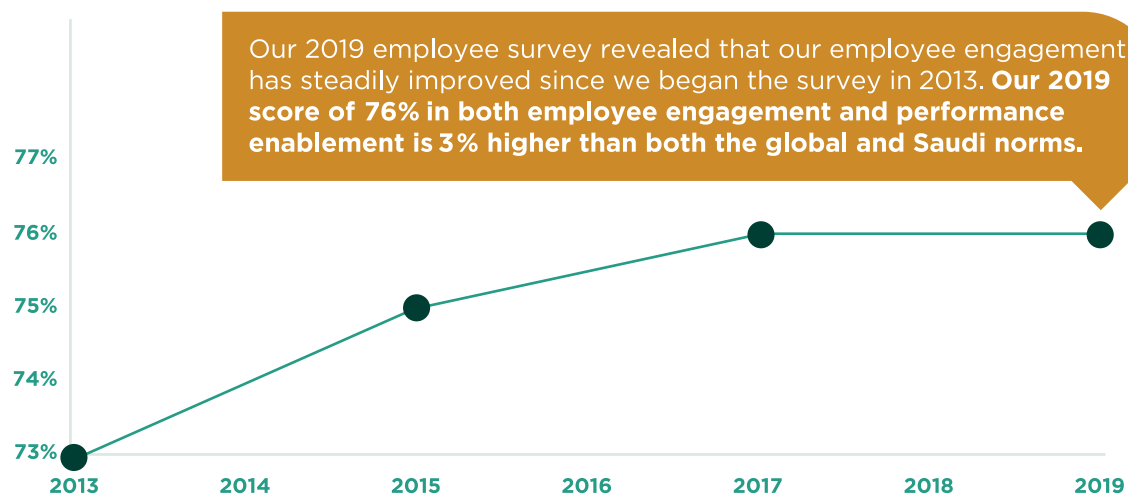
Our people are essential to Ma'aden's success. We endeavor to provide our employees with a nurturing environment that improves their health and wellbeing. We leverage open communication, leadership visibility, and active engagement to maintain a strong understanding of our employees' needs while building a culture of mutual trust, respect, and appreciation across the organization. Consistent employee engagement results in the kind of top-down and bottom-up collaboration that

makes Ma'aden's business safer and more productive.

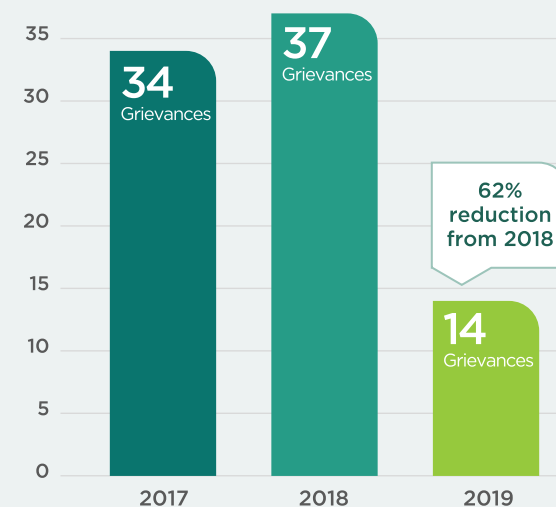
We conduct an employee engagement survey each year, and the most recent survey indicates we have made significant progress in improving the level of engagement of employees. This progress is the result of a concerted effort by the executive leadership to address issues identified as part of the employee engagement survey and focus groups.



### EMPLOYEE ENGAGEMENT, 2013-2019



### TOTAL NUMBER OF GRIEVANCES







## TRAINING & EDUCATION

Ma'aden encountered a unique challenge in fulfilling our mission of developing a modern mining industry in Saudi Arabia: identifying, training, and retaining a workforce with the appropriate knowledge, talent, and skill set necessary to make our complex and highly technical business a success. This challenge informed Ma'aden's employee relations from the start. We empower our people through opportunities for continual personal and professional growth and the tools and resources needed to strengthen their skills and enhance their capabilities.

As we continue these efforts, we are focused on recognizing and training the leadership and talent needed for Ma'aden's future success. We are taking practical steps to set our people up to succeed as the future leaders of the Kingdom and the global mining industry. Training and professional development programs are an integral part of Ma'aden's strategy to create a pool of highly talented, skilled, and qualified candidates to support our continued growth.

Continuing education and skills training are critical to operating safely and profitably,

providing us with a better workforce and our employees with opportunities for growth and promotion. Over the 10 years since our IPO, we have seen positive outcomes and practical results including numerous promotions and even several graduations from prestigious MBA programs, and are continuously growing our robust selection of educational and training opportunities.



### EMPLOYEES

	2017	2018	2019
<b>Total Number of Employees</b>	5,993	5,773	5,746
<b>Total Number of Local Nationals</b>	3,876	3,806	3,908
<b>Total Foreign Employees</b>	2,117	1,967	1,838
<b>Percentage (%) of Local Nationals</b>	65%	66%	68%
<b>Turnover Rate</b>	5%	5%	4%
<b>Average Number of Hours of Training Per Each Saudi Employee</b>	43	51	45
<b>Percentage (%) of Employees Receiving Regular Performance and Career Development Reviews</b>	57%	59%	58%

Scope Note: Total Number of Employees includes all Full Time Equivalent, excluding contractors and secondary employees



## TRAINING & EDUCATION

In alignment with both our Saudization program and 2025 Strategic Plan, Ma’aden offers pre-employment training, on-the-job training, development assignments, in-Kingdom training programs, scholarships, international educational opportunities, and more.

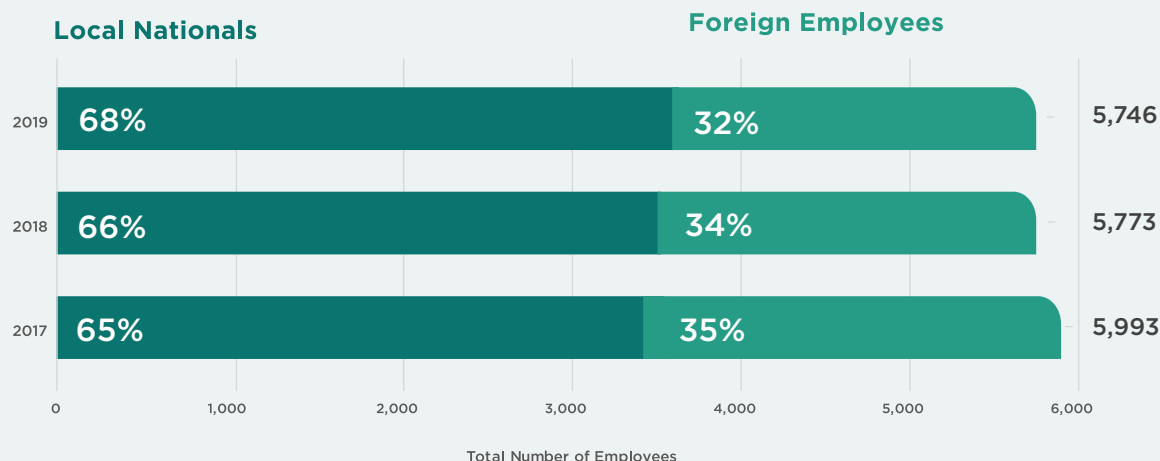
We have strong, ongoing partnerships with the Saudi Ministry of Education (MOE), Saudi universities, and the Technical and Vocational Training Center (TVTC) in Riyadh, and hundreds of our employees have utilized these programs.

Saudi Mining Polytechnic (SMP), our partnership with the TVTC, has graduated hundreds, helping us improve performance, enhance safety, and reduce cost across our operations, while pursuing a long-term strategy for talent identification and development. Select SMP graduates have gone on to complete degrees in Earth Sciences at the King Abdulaziz University.

Ma’aden has invested in 200 e-learning licenses. To date, our employees have completed 1,195 learning hours of training. Additionally, we prior-

itize identifying and developing potential future management talent. All members of our management team, including the President and the CEO, work to identify employees with management potential. We have partnered with McKinsey & Company to scout multiple Saudi campuses and identify potential leadership talent for Qimam (“Top”) fellowships for study inside and outside of the Kingdom. Additionally, our own Ma’aden Academy has identified and enrolled numerous senior managers and future potential leaders in MBA and EMBA programs around the world.

### SAUDIZATION



**100%**  
of Ma’aden’s employees were trained in human rights policies or procedures concerning aspects of human rights that are relevant to operations in 2017, 2018, and 2019.



## DIVERSITY & 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, 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.

Ma'aden's diversity efforts are also about creating employment and educational opportunities for Saudi citizens in remote communities. The development of our mines not only boosts local economies, but also leads to the availability of a wider variety of career and professional development opportunities for Saudi improvements in the availability of educational opportunities for local communities.

At the two industrial cities, Ras Al-Khair and Wa'ad Al Shamal alone, Ma'aden has created jobs for over 19,000 Saudi nationals, nearly two-thirds of which were filled by local residents.



**11** female employees were recruited at Ma'aden Headquarters in 2019.

## WOMEN ON BOARD

While women are not currently employed in remote mining operations, Ma'aden strives to increase the number of its female staff wherever possible. We have succeeded in identifying and hiring women in senior positions in investor relations, project management, and in the engineering and human resources departments. These hires have been made pursuant to our formal Female Employment Plan, which outlines our specific goals for the recruitment, training, and accommodation of female employees.



## HOUSING PROGRAM

Ma'aden Affiliates have established an employee Home Ownership Program (HOP) that offers eligible employees the opportunity to buy at a competitive price and through a payment plan, housing units constructed by the company.



## SAVINGS PLAN PROGRAM

Ma'aden Affiliates have established an employee contribute up to 15% of their base pay which is then matched by the company up to 100%, based on an employee's years of service.



## RECREATIONAL FACILITIES

Ma'aden considers leisure and sporting activities to be crucial for people to maintain both their physical and mental wellbeing, so all Ma'aden locations that include on-site residences also provide a selection of leisure-oriented amenities including swimming pools, gyms, communal lounges, and more.

## QUALITY OF LIFE INITIATIVES

Ma'aden takes a deliberate multichannel approach to enhance the quality of life of its employees physically, mentally, and emotionally. This includes our robust employee benefits programs covering health care, wellness, and education.

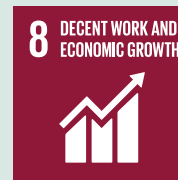




# 05

## COMMUNITY & HUMAN RIGHTS

Ma'aden aspires to be a welcomed neighbor, respecting human rights and maintaining meaningful relationships with our host communities globally.



UN Sustainable Development Goals



## COMMUNITY & HUMAN RIGHTS

**At Ma'aden, our long-term success is directly linked to the success of the local communities in which we do business, and the rights of all people affected by our operations. We are determined to be a welcomed neighbor that respects the human rights and dignity of all citizens and community stakeholders, and are committed to a community engagement process based on mutual respect that is consistent with traditional decision-making processes.**

Ma'aden community development and engagement activities are conducted as part of a formal CSR program designed to empower locals through local hiring, local buying, and local skill development, and to drive strategic social investment by addressing impact assessment and local pressing needs. We believe that our success depends on the success of the local communities that host our operations, and being a partner in prospecting and a catalyst for growth in the Kingdom, supporting the ambitious initiatives set out in Vision 2030. It is this belief that shapes our social performance, which is invariably linked to community needs and impacts. While CSR performance metrics are centrally reported and assessed, we recognize that community needs differ at our different sites, and consequently, we give each site the authority and responsibility for developing social directions and goals best suited to local circumstances.

Ma'aden has taken important, concrete steps as we look to constantly improve the impacts of our engagements, local empowerment, and social investments.

We have built a Community Management System which tracks improvement overall and at each site, and is the basis of a quantitative yearly assessment. We set specific performance targets with respect to social engagement, local content, and social

investment which all sites are required to meet, as we conduct annual assessments of all sites against our target.

Finally, we hold sites responsible for performance on social indices by linking staff performance evaluations to key social KPIs. This effort has been ongoing for several years, and overall CSR performance scores have improved every year since we started measuring them in 2013.



## MA'ADEN COMMUNITY MANAGEMENT SYSTEM

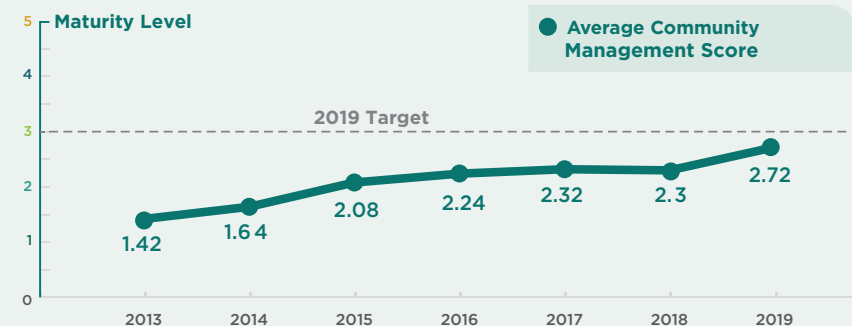
MA'ADEN'S ASPIRATION: TO BE A WELCOMED NEIGHBOR IN AN EMPOWERED ECOSYSTEM

The five maturity levels indicate the progress made by each site in community care and engagement.



Since 2013 when we introduced the Community Management System (CMS), we have been closely monitoring our social performance. The CMS is based on a “plan-do-check-act” approach, which stresses the need to adopt appropriate standards in managing social performance. Over the course of years, our CMS framework has guided Ma’aden’s performance and impact, resulting in an increase in the company CSR performance and maturity, establishing ourselves as a global best practice.

Average Community Management Score is calculated every year to determine the Maturity Level (see table above) out of a maximum of 5. In 2019, Ma’aden had a target of 3, and reached an average score of 2.72.







## LOCAL COMMUNITIES



Ma'aden CSR Programs have had significant impacts across the kingdom and particularly in the local communities where we do business, increasing the local content in our projects, employing local people where possible, developing local suppliers, and contributing to education and training, infrastructure development, and holistic community development. All of our CSR activities and investments, including key performance indicators to track our results and progress, are annually disclosed to the CEO and executive team as well as in our Annual and Sustainability Reports.



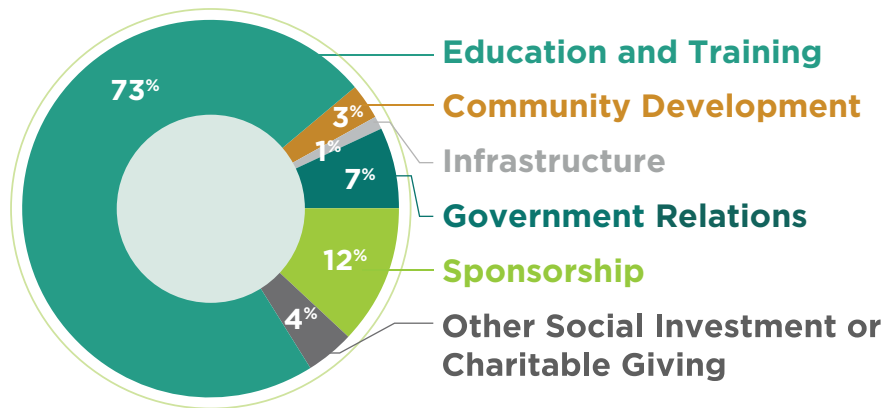




## COMMUNITY INVESTMENT SUMMARY

### Ma'aden Community Investment

#### 2019 SPEND



Ma'aden's community investment profile continues to improve each year, with a growing focus on education and employability. We plan to continue our strategic focus on these community needs as we strengthen our signature programs.

#### 2019 FACTS

- 79.1% of spend on initiatives came from MWSPC followed by 16.3% from MGBM, 3.9% from MA, and 0.7% from IMC.
- We had 37 total initiatives in in 2019.

### MA'ADEN COMMUNITY INVESTMENT SINCE 2015

Since the inception of the Ma'aden Higher Community Initiative Committee, the total social investment commitment exceeds SAR 246 million for the period between 2015 - 2022 and the spend exceeds SAR 120 million so far.

#### SINCE 2015

**150+**  
Approved  
Initiatives

**246+**  
MILLION SAR  
Total  
Commitment

**120+**  
MILLION SAR  
Total Spend  
Since Inception

**10+**  
MILLION SAR  
Total Spend  
2019



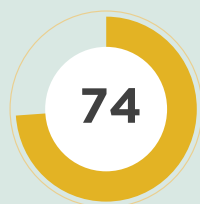
## LOCAL COMMUNITIES

### COMMUNITY PERCEPTION ALIGNED ON THE INTERNATIONAL COUNCIL ON MINING AND METALS (ICMM)

Ma’aden seeks to align its community engagement and other initiatives with the standards promulgated by the ICMM, the leading organization dedicated to a safe, fair, and sustainable mining and metals industry and to improving the sustainable development performance of the mining and metals industry. Those community standards, which address relationships, planning, assessment, management monitoring, and evaluation, include:

- Fostering constructive working relationships between communities, companies, and governments.

- Building capacity within governments, companies, and local communities to address sustainable development at the local level.
- Improving understanding of local community development processes.
- Promoting the potential of mine development and operation to add value to sustainable social and economic development.
- Creating and improving lasting opportunities for sustainable community development through every phase of the mining and metals project cycle – and beyond.
- Reducing conflict in mining communities and regions.

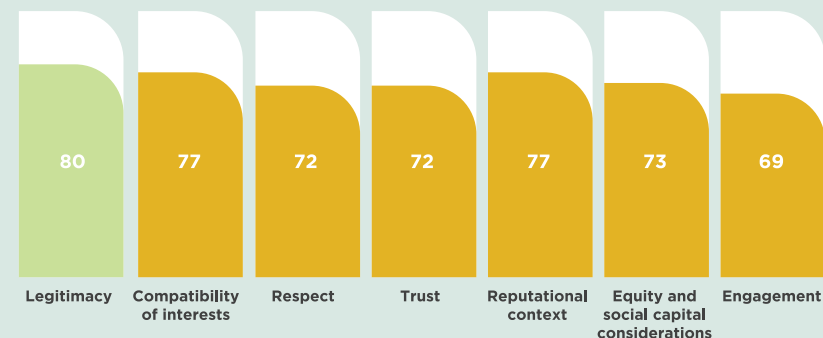


Overall  
Perception  
Score

85+	Very Positive	Delighted and advocates
80-85	Somewhat Positive	Satisfied but not endorsing
79-65	Neutral or Don't Know	Passive / do not show their intention
64-50	Somewhat Negative	Critic / opponent
<50	Very Negative	Hostile

### HOW LOCAL COMMUNITIES SEE US

Ma’aden recognizes that the long-term success of its operations critically depends on building and maintaining positive relationships, respect, and trust with communities, and that community support is a key factor in maintaining a “social license to operate.” Accordingly, in 2019 Ma’aden commissioned a local community perception study to better understand how local communities thought of our legitimacy, compatibility of interest, respect, reputational context, equity and social capital considerations, and community engagement. While the resulting scores are encouraging, it is clear there is still some work to be done building our reputation with these stakeholders. Ongoing community engagement, programs encouraging local content, as well as investment in education and the environment are some of the ways we increase trust and positive community relations.



## SPECIAL REPORT

INVESTING IN DEVELOPING THE FULL POTENTIAL  
OF OUR PEOPLE AND OUR COMMUNITIES

## What we enjoy learning, we never forget

Ma'aden, through its Learning & Development Program, has embarked on an ambitious initiative of employee and community education and development. This includes a wide range of efforts, from identifying gifted students among the top 9th grade students from Ar'ar and Turaif for advanced training and education, to establishing partnerships with King Fahd University for Petroleum and Minerals and the Northern Borders University to promote professional development. The majority of Ma'aden social spending is directed toward education, and we are proud to be a force in promoting skill and talent development throughout the Kingdom, and everywhere we do business.



**687+**  
Students Enrolled in  
Schools of Excellence

100

Gifted Students

- **100 gifted students** attended Mawhiba immersive program

200

eLearning Participants

- **33 SMP graduates** in 2019
- **200 eLearning participants** using LinkedIn Learn program

50

distinguished  
university students  
selected from Qimam  
fellowship program

- **Ten scholarship students** in US and Australia
- **50 distinguished university students** selected from Qimam fellowship program

## SPECIAL REPORT

### Ma'aden's Education Investments & Initiatives

#### SAUDI MINING POLYTECHNIC (SMP)

The Saudi Mining Polytechnic (SMP), Ma'aden's partnership with Technical & Vocational Training Corporation, graduated 63 operators in 2018, and established a safety corner to propagate industrial and personal safety awareness. Some of SMP's leading programs include:

#### Schools of Excellence

The two Schools of Excellence in Ar'ar and Turaif sponsored by MWSPC started their third year of operation in 2019. The overall objective of this initiative is to support the general education system in NBR.

#### Ma'aden eLearning

Designed to create a learning culture throughout Ma'aden by the efficient use of eLearning. Two hundred LinkedIn Learn licenses are currently being utilized.

#### Talent Identification and Development - Mawhiba Program

In partnership with Mawhiba (the King Abdulaziz and his Companions Foundation for Giftedness

and Innovation), Ma'aden sponsored 20 gifted 10th grade students from the Northern Borders region in an enrichment program at Imam Abdulrahman bin Faisal University.

#### Qimam Fellowship

A partnership with McKinsey to establish a fellowship program (Qimam) for distinguished university students.

#### Moe Scholarship Program

Provides top students in key mining disciplines with scholarships in collaboration with the Ministry of Education.

#### Bridging Program with King Abdulaziz University (KAU)

An enrichment program for the continuous development and growth of Saudi employees through targeted educational programs.

#### Employees Certification Program

Certification programs for Ma'aden professionals at the junior, middle, and senior levels.







## HUMAN & INDIGENOUS RIGHTS

Ma'aden fully endorses the position of the International Council on Mining and Metals (ICMM) that companies have an absolute responsibility to respect the human rights of the communities that they affect and the people they employ. As a result, we are developing appropriate policy and governance processes designed to further bolster economic and social rights through poverty alleviation, the provision of essential infrastructure, and broad social investments. Special attention is being paid to ensure our future ability to assess and assure our performance against ICMM and other leading international frameworks.

Ma'aden supports all human rights recognized by Islamic Sharia and United Nations human rights conventions, and the conventions of the International Labour Organization, to the extent adopted by Saudi Arabia. We fully comply with the laws of Saudi Arabia, as promulgated by the Kingdom of Saudi Arabia Human Rights Commission, with respect to human rights, which were established by the government to guarantee conformity with multiple international frameworks to which it is a party. These 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.

Human Rights is a pillar of our social commitment and of our Sustainability Framework. We support and uphold the UN Guiding Principles on Business and Human Rights by committing to respect human rights, undertake human rights due diligence, and to the remediation of any adverse human rights impacts we may cause or contribute to in the course of our business activities. Ma'aden will respect the rights, interests, aspirations, culture, and natural resource-based livelihoods of indigenous peoples wherever we do business, including taking any necessary steps to protect and preserve critical historical and cultural heritage artifacts and sites.

### MA'ADEN HUMAN AND INDIGENOUS RIGHTS CURRENT AND UPCOMING EFFORTS

- Ma'aden is committed to respecting human rights by supporting the **UN's guiding principles on Business and Human Rights (UNGPs)** and the Voluntary Principles on Security and Human Rights.
- Ma'aden plans to develop a **Company Human Rights Policy** outlining our approach to human rights and relevant issues.
- Ma'aden is committed to integrate **human rights due diligence** into corporate risk management processes.
- Ma'aden will continue to **provide appropriate channels for stakeholders to raise and seek compensation regarding human rights**.
- Ma'aden is devoted to **training employees on human rights issues** to raise general internal understanding and to ensure staff implement specific human rights related procedures.

**Zero incidents**  
of violations involving rights of  
indigenous peoples were experienced  
at Ma'aden in 2017, 2018, & 2019.





## LAND ACCESS, ACQUISITION, & RESETTLEMENT

Each Ma'aden operating location follows strict programs and procedures established to control environmental risks associated with land management activities through compliance with legal requirements, application of good land management practices, and management of real estate transfers including rental and lease agreements. Land that is owned, controlled, or used by Ma'aden is managed to ensure compliance with applicable legal requirements and to minimize liability through application of reasonable land management practices appropriate for the complexity and geographic location of the facility.

Ma'aden is committed to minimizing the involuntary resettlement of people or communities in or near our operating sites, or when developing new assets. Any person or community so displaced will be fairly compensated, and Ma'aden will do everything in its power to minimize resettlement impacts. In making any compensation determinations, Ma'aden will work diligently to base them on a deep understanding of our host communities, factoring in local context, cultural heritage, needs, and impacts of our operations.

### AL BA'ITHA RESETTLEMENT PROGRAM

The development of Ma'aden's bauxite mine at Al Ba'itha necessitated the relocation and resettlement of the residents of Al Ba'itha village.

Ma'aden participated in the Al Ba'itha Resettlement Committee, helping draw up the requirements for the program that followed the IFC's standard, and found a suitable replacement site for the village. By the end of 2016, all families had vacated the old village site and resettled in New Al Ba'itha. Agricultural land was provided with water suitable for growing trees and crops. There is the additional possibility that with government permission, irrigated agricultural land will also become part of the resettlement package, which would be a significant livelihood bonus for the resettled households.

People with dwellings in Old Al Ba'itha received both compensation for their old dwellings at replacement cost and the opportunity to access a Real Estate Development Fund loan to assist with replacement house construction, if desired. Loans are typically interest free and repayable in 25 years, with the borrower only

required to pay back 80% of the principal. Under normal circumstances, the waiting time for such loans is in the order of 20 years.

Ma'aden Aluminum Company (MAC) played a key role in facilitating the resettlement of the Al Ba'itha community, contributing to:

- Development of the New Al Ba'itha village
- Contribution to arrangements for the relocation
- Constructing new schools and government buildings

By March 2017 the resettlement was complete, with the whole community successfully relocated to the new village.

**100%**

**of Ma'aden's investment agreements and contracts included human rights clauses or underwent human rights screening in 2017, 2018, and 2019.**



# 06

## ECONOMIC CONTRIBUTIONS

Ma'aden seeks to be a positive economic agent in the host countries and local communities in which we operate.

**3** GOOD HEALTH  
AND WELL-BEING



**4** QUALITY  
EDUCATION



**8** DECENT WORK  
AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**17** PARTNERSHIPS  
FOR THE GOALS



UN Sustainable Development Goals





## LOCAL CONTENT, LOCAL PROCUREMENT, & SAUDIZATION



Over the past decade, Ma'aden has become the largest multi-commodity mining company in the Middle East and a global mining industry leader. With more than SAR 100 billion in assets and over SAR 17.7 billion in annual sales, Ma'aden has become a major contributor to the Saudi economy.

We leverage our unique position as the champion of the Saudi mining industry to invest in the Kingdom's local economy and propel localization across the broader mining sector. We are committed to supporting local sourcing of materials, staff, and services, and our operations enable economic development in remote areas of the Kingdom. Through these efforts we will continue to create positive social impacts by providing local employment, boosting local procurement, and supporting relevant community and social development programs throughout Saudi Arabia.

**“Our vision is to maximize the contribution of the mining industry in the Kingdom of Saudi Arabia through spend on Saudi components with labor, goods, services, assets, and technology.”**

### FIVE STRATEGIC OBJECTIVES TO ACHIEVE OUR VISION FOR LOCAL CONTENT



Maximize employment opportunities for KSA nationals



Maximize participation of local businesses in our supply chain



Maximize opportunities for Local Small and Medium Enterprises (SMEs)



Maximize economic opportunities for communities in remote regions



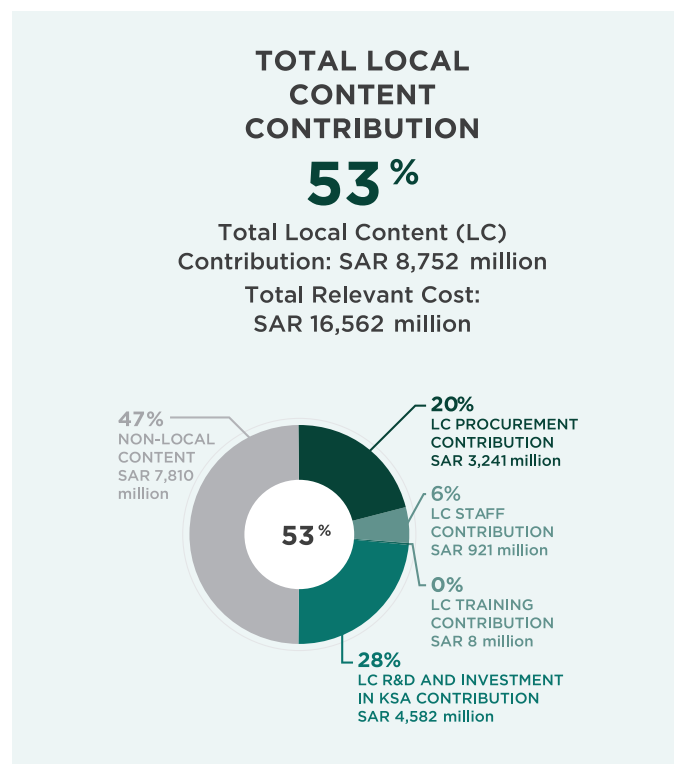
Drive Local Content throughout the mining industry supply chain



## Achieving Our Local Content Objectives

Ma'aden diligently pursues our Local Content goals, seeking to increase the amount of business we do with local partners, create local employment opportunities, and support the development of local small and medium-size enterprises. Local Content data is reported at the affiliate level and is also aggregated at the corporate level. We have prioritized Local Content as a major objective for the coming years, in support of both our strategic objectives and of Vision 2030.

We have a strong governance framework in place for our Local Content initiatives. A Local Content Steering Committee has been established, consisting of members of senior management including all affiliate presidents, which is responsible for providing direction and key decision making for Ma'aden's Local Content program, as well as ensuring that all Local Content activity is fully aligned with the broader priorities and objectives of the organization. While overall responsibility rests at the corporate level, the Local Content Department is responsible for setting Local Content strategy and establishing and running the operating model, including the robust governance mechanisms in place. The department also takes responsibility for establishing the framework and metrics that are used to measure Local Content performance, work with each of the affiliate and project organizations to set targets, and provide regular reporting on progress against those targets. Accountability for the delivery of Local Content targets, and for the execution of individual initiatives, rests with the affiliate leadership and its teams.



To achieve our goals, we have adopted a quantitative Local Content measurement and reporting framework, have begun reporting quarterly on Local Content performance metrics, and developed an aggressive supplier development program. Under this program, we track and measure the percentage of Local Content in our supply chains, the number of jobs created for Saudi citizens, our expenditures with small and medium-size enterprises, and the percentage of our total spend in the local communities where we operate.

## LOCAL CONTENT TIMELINE

Ma'aden has had a consistent focus on Local Content across the business; the approach has been revised to align with the localization drive outlined in Vision

### Evolution of Local Content



Our Local Content strategy builds on the success and achievements of the past, with an emphasis on working with suppliers to drive up levels of Local Content throughout the supply chain.



## MA'ADEN LOCAL CONTENT OPERATING MODEL (MLCOM)

Since creating a 2017 baseline subsequently revised in 2019 to reflect the national Local Content measurement methodology against which we can compare our progress, we have met or exceeded our Local Content goals in every category and have committed to increasing our Local Content spend by a minimum of 3% annually every year between now and 2030.

Our Local Content program provides tactical business advantages, such as lowered costs, reduced lead times, reduced supply chain risks, and improved service levels, while affording increased employment and economic opportunities for Saudi nationals.

By maximizing the opportunities for regional enterprises and by expanding economic opportunities especially in remote communities, Ma'aden supports and empowers these communities. Additionally, our partnerships with numerous nationwide government organizations, as well as membership with the Local Content Council, allows Ma'aden to champion Local Content in the Saudi mining industry and lead and set the Local Content agenda for all of Saudi Arabia.

### MA'ADEN HAS DEFINED A COMPREHENSIVE LOCAL CONTENT OPERATING MODEL



#### GOVERNANCE

The organizational structure and decision-making rights to run the operating model

#### TRAINING

The approach to educating everyone in the supply chain to understand their role in delivering Local Content

#### COMMUNICATION

The actions to engage within, and outside, Ma'aden to ensure awareness and understanding of Local Content

#### PROCESSES

The additions to existing supply chain processes to embed Local Content as a priority in decision making

#### METRICS

The tools and processes to drive continuous improvement and focus on levels of Local Content

#### MONITORING & REPORTING

The measures that drive the right Local Content behaviors throughout the supply chain



# LOCAL CONTENT, LOCAL PROCUREMENT, & SAUDIZATION

Ma'aden's experience demonstrates that one of the most effective methods for increasing localization in the supply chain is to embed Local Content in procurement processes. For many years, Ma'aden has included targets for Local Content and Saudization as part of the tendering process for major projects. Ma'aden has now gone further by embedding Local Content across all procurement processes. This ensures that Local Content is considered when Ma'aden develops procurement strategies, and where local companies can fulfill Ma'aden's requirements, they are included in bidder lists. Local Content is then assessed as part of the tender evaluation with the objective of increasing the focus on

localization, and incentivizing suppliers to improve performance over time.

Finally, Local Content performance is measured and reported throughout the life of the resultant contract.

At the core of our local procurement practices is dedication to hiring Saudi and regional personnel. Our preference is to employ people, buy products, and engage services from areas in the immediate vicinity of our operations. In areas where such skills, goods, and standards are not available, we invest in establishing them and supporting new procurement practices. At year end 2019,

38% of the employees across Ma'aden and our supply chain were Saudi citizens.

All new standard operational service contracts include our expectations for Saudi national job creation. On our major capital projects, the Saudization level has steadily increased, to 20% today from 10% in 2014, across all job categories including management, technical, and engineering positions.

Ma'aden is committed to continuing our robust efforts to increase local procurement and job creation across all our operations and considers these efforts to be a first-tier business objective.

## EMBEDDING LOCAL CONTENT IN PROCUREMENT

A key element of Ma'aden's Local Content program is to embed Local Content through our procurement processes.

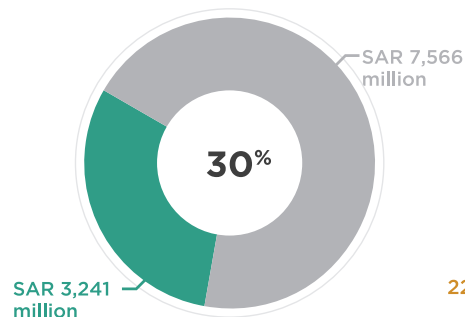


# 2019 LOCAL CONTENT METRICS

## SUPPLY CHAIN LOCAL CONTENT

30%

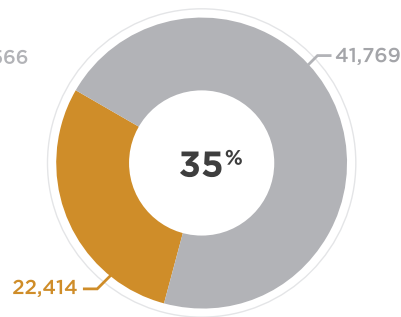
Total Supply Chain Relevant Cost: SAR 10,807million



## SUPPLY CHAIN SAUDIZATION

35%

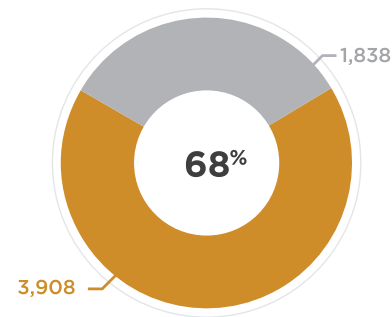
Total Supply Chain Employees: 64,183



## MA'ADEN SAUDIZATION

68%

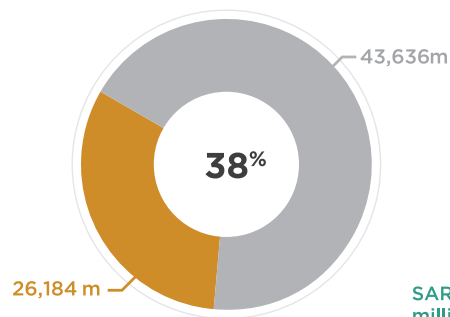
Total Ma'aden Employees: 5,746



## COMBINED SAUDIZATION

38%

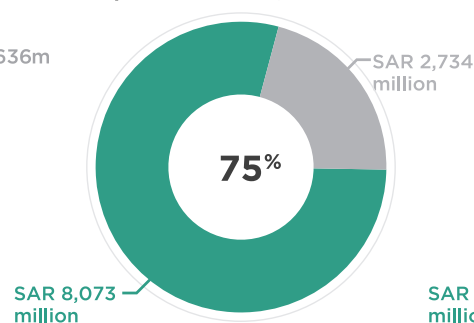
Total Employees: 69,820



## ONSHORE SPEND

75%

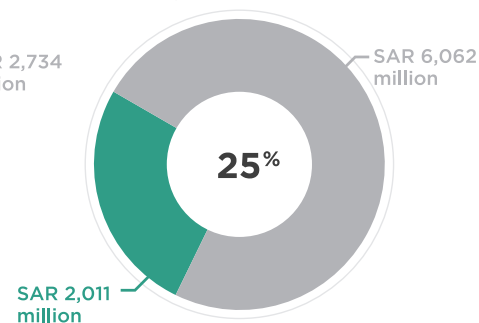
Total Supply Chain Spend: SAR 10,807million



## LOCAL SPEND TO SME

25%

Total Local Spend: SAR 8,073 million





## SPECIAL REPORT

### DEVELOPING LOCAL BUSINESS COMPETENCIES

Ma’aden has always understood that it was part of its commitment to the National Transformation Plan (NTP) to put its growing success as the Saudi mining champion to work to model and as an incentive for the independent development of ancillary businesses, especially suppliers. This effort has been especially productive at our Al-Jalamid phosphate mining facilities.

#### Kaswa Trucking

Kaswa Trucking is an important provider for Ma’aden Phosphate Company (MPC) at Al-Jalamid. Since doing business with them, Ma’aden management trained and helped develop Kaswa employees into logistics experts. Kaswa used that expertise in turn to become a promising national trucking company that employs local Saudis throughout its operations, and carries a valuation in the millions of SAR.

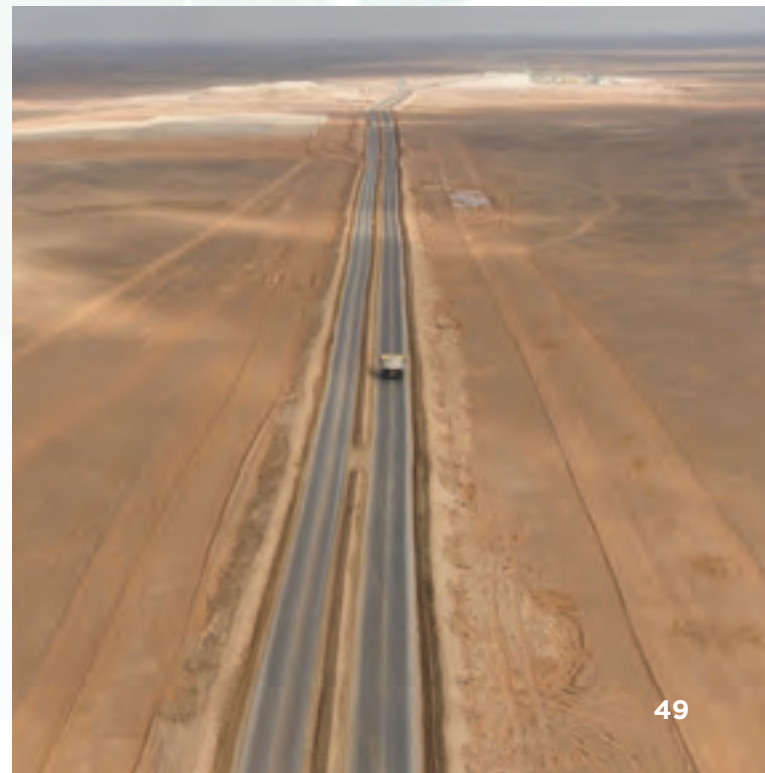
#### Radian Oil and Gas Services

Radian Oil and Gas Services is part of a wholly Saudi-owned conglomerate, Haka Group, that provides industrial process and construction services. Ma’aden Aluminum Company (MAC) negotiated an innovative Build, Own, Operate, Transfer (BOOT)

contract with Radian to provide on-site dross processing and metal recovery.

The agreement stipulates that Radian will build the processing facility in return for a long-term concession to operate it.

Both Ma’aden and Radian benefit from the unique arrangement, with Ma’aden achieving significant cost savings compared to traditional contract arrangements, and Radian adding facilities and expertise to its growing portfolio of industrial processing facilities and a guaranteed income stream for the life of the contract. Additionally, this contract ensures Ma’aden continues to advance its Local Content targets, while Radian further commits to push its Saudization goals to a Saudization target of up to 30% at the start of the contract, increasing by a minimum of 5% per annum to approximately 75% after seven years.





## SOCIAL INVESTMENTS

### MA'ADEN SOCIAL IMPACT STRATEGIC GOALS

#### Mature social engagement

Level 4 assured by community

#### Promote social brand and fund

Establish fund and publish audited report annually

#### Integrate within the local ecosystems

Improve stakeholder satisfaction (internally and externally)

#### Develop Local Content

Develop local purchasing, supply chain, and businesses

### KEY PARTNERSHIPS/INITIATIVES

Mosaic Company and the Saudi Basic Industries Corporation: Schools of Excellence

General Authority of Meteorology and Environmental Protection: Training Course Development

Ministry of Environment, Water, and Agriculture: Tree Planting at Ghazala

Ma'aden's social investment activities are conducted under the auspices of the Ma'aden Higher Community Initiative Committee, founded in 2015, chaired by our CEO, and representative of our commitment to community at the highest level and across our entire organization. In the course of building a globally competitive mining industry in Saudi Arabia - with operations often in some of the most remote regions of the Kingdom - Ma'aden has worked especially hard to engage with local communities around our sites. Ma'aden makes extensive social investments in communities surrounding our mines and plants. Social responsibility an integral part of our operations, creating value for our business and for the communities in which we work.

We believe there is a competitive advantage in employing people from the local community in our operations and in procuring as much as we can domestically - and whenever possible, from suppliers based in the localities in which we operate, and we strive to achieve community initiatives that go well beyond our role as a responsible member of the community. Ma'aden has therefore focused its community efforts on four broad categories: community engagement, local hiring, local buying, and social investment.

In the past four years, we have committed more than **SAR 246 million** on over **150 community development and support programs**, with the majority dedicated to **training and education**, followed by **health and infrastructure**.

Ma'aden's social investments go to programs we have identified as addressing the impact assessment and most pressing needs of the communities in which we operate around, with a majority of the spending going directly into educational programs, and the rest to infrastructure, capacity, and community development.

Our Social Investment Standard and Community Management System (CMS) provide a clear framework and KPIs by which we govern and measure the effectiveness of our community investment efforts. In the upcoming year, we expect to have a dedicated Corporate Social Responsibility officer assigned to every affiliate site to see that every affiliate meets or exceeds its social performance goals.

It is our intent to align our investments in host communities with the needs of local people and businesses. Ma'aden's projects will continue to drive economic and social development in our rural areas of operation and across all of Saudi Arabia.



## DIRECT & INDIRECT ECONOMIC IMPACT

Our business generates economic value, both directly and indirectly, for the communities in which we work. Ma'aden's investments promote the resilience of local economies throughout and beyond the operational lifespan of our mines.

Direct economic impacts include all effects Ma'aden operations have on areas where we do business, including direct employees, organizational spending, employee spending, and spending by visitors to our sites.

Indirect impacts include local industries buying goods and services from other local industries, continuing down the value chain until all value is spent outside Ma'aden's immediate operating areas.

Our growth as Saudi Arabia's first diverse, integrated mining company has added billions of riyals in GDP to the Saudi economy Saudi economy, both directly and indirectly. We bolster economic development in previously

undeveloped parts of the country, while providing a wide variety of career, professional, and educational opportunities. Our partnerships with local enterprises, undertaken as part of our Local Content initiatives, have supported the development of capabilities across a range of business sectors and contributed to the overall diversification of the Saudi marketplace. The economic impact of our activities has been far-reaching and extensive, especially in the Northern and Eastern Districts.

### MA'ADEN'S ECONOMIC IMPACT

Since the IPO Ma'aden has invested ~SAR 100 billion in the Kingdom's mining industry.

**2007**

**#128 Global Mining Company**

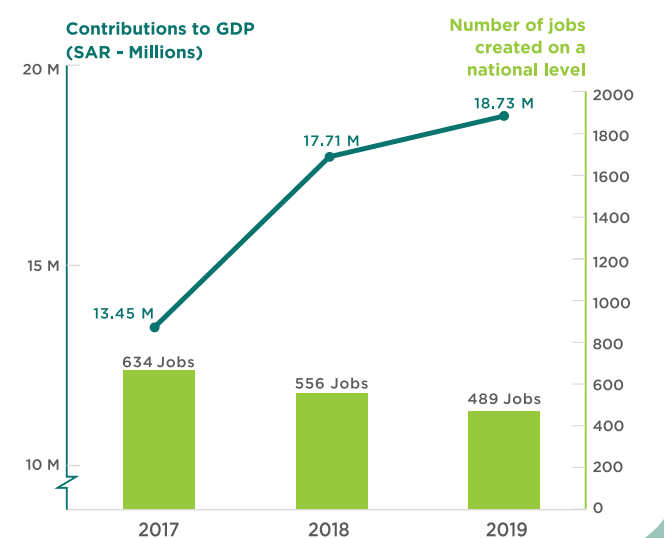
**2019**

**#14 Global Mining Company**

- ALUMINUM
- COPPER
- GOLD
- PHOSPHATE & IM



### JOBS CREATED





## DIRECT & INDIRECT ECONOMIC IMPACT

Our local and regional Corporate Responsibility efforts have also had both direct and indirect economic effects. Our largest contribution has been in education. Many of our program graduates work or go on to work at Ma'aden, but many others have put their new skills to work with our suppliers or in other industries, bringing professional skills and talents to the Saudi workforce at large. For more information on Ma'aden's educational and training initiatives, see the Special Report on page 39.

The greatest physical example of Ma'aden's economic impact has been the development of two entirely new industrial cities, Wa'ad Al-Shamal and Ras Al-Khair, which are discussed in detail in the Special Report on the following pages. Wa'ad Al-Shamal is estimated to add approximately SAR 15 billion to Saudi Arabia's GDP. Ras Al-Khair is estimated to have added SAR 33.78 billion to Saudi Arabia's GDP and to have created over 25,000 direct and indirect jobs.



### Industrial Mega-Cities Bring World-Class Infrastructure to the Kingdom

Ma'aden has leveraged and propelled the growth of the Saudi mining industry, and in partnership with both Saudi and international entities, has rapidly built the world-class infrastructure necessary to support the success of our own and other Saudi industries.



#### WORLD-CLASS INFRASTRUCTURE SUPPORT FACILITIES

including the port, railway, and utilities



#### NEW INDUSTRIAL CITIES

built to support the growth of the mining sector: Ras Al-Khair and Wa'ad Al-Shamal



# SPECIAL REPORT

Aluminum complex investment

40.5  
SAR billion

SWCC (water and power) investment

27.4  
SAR billion

Railway investment

25  
SAR billion

Phosphate industry investment

31.85  
SAR billion

Village and Infrastructure investment

1.9  
SAR billion

## RAS AL-KHAIR INDUSTRIAL CITY

Ma'aden partnered with the Saudi Port Authority, the Saudi Water Conversion Company (SWCC), and the Saudi Railway Company to build this ambitious industrial city north of Jubail in the Eastern Province that is now home to both Ma'aden Phosphate Company and Ma'aden Aluminum Company. Infrastructure built to support our operations includes a modern port, one of the largest desalination and power plants in the world, housing facilities for on-site employees, and 1,400 kilometers of railroad connecting our mines and processing facilities to each other and to national main lines.

Our phosphate facilities, an approximately SAR 20.64 billion joint venture with SABIC, consist of a phosphoric acid plant, a sulphuric acid plant, an ammonia plant, a diammonium phosphate (DAP) granulation plant, and a cogeneration and desalination plant. Ma'aden Aluminum, an approximately SAR 40.5 billion joint venture with Alcoa, is one of the world's largest fully integrated aluminum complexes, and comprises a refinery, smelter, and rolling mill. Ras Al-Khair is expected to play a pivotal role in the continuing growth of the Saudi mining industry and in Saudi industrial diversification through significant downstream investment opportunities.

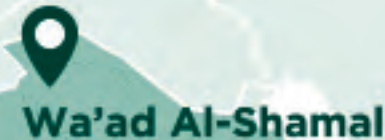
Ras Al-Khair



12,000

Jobs created for Saudi citizens

SPECIAL REPORT



Investment

22.5

SAR billion

Residential units

483

Roads

39

kilometers

Number of people who worked on the project

26,000

Safe hours

159

million

GDP contribution

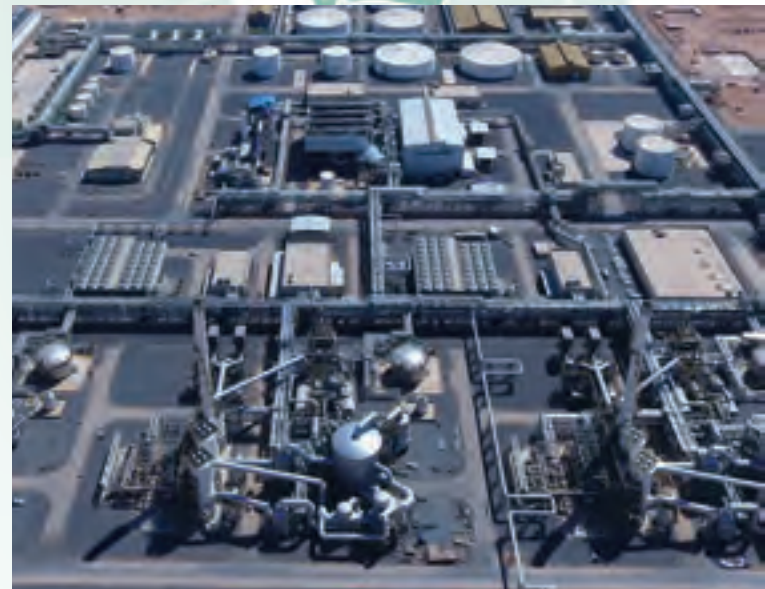
15

billion

WA'AD AL-SHAMAL INDUSTRIAL CITY

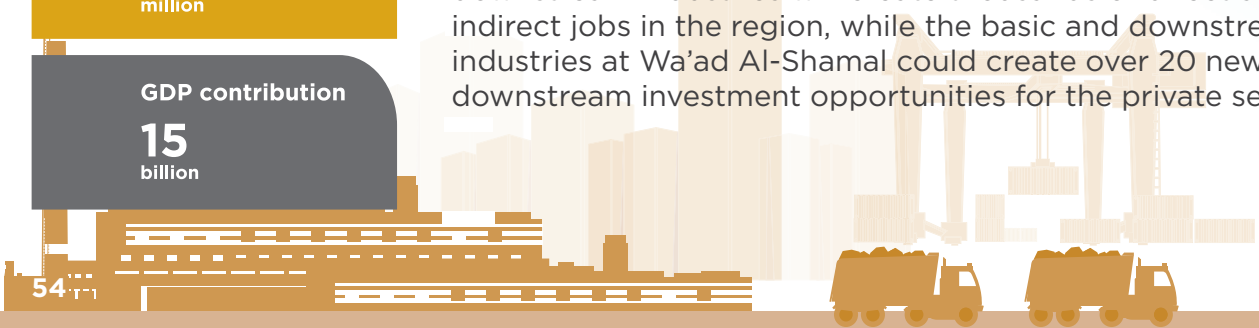
Wa'ad Al-Shamal (which means “Northern Promise” in Arabic) is the largest industrial project ever proposed in the interior of Saudi Arabia. This industrial and mining city in Saudi Arabia’s Northern Borders Region, home to the Ma’aden Wa’ad Al-Shamal Phosphate Company, was built in collaboration with the Ministry of Energy, Industry, and Minerals alongside a variety of public and private organizations from Saudi Arabia and around the world. The city’s initial phosphate project is a SAR 30 billion joint venture between Ma’aden, Mosaic, and SABIC, which began commercial production in 2016. Ma’aden facilities at Wa’ad Al Shamal include the Al Khabra phosphate mine, six phosphate processing plants, supporting industries, and a full residential community with 483 housing units. Nationally, it has already added approximately SAR 15 billion of GDP to the Saudi economy.

Wa’ad Al-Shamal contributes significantly to a sustainable economic future for the people of northern Saudi Arabia and perfectly serves the Kingdom’s Vision 2030 goals of economic diversification. Ma’aden’s phosphate project and future downstream industries will create thousands of direct and indirect jobs in the region, while the basic and downstream industries at Wa’ad Al-Shamal could create over 20 new downstream investment opportunities for the private sector.



7,000

Jobs created for Saudi citizens







# 07

## WATER STEWARDSHIP

Ma'aden intends to be a steward for responsible water management practices and implement innovative solutions to water scarcity, ensuring that community water systems are not affected.



UN Sustainable Development Goals



## WATER MANAGEMENT

In a world—and, specifically, a region—where water resources are increasingly limited, but remain crucial to our operations, Ma'aden is committed to responsible water management practices, to maintenance of quality water supply, and to innovating solutions to water scarcity.

Ma'aden is in the process of developing and implementing a formal policy to establish water use targets and integrate water management into company-wide risk management. The policy will cover site assessments, auditing and reviews, and community management and performance management systems.

Its development will be based on a thorough water use assessment covering the following areas:

- Interactions with water as a shared resource
- Operational water management
- Watershed-scale planning
- Water reporting
- Environmental assessment of new projects from exploration to closure

Ma'aden also fully endorses and adheres to the ICMM's mandate on water stewardship, which states that the use of water must

### WATER CONSUMPTION

	2017	2018	2019
<b>Total water consumption (m³)</b>	72,879,486	70,900,097	72,636,495
<b>Water from municipal water supply or water utility (m³)</b>	21,299,224	19,748,997	21,909,104
<b>Water drawn from wetlands, rivers, lakes, and oceans (m³)</b>	16,279,577	16,596,840	15,859,959
<b>Water drawn from groundwater (m³)</b>	34,035,776	33,452,361	33,462,540
<b>Waste water from other organization for use (m³)</b>	1,264,909	1,101,299	1,404,892
<b>Water Recycled and Reused (m³)</b>	4,583,452	5,360,090	6,048,109

Scope Note: Water Management data from MPC, MWSPC, IMC, MBAC, MRC, MGBM, MAC, and HQ have been included for all 3 years.

be socially equitable, environmentally sustainable, and economically beneficial by following a stakeholder-inclusive water management process that involves both site and catchment-based actions. By following

ICMM guidelines on water we expect to formalize operational and governance processes and procedures and better understand and manage water-related risks across all our businesses.





## WATER MANAGEMENT



Across our operations, we adhere to all regulations and quotas, minimizing freshwater use as much as possible and maximizing water efficiency throughout the value chain. It is fundamental for us to carefully manage our water use and discharges. We have made important investments in water reuse and alternative supply, in minimizing the release of any harmful effluents, and in strengthening policies on the safe storage and disposal of residual wastes and process residues.

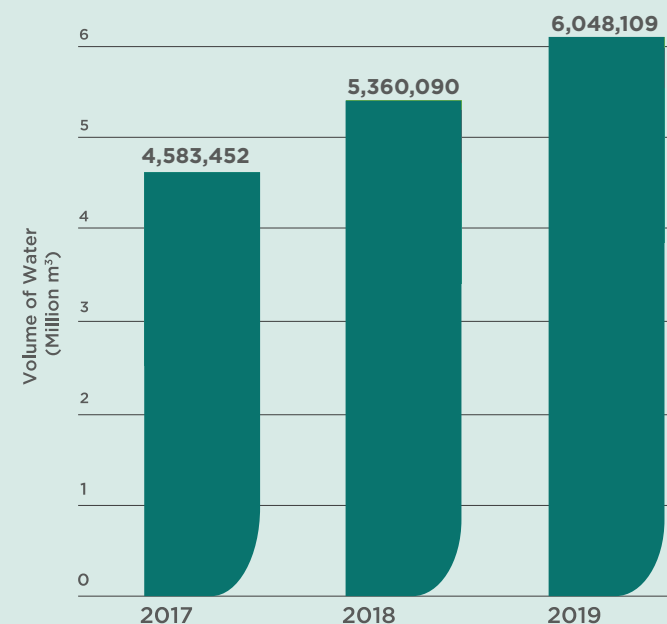
Most importantly, Ma'aden ensures that community water systems are not affected by its operations and regularly engages with host communities and other relevant local water users to find out their priorities and collaborate on solutions.

Ma'aden built a 475-kilometer wastewater delivery pipeline, known as the Taif pipeline,

that has delivered recycled wastewater for use at our Ad Duwayhi gold mine since 2016, and is being expanded to provide all process water needed at our gold mining sites in Mansourah-Massarrah and Ar Rjum as well.

Our phosphate and aluminum operations at Ras Al-Khair Industrial City draw all their process water from one of the world's largest desalination plants, located on site. Also at Ras Al-Khair, we have implemented a natural engineered wastewater treatment (NEWT) system capable of treating up to 4.5 million gallons of wastewater a day without chemicals and with minimal energy inputs, the majority of the treated water then gets reused as process water and the rest for local irrigation. In addition to these large efforts, we continually review our operational processes with a view toward minimizing freshwater use.

### WATER RECYCLED AND REUSED



**These initiatives and investments have been made in line with Vision 2030 goals of preserving and improving the supply of this most precious resource and Ma'aden's alignment with the United Nations Sustainable Development Goal #6 on maintaining clean water.**



# WATER MANAGEMENT

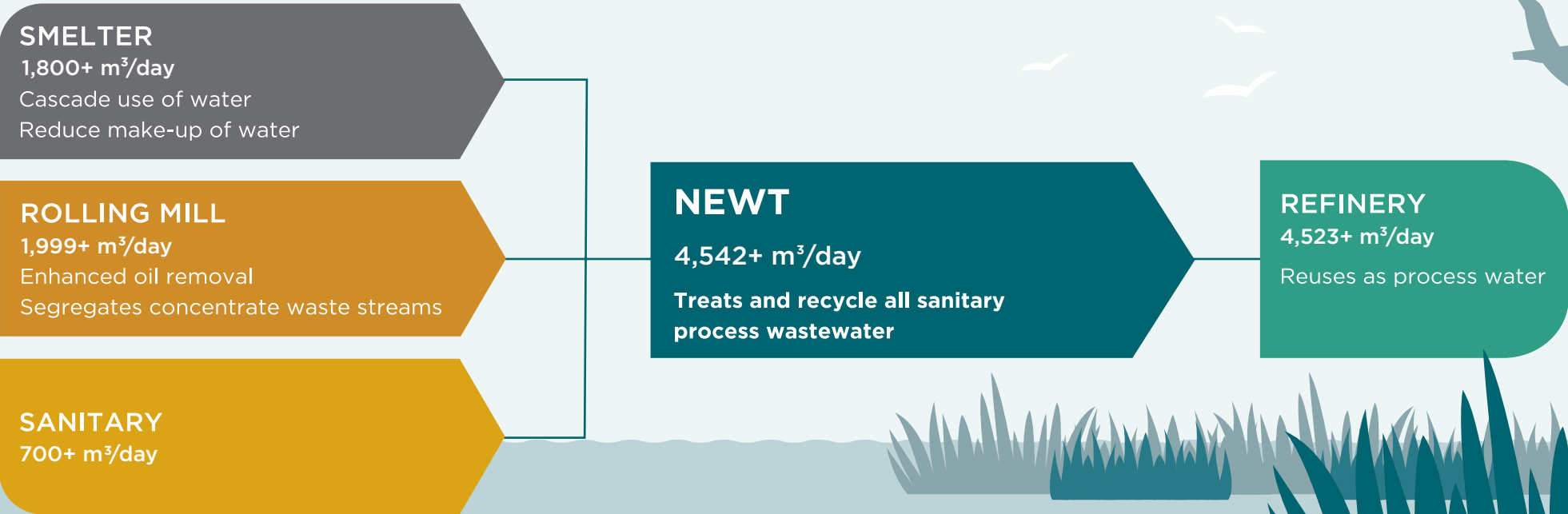
## Natural Engineered Wastewater Treatment (NEWT)

The natural engineered wastewater treatment (NEWT) system has played an integral part in drastically reducing water wastage from Ma’aden aluminum operations at Ras Al-Khair by treating up to 4.5 million liters of water a day. The system treats a broad range of organic and inorganic chemicals and substances including nutrients,

pathogens, and heavy metals, as well as oil and grease. The treated water contains minimal effluent concentrations and between 60-80% is reused as process make-up water, and the rest for landscape irrigation. The resulting “artificial wetland” created by NEWT has proven to be a sustainable and effective natural method to treat wastewater on municipal and industrial levels, and as an added benefit, has become an important habitat for wildlife, especially shore birds.

### NATURAL ENGINEERED WASTEWATER TREATMENT (NEWT)

Treated water for recycle and reuse



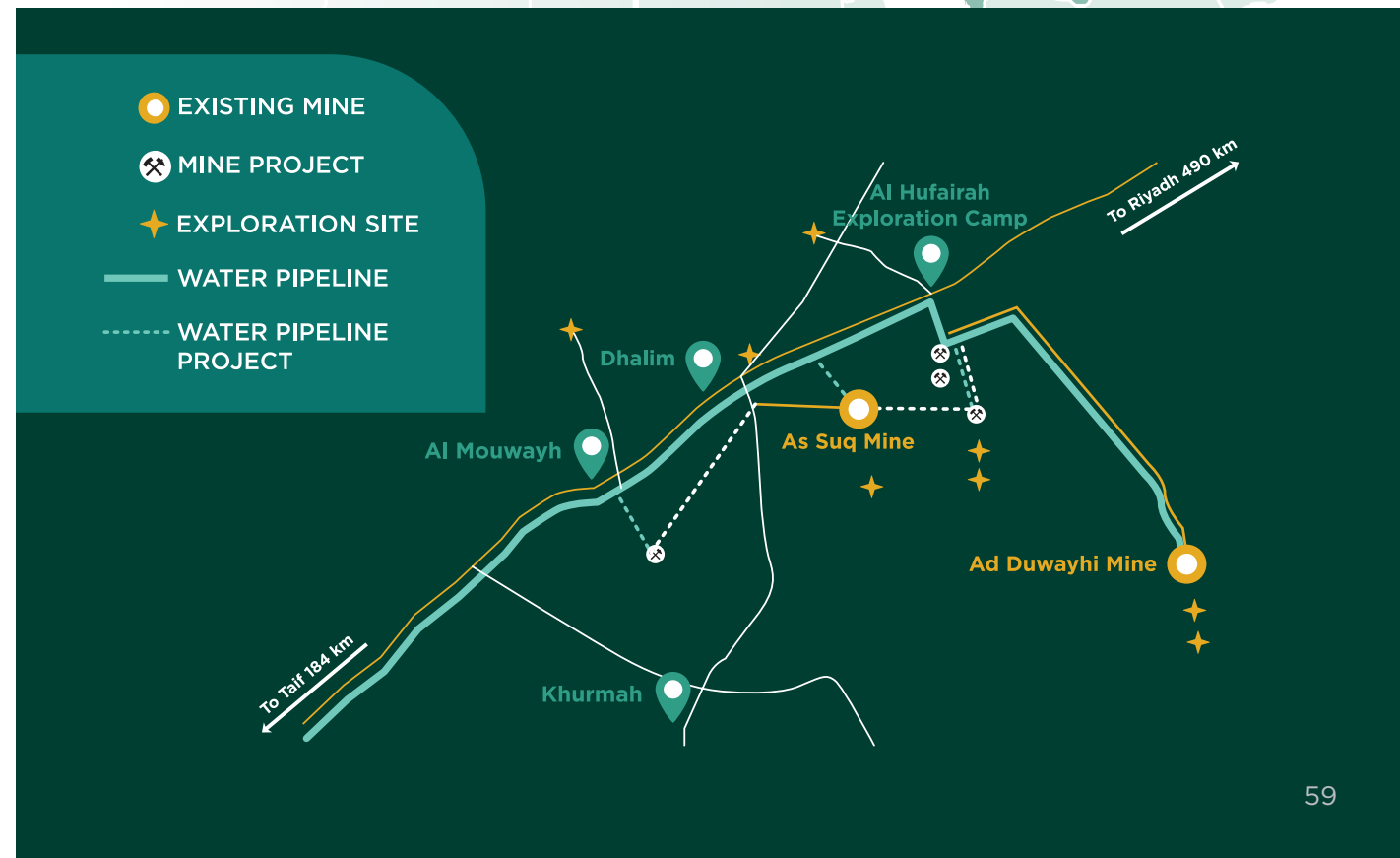
## SPECIAL REPORT

## ADVANCING SUSTAINABLE WATER PRACTICES AT MA'ADEN GOLD BUSINESS

The Taif water pipeline – which runs 475 kilometers from Taif to the Ad Duwayhi gold mine – that supplies treated wastewater to our gold mines is a major accomplishment and an excellent example of Ma'aden integrating sustainability in our mining operations.

Operational since 2016, the pipeline delivers bulk industrial grade water to the Central Arabian Gold Region. It has been supplying our Ad Duwayhi mine since becoming operational and is being substantially expanded to also supply the Mansourah-Massarrah and Ar Rjum mines, delivering approximately 22,000 cubic meters of treated water daily when complete.

Using treated wastewater for our mining operations leverages a renewable water source for the gold mining industry and is a leading environmental practice that minimizes the impact of mining on local groundwater resources. It is also a symbol of Ma'aden's long-term vision of infrastructure investment and sustainability working hand in hand to support the company's and the Kingdom's growth strategy.









# 08

## CLIMATE CHANGE & BIODIVERSITY

Ma'aden aims to evolve our business and practices to pioneer new thinking, technology, and business models to ensure climate resilience, ecological preservation, and environmental justice.



UN Sustainable Development Goals



## ENVIRONMENTAL MANAGEMENT & COMPLIANCE

As the rapid warming of our planet increases environmental risk factors, addressing climate change is an increasingly strategic imperative for the world and for Ma'aden. We recognize the need to consider the potential impacts of climate change on our business as well as local communities, and manage our business and operations accordingly.

Ma'aden is committed to managing environmental issues in compliance with the standards set by Saudi Arabian regulatory authorities and in alignment with leading international environmental management frameworks. When we conceive a project, we embed regulatory requirements based on environmental baseline studies and impact assessments. Once a project becomes operational, we hold periodic environmental reviews to ensure strict compliance with all regulatory requirements, and regularly submit monitoring reports to regulatory bodies, such as The General Authority of Meteorology and Environmental Protection (GAMEP) and the Royal Commission of Jubail and Yanbu (RCJY).

We monitor regulated environmental pollutants and key environmental factors such as air and water quality, noise levels, pollution sources, and waste generation at our mines and industrial plants, using advanced protocols and equipment.

And under our Hemaya (“Protection”) data platform, we manage environmental incidents through an automated management system that enables instant incident reporting and validation.

In 2015 we undertook a thorough assessment of the ecological footprint of our operations. This entailed measuring and benchmarking our energy and water consumption and greenhouse gas emissions at all our mining and processing sites. We used our findings as a baseline for quantifying our progress toward our 2025 energy, water, and emissions reduction goals. Our sites as well as our headquarters also continue to assure and renew different ISO certifications such as the ISO 14001:2015 for Environmental Management System, ISO 50001 for Energy Management Systems, and the International Cyanide Management Code for gold operations. In addition to these



environmental management efforts, Ma'aden is investing in dedicated technologies, and systems to reduce the environmental impact of our operations, improve the resiliency of our assets, and enhance the adaptability of our business.





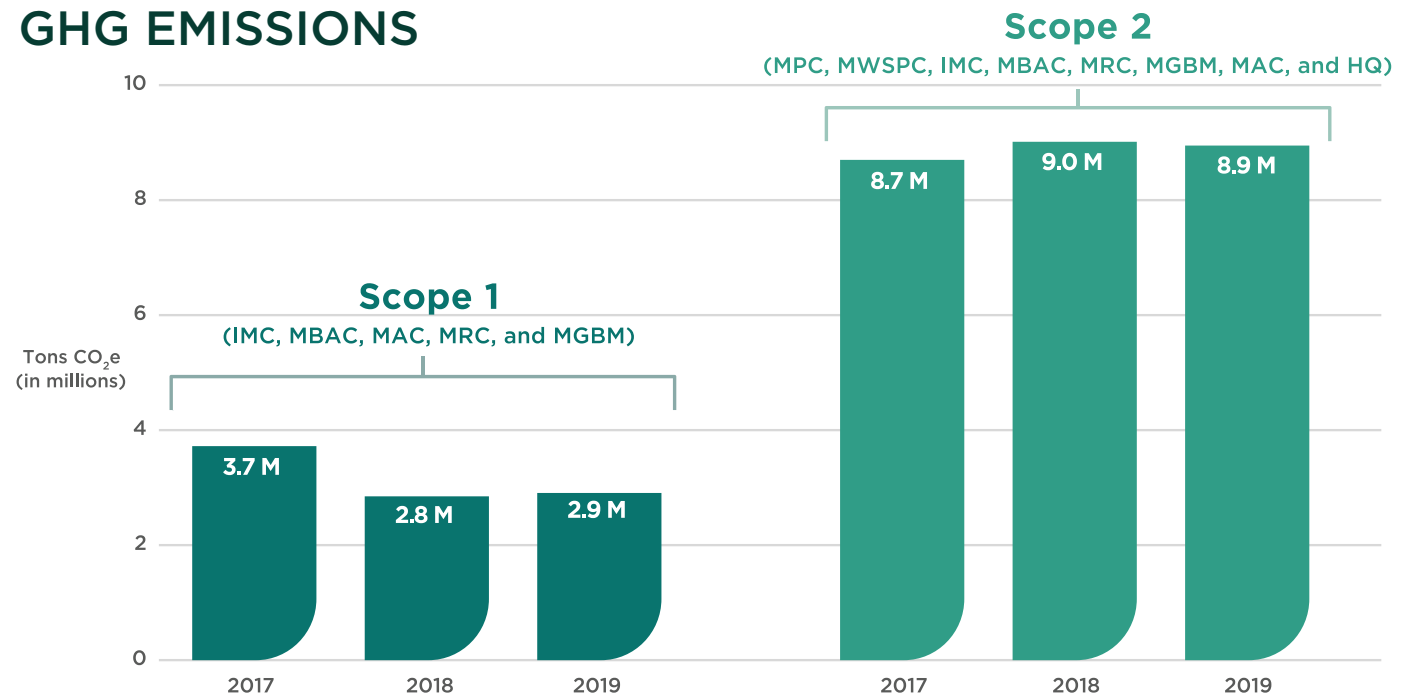
## GHG EMISSIONS & AIR QUALITY

At Ma'aden, we are committed to reducing greenhouse gas (GHG) emissions across our entire value chain. Minimizing emissions, reducing leaks, and making more efficient use of all energy sources are high priority business goals for Ma'aden as we seek to continue sustainably building the Saudi mining industry. We are taking actions to manage the Scope 1 emissions from our own operations and the Scope 2 emissions from the energy we use in our operations, and have performed preliminary assessments to establish baselines and benchmarks of all our carbon emissions.

Out of this assessment, we developed and implemented air emissions management and fugitive emissions policies that integrate environmental management into our company-wide risk management, and put in place standards, codes of practices, and procedures for site environmental management, assessments, auditing, and reviews, as well as community and performance management systems.

Ma'aden tracks emissions released by our operations and works to control and reduce emissions from our facilities.

### GHG EMISSIONS



### Air Quality

There are many factors that contribute to air quality at and around our operating sites. We monitor air quality for particulate matter such as PM 10 & PM 2.5 in addition to nitrous oxide, sulfur oxide, and other gases and continually look for ways to reduce emissions. Wherever we operate, we meet or exceed relevant reg-

ulatory limits and international standards for mining industry emissions and air quality, such as those promulgated by the International Council on Mining and Metals and the United Nations 2030 Agenda for Sustainable Development. We focus on controlling and monitoring air emissions under our control at their source and to minimize our impacts on the air quality in all our operating locations.



## BIODIVERSITY & ECOLOGICAL REHABILITATION

It is our pledge to create not just a more prosperous Saudi Arabia, but one that is more ecologically diverse and beautiful as well.

Since mining and processing operations can be disruptive to local ecosystems if not responsibly managed, Ma'aden actively works to mitigate or compensate for ecological damage wherever necessary. We are dedicated to maintaining or improving the quality of land, water, and natural ecosystems everywhere we do business.

Ma'aden is addressing its biodiversity and ecological rehabilitation issues through the development of sound risk and impact policies and practices that help preserve the ecosystems we depend on, from site prospecting all the way through to site closure.

We aspire to align with and achieve the International Council on Mining and Metals (ICMM) Principles mandate to contribute to conservation of biodiversity and integrated approaches to land use planning.

In addition to the reforestation projects in the valleys surrounding our Al-Jalamid phosphate mines, we have built the Natural Engineered

Wastewater Treatment (NEWT) facility at our aluminum smelting and processing plants at Ras Al-Khair, which comprises an artificial wetland that is not only an effective natural method to treat wastewater, but also creates an attractive artificial wetland that is home to many forms of wildlife. Ma'aden is firmly committed to leaving every place we do business healthier and more environmentally sound than when we began operating there.



**In 2019, no Ma'aden sites were at risk of disrupting protected areas of high biodiversity value, and therefore has not closed any sites due to their proximity to protected areas of high biodiversity.**



## SPECIAL REPORT



Alleviating  
climate change



Creating green  
areas to attract  
tourism



Curbing  
desertification



Cooling down  
high temperatures



Recovering  
wildlife



Improving  
vegetation



Providing wide  
pastures

## A NORTHERN REFUGE: LAND RECLAMATION AND BIODIVERSITY IN AL-JALAMID

In 2013, Ma'aden began an ambitious ecological enhancement project around its phosphate mining operations near the northern village of Hazm Al-Jalamid. This effort has resulted in the creation of a unique forest reserve that will eventually provide protection to the land from grazing and provide wildlife and livestock with a natural source of food.

As we began to plan our phosphate mining operation at Al-Jalamid, we created an ambitious plan to cultivate trees and grasslands in and to the west of the Al-Mara Valley four kilometers from our mine site. This is consistent with our goal of preserving and improving the environment in which we operate.

The effort from the beginning was complicated by the unique environment in and around Al-Jalamid, which is at once extremely arid like most of Saudi Arabia, and subject to periodic frosts. We made a careful selection of mostly Haloxylon

trees, which are native to the Middle East and are highly drought resistant, and Jujubes, which can also survive long periods without water and are a good source of food for wildlife. It is estimated that some 2,500 trees have now been established to maturity, and as the forest developed, other species of trees such as acacia, prosopis, tamarisk, and Salsola villosa also began to appear there. The result, aligned with Ma'aden's vision of a sustainable Saudi Arabia, is an expansive forest reserve that provides a local oasis of indigenous plantings and a future home for native wildlife.





# ENERGY EFFICIENCY & RENEWABLES

Ma'aden is committed to reducing our use of non-renewable energy at our facilities through energy efficiency and cost-effective alternatives, including solar and wind power. Monitoring, managing, and reducing our energy consumption enables Ma'aden to not only reduce our costs, but also reduce our carbon emissions and environmental impact.

Energy efficiency and conservation are key material issues for Ma'aden's operations.

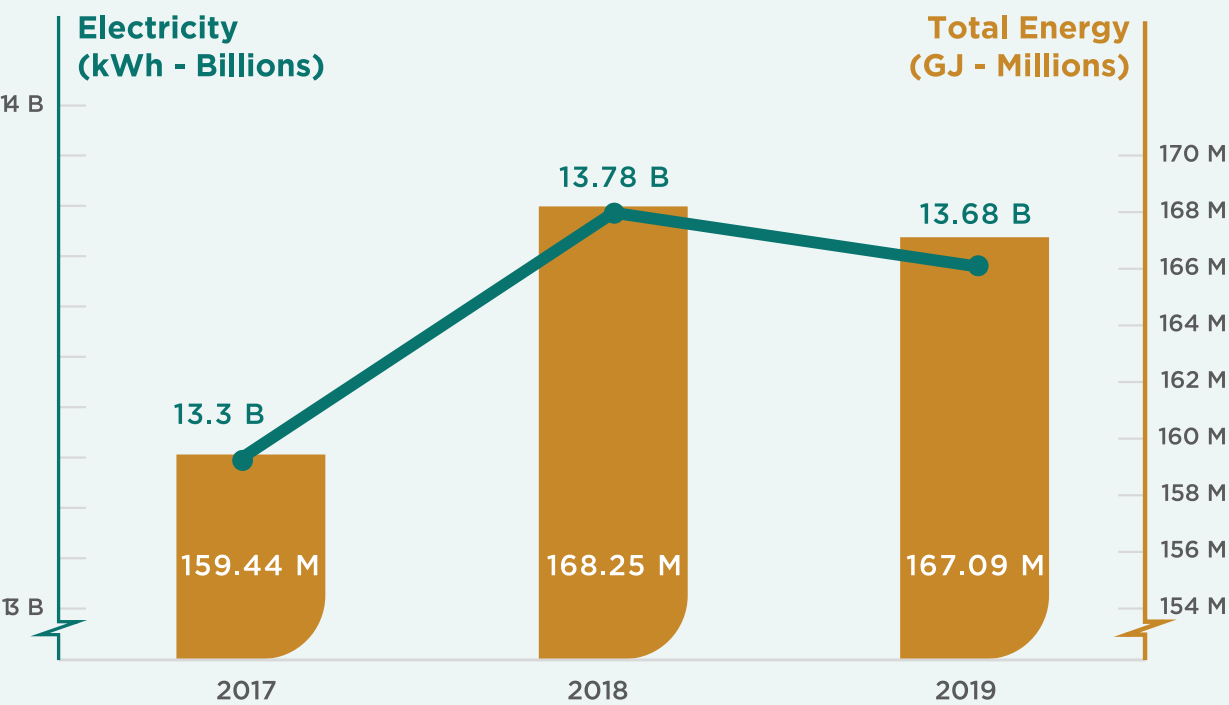
We track and monitor our energy consumption to capture spikes that require immediate maintenance, and to identify additional efficiency opportunities. We are employing innovative technologies such as process steam recycling and co-generation to fuel Ma'aden's continued growth while reducing environmental impacts.

We are also committed to increasing our use of renewables at our facilities through the adoption of new technologies and by raising awareness among our workforce of the need to save energy. Given the high viability of solar as an alternative across the

Saudi peninsula, we are exploring ways to add solar capability. These are just some of the ways we continually work to improve the efficiency with which we use energy, be it electricity, gas, or from other sources.



MA'ADEN ENERGY CONSUMPTION



## SPECIAL REPORT

# CARBON REDUCTION INITIATIVES AT MA'ADEN PHOSPHATE BUSINESS

The mines of Ma'aden, with operations located in remote areas of the Kingdom of Saudi Arabia, depend mostly on diesel for electricity generation. With the planned reductions of subsidies for diesel fuel and the government's initiatives to reduce domestic fuel consumption and encourage more sustainable energy generation, new alternatives are being investigated and implemented.

Ma'aden continuously works to improve the efficiency with which we use energy, be it electricity, gas, or from other sources. Ma'aden Phosphate Business continuously seeks to implement innovative processes. The integrated solar combined cycle (ISCC) power plant that fuels our Wa'ad Al-Shamal operation with a combination of solar power and natural gas has a total capacity of 1,390 MW, 50MW of which comes from solar. Built by General Electric, and operated by the Saudi Electric Company, the plant

provides enough power to supply over 500,000 local Saudi homes. Strategically located and supplying the needs of the Wa'ad Al-Shamal Industrial City, this new hybrid power plant has tremendous potential to boost the local economy and create numerous jobs for Saudis from the far north.

Ma'aden Phosphate Company at Ras Al-Khair and Ma'aden Wa'ad Al-Shamal are the locations of a unique steam heat resource recovery project. Turbines are powered by steam from an exothermal process waste heat recovery boiler, returning both electricity and low-pressure steam for use in our process plants. The turbine exhaust and excess steam are condensed by an air-cooled condenser and returned 100% as steam condensate back into the process system. In addition to the recovered steam, the system produces approximately 74 MW, most of which is returned to the grid.



Ras Al-Khair











# 09

## TAILINGS & MATERIALS MANAGEMENT

Ma'aden strives to manage tailings in line with internationally recognized good practice, reduce waste and impact associated with our sourcing operations, and manage materials across our value chain and throughout our product lifecycles.



UN Sustainable Development Goals





## TAILINGS

When ore is mined, pulverized into small particles, and then “watered,” with the potential addition of chemicals to allow the useful minerals to be harvested, the rest is disposed of as a milled rock slurry known as tailings that can either be stored onsite in tailings storage facilities or transported offsite for disposal. Ma’aden is committed to implementing leading practices in all aspects of managing tailings and associated impacts related to the safe handling and disposition of tailings.

In response to several high-profile tailings dam failures, Ma’aden endorsed the ICMM’s position statement on Preventing Catastrophic Failure of Tailings Storage Facilities (TSFs) and has focused on implementing dry tailings handling protocols that lower or eliminate the prospect of dam failures. Consequently, tailings at our operations are dewatered and sent as dry tailings to dedicated tailings storage facilities.

Our Tailings and Residue Management Standard will come into effect in 2020, promoting safety as its key objective. This standard will govern how all TSFs are designed, constructed, operated, monitored, and decommissioned using comprehensive, risk-based management and governance practices in line with internationally recognized good practice, to minimize the risk of catastrophic failure and negative environmental and social impacts.







## TAILINGS

At our phosphate mining operations, optical ore sorter rejects — tailings, phosphogypsum, and fluorosilicates — are stored in dedicated, lined, and appropriately engineered waste storage facilities. Non ore-containing material is rejected, and ore-containing rock is passed through a flotation process to separate the phosphate from the gangue and form rock slurry and tailings, which are then dewatered and disposed of in a tailings storage facility. The resulting dewatered, or “dry” tailings, are inherently more stable than slurries and when suitably stored pose minimal risk to groundwater quality and local communities.

At our gold and copper operations, mine tailings are dewatered in the processing plant, and are stored using the relatively rare method known as dry stack tailings. Unlike conventional tailings storage facilities, which occur in large ponds that require the construction of complex tailings dams to store wet tailings, dry tailings are easier to maintain. They are compacted and stacked in tailings storage facilities lined with high density polyethylene. Management of the facility is far less complex due to the relative absence of water.

## TAILINGS MANAGEMENT AT AL-JALAMID

Al-Jalamid tailings storage facility was constructed on the basis of thorough geo-technical findings and assessments and conforms with all applicable Royal Commission at Yanbu Environmental Regulations (RCER).

In compliance with Saudi and global standards, samples are collected from the tailings dam and analyzed under the toxicity characteristic leaching procedure (TCLP), which is a global best practice utilized by the U.S. Environmental Protection Agency among others, for measuring potential leaching through a landfill. Results indicate that plant tailings can be categorized as non-hazardous waste, and all test values are well within allowable limits.

**Key tailings safety practices at Al-Jalamid are consistent with Ma’aden practices at all sites, and have been designed using international best practices including:**

**Routine inspections**

**Safety review**

**Assurance audit**

**Independent tailings review**



## HAZARDOUS MATERIALS MANAGEMENT

Hazardous materials are defined as any solid, semi-solid, liquid, or contained gaseous materials, or combination of such wastes, which may, because of their quantity, concentration, physical, or chemical characteristics, pose a hazard or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Any third parties that are contracted to remove hazardous materials from our sites are fully vetted and must demonstrate that they meet Ma'aden's rigorous Health, Safety, Security, and Environmental standards and protocols.

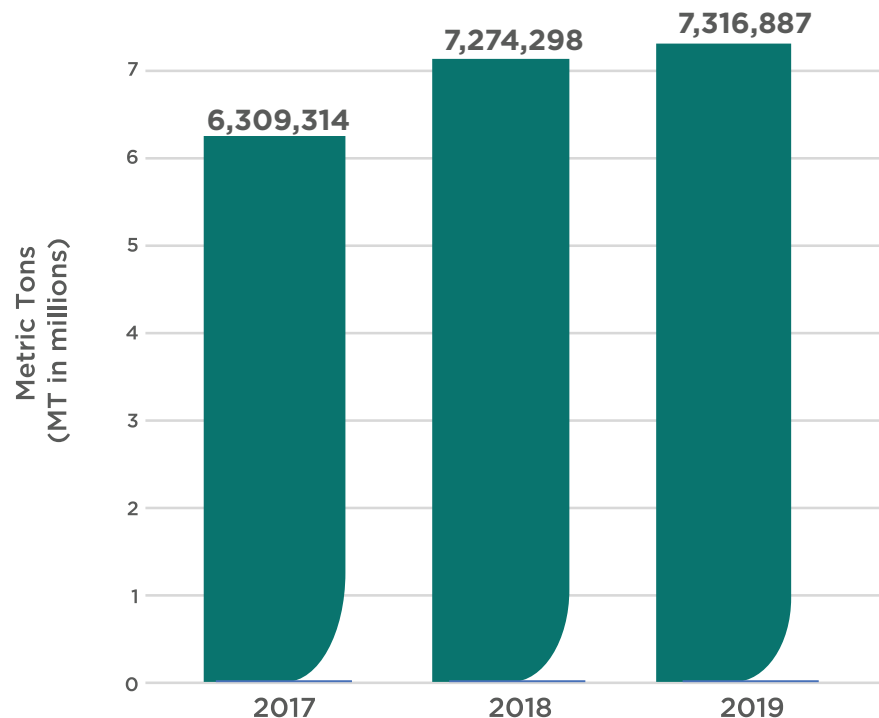
Ma'aden is dedicated to minimizing the use, and maximizing the safe handling, of all hazardous materials. We are in the process of minimizing the use of oil and the resulting production of oil slurries both by converting to natural gas as a fuel source in our operations, and through the use of desalinated and wastewater in our mining operations. We are also replacing chemicals such as mercury and cyanide with less hazardous alternatives wherever possible.

Ma'aden handles all hazardous materials consistent with UN Globally Harmonized Systems of Hazard Classification and Labeling (GHS), which have been introduced in several countries around the world. We are continually implementing and updating policies, assessment methods, and risk management measures to ensure the safe and environmentally healthy operation of all our facilities.

Our Materials Handling and Storage Code of Practice and the Hazardous Materials Management Standard demonstrates our local and regional regulatory requirements as well as international best practices regarding occupational health, safety, and environmental protection.

Cyanide, on the other hand, is handled, stored, and used at our gold mines for ore processing during the extraction of gold and silver. Our storage and handling processes that include cyanide are dealt with in accordance with the International Cyanide Management Code (ICMC) standard of practices to ensure employee safety and environmental protection while handling and storing cyanide.

### MATERIALS CONSUMPTION







## WASTE MANAGEMENT

Waste management requires managing waste from its inception to its final disposal, and the successful management and minimization of waste from our operations is of critical importance to Ma'aden. We implement policies aimed at reducing waste at our facilities, with the ultimate goal of minimizing waste intensity while managing the waste we do produce responsibly in the interim.

Ma'aden actively engages employees at all its sites to be trained in implementing leading practices in waste identification and classification, protocols for on-site storage, off-site disposal, and keeping accurate and compliant reporting and record keeping. We have robust procedures to manage dross and salt cake residues, including for their safe reuse, storage, or disposal.

Ma'aden Aluminum is working on different options to eliminate the dross that accumulates on site and is committed to implementing the most sustainable long-term solution for dross that includes the recovery of the metallic content contained in dross for beneficial use. The company is also making efforts to reduce dross generation in its Cast House and can reclamation operations. Efforts such as enhancing the siphoning system at ingot furnaces and an overall improvement of furnace operational best practices have brought

down dross generation from 1.26% (2018 average) to 1.16% (Q1-2019 average).

Ma'aden Aluminum is committed to further reduce waste generation and emission and minimize its environmental footprint by setting progressive waste recycling targets each year through our ongoing ISO- 14001:2015 Certification process.

Refinery boilers at Ma'aden Aluminum were switched from crude to natural gas in 2018, which has resulted in the complete elimination

of gypsum and fly ash generation. MRC emulsion sludge used to be sent for incineration, but in 2019 Ma'aden began recycling all oily sludge and flocking settling sludge, increasing waste recycling and reducing costs.

These waste recycling efforts together have had a positive impact on Ma'aden's recycling KPIs reported on the National Transformation Report, and Ma'aden is dedicated to utilizing leading waste management and minimization approaches as called for under Vision 2030.

### WASTE

	2017	2018	2019
<b>Total weight of solid hazardous waste (tons)</b>	1,613,081	2,328,180	2,242,751
<b>Total weight of liquid hazardous waste (kl)</b>	5,446	9,925	11,554
<b>Total weight of solid non-hazardous waste (tons)</b>	49,070	14,952	16,093
<b>Total volume of liquid non-hazardous waste (kl)</b>	4,445	6,887	2,520

*Scope Note:* Waste consumption data from IMC, MBAC, MAC and MRC have been included for all 3 years. MPC has only been included for 2017 and 2019, and MGBM has only been included for 2019, which is when the company started tracking waste consumption performance.

**MRC used  
47.40%  
recycled  
material  
to manufacture  
its primary  
products  
and services  
in 2019.**

## SPECIAL REPORT

# DRY TAILINGS AT MA'ADEN GOLD AND BASE METAL COMPANY (MGBM)

Dry stack tailings is an innovative solution to one of the mining industry's most pressing environmental challenges, the handling and storage of contaminated process water and excess materials created in the course of mining. Traditional mining operations store such "tailings" as liquids in large holding ponds, which present significant risks, especially of breaches or groundwater leaching. Dry stack tailings virtually eliminate these risks, while also reducing the amount of water required for tailings processing by up to 50%.

Dry stack tailings disposal is practiced at several of MGBM's operations. Ma'ad ad Dahab, Al Amar and Ad Duwayhi truck tailings to their TSFs with moisture contents of 20%.

Dry stacking requires thickening the tailings followed by filtering. Slurred tailings are forced against plates or belts through which water passes but not the solids. The resulting tailings cake is transported by conveyor or truck as it is too dense for pipeline transport. Tailings material is then

spread out and compacted to form an unsaturated tailings stack.

Beyond environmental risk and water use reduction, the dry stack tailings process offers considerable advantage at the time of mine de-commissioning and reclamation. Final emplacements of dry tailings can follow the desired landform shape, with limited post-placement deformation, offering more predictable closure and reclamation. The physical footprint of a dry tailings storage facility is also usually smaller than ponds holding conventional tailings, as dry tailings can be stacked to greater heights.



Ad Duwayhi



Ad Duwayhi Gold Mine



**10**

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APPENDIX



## ADDITIONAL FACTS & FIGURES

### FORCED AND CHILD LABOR

	2017	2018	2019
Total number of reported cases of child labor	0	0	0
Total number of reported cases of forced or compulsory labor	0	0	0

### LOCAL COMMUNITIES

	2017	2018	2019
Percentage (%) of operations with implemented local community engagement	100%	100%	100%
Total number of local community programs	20	50	35
Total local community investments spend (SAR - M)	45,050,438	29,651,170	10,368,920

### SOCIOECONOMIC COMPLIANCE

	2017	2018	2019
Total monetary value of fines with laws and/or regulations in the social and economic area	0	0	0
Total number of non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area	0	0	0

### PROCUREMENT

	2017	2018	2019
Total Procurement Budget (SAR - M)	6,746	9,098	10,807
Percentage (%) of procurement budget spent on local suppliers (Local suppliers defined as national suppliers)	80%	77%	75%

### ANTI-CORRUPTION

	2017	2018	2019
Percentage (%) of operations assessed for risks related to corruption	100%	100%	100%
Percentage of governance body members that the organization's anticorruption policies and procedures have been communicated to	100%	100%	100%
Percentage of employees that the organization's anti-corruption policies and procedures have been communicated to	100%	100%	100%
Percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to	100%	100%	100%





## ADDITIONAL FACTS & FIGURES

### MATERIALS CONSUMPTION

	2017	2018	2019
Total (MT)	6,309,314	7,274,298	7,316,887
IMC (MT)	86	86	86
MBAC (MT)	4,244,041	5,104,340	5,076,714
MAC (MT)	1,809,745	1,827,272	1,836,240
MRC (MT)	125,459	181,712	212,424



## GRI, ICMM, & UN SDGS INDEX

USING THE GRI STANDARDS AS A LEADING PRACTICE GUIDE FOR DISCLOSURE, THE CONTENT OF THIS 2019 SUSTAINABILITY REPORT HAS BEEN PREPARED IN REFERENCE TO THE SPECIFIC GRI STANDARDS LISTED BELOW:

GRI Topic	GRI Standard Disclosure	Information	Source	ICMM Principles	Prioritized SDGs
General Disclosures	102-1 Name of the organization	The Saudi Arabian Mining Company – the Company is known as Ma’aden.			
	102-2 Activities, brands, products, and services	Ma’aden is a leading mining and metals company in the Kingdom of Saudi Arabia, with a diverse portfolio of mineral assets at various stages of development including: exploration, development, and production. Ma’aden has a broad commodity focus spanning gold, phosphate, aluminum, and industrial minerals.			
	102-3 Location of headquarters	Riyadh, Kingdom of Saudi Arabia			
	102-4 Location of operations	Kingdom of Saudi Arabia, Sub-Sahara Africa, Australia, Canada, and South America.	Annual Report		
	102-5 Ownership and legal form	Ma’aden is a Saudi Joint Stock Company listed in the Saudi Stock Exchange. Ma’aden wa formed by the Royal Decree number m/17 date 14/11/1417 (H) to undertake all mining activities and development of mining sector in the kingdom.			
	102-6 Markets served		Annual Report		
	102-7 Scale of the organization		Annual Report		
	102-8 Information on employees and other worker	Ma’aden does not employ personnel on temporary contracts; therefore there are zero temporary contract employees.	p. 29		
	102-9 Organization’s supply chain		Annual Report		
	102-10 Significant changes to the organization and its supply chain		Annual Report		

GRI Topic	GRI Standard Disclosure		Information	Source	ICMM Principles	Prioritized SDGs
General Disclosures	102-11	Precautionary principles or approaches		Annual Report	2, 4	
	102-12	External initiatives	GRI Reporting Practices, SDGs, Vision 2030, CSR projects, and industry related frameworks.	p. 9	1, 2	17
	102-13	Membership of associations		p. 9 Annual Report		
	102-14	Statement from senior decisionmaker	Leadership statement from CEO	p. 4–5	2	
	102-16	Values, principles, standards, and norms of behavior	Our Code of Conduct articulates our approach to business ethics, anti-corruption, and anti-bribery, and sets the standards for responsible and appropriate behavior. Our Code of Conduct highlights that unethical activity is a disciplinary offense that could lead to dismissal.	p. 4–12, 16	1, 2	
	102-17	Mechanism for advice and concerns about ethics	To ensure effective internal application of our standards, we monitor ethical practices and engage with project managers on a regular basis. Additionally, an independent 24/7 whistleblower hotline and email, first implemented in 2012, are available to all internal and external stakeholders, including contractors, subcontractors, suppliers, clients, and advisors.	p. 16, 28	1, 2	
	102-18	Governance structure	Ma'aden's corporate governance structure consists of a Board of Directors and a further four functional Board Committees, responsible for reviewing the Company's operations within their particular areas of expertise and who then present their findings and suggestions to the Board of Directors.	p. 7–12	1, 2	
	102-19	Delegating authority	The Company Board, its advisors, its functional committees, Company management and employees, shareholders, and direct stakeholders are guided by the Company's Corporate Governance Guidelines and Procedures and Code of Ethics.	p. 10	1, 2	

GRI Topic	GRI Standard Disclosure	Information	Source	ICMM Principles	Prioritized SDGs
General Disclosures	102-20 Executive-level responsibility for economic, environmental, and social topics	Our robust governance framework is designed to enhance accountability through the recognition and management of all risk areas. It specifies the distribution of rights and responsibilities among various participants of the Company, including our Board of Directors and its four functional committees, our executive managers, and our employees.	p. 10	1, 2	
	102-21 Consulting stakeholders on economic, environmental, and social topics	We engage formally and informally on an ongoing basis with our key stakeholders, first among whom are clients, our employees, and local communities. Following a comprehensive review of our non-financial material issues in 2018, we have continued our work with consulting companies to update issues most relevant to our stakeholders and our business.		1, 2, 10	
	102-22 Composition of the highest governance body and its committees	Our sustainability priorities and actions are guided by our management team, and are informed by the needs and opportunities of our local communities. This structure allows us to prioritize sustainability as a Company-wide imperative, while maintaining the flexibility to invest in targeted local programs and share learnings from community initiatives across our portfolio.		1, 2	
	102-40 List of stakeholder groups		p. 13	10	17
	102-41 Collective bargaining agreements	This does not apply to the Kingdom of Saudi Arabia.		3	
	102-42 Identifying and selecting stakeholders		p. 13	10	
	102-43 Approach to stakeholder engagement		p. 12-13	10	
	102-44 Key topics and concerns raised		p. 13	10	
	102-45 Entities included in the consolidated financial statements	All of Ma'aden and its business units have been included in Ma'aden's consolidated financial statement.	Annual Report	10	



GRI Topic	GRI Standard Disclosure		Information	Source	ICMM Principles	Prioritized SDGs
General Disclosures	102-46	Defining report content and topic boundaries	The topic boundaries been defined based on the GRI Standards, and include Ma'aden and its affiliates.		10	
	102-47	List of material topics		p. 14	10	
	102-48	Restatements of information	None to be reported		10	
	102-49	Changes in reporting	This is our first annual Sustainability Report in compliance with the GRI: Core option, so no changes in reporting from previous years can be disclosed.		10	
	102-50	Reporting period	1st January to 31st December 2019		10	
	102-51	Date of most recent report	We previously disclosed our sustainability commitments in our Annual Report. Ma'aden's 2019 Sustainability Report is our first annual Sustainability compliance with the GRI standards.		10	
	102-52	Reporting cycle	Annual		10	
	102-53	Contact point for questions regarding the report	Mohammed Al-Ghadhbani, Manager, Corporate Sustainability Assurance, Ma'aden.		10	
	102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option.			
	102-55	GRI content index		p. 78–86	10	
	102-56	External assurance		p. 87	10	
	103 (201)	Management Approach: Economic Performance		p. 44, 50–54		
	103 (203)	Management Approach: Indirect Economic Performance		p. 51–52		
	103 (204)	Management Approach: Procurement Practices		p. 44–47		
	103 (205)	Management Approach: Anti-Corruption Behavior		p. 16	1	
	103 (301)	Management Approach: Materials		p. 72		
	103 (302)	Management Approach: Energy		p. 66	6	
	103 (303)	Management Approach: Water and Effluents		p. 56–57	1, 6	6

GRI Topic	GRI Standard Disclosure		Information	Source	ICMM Principles	Prioritized SDGs
General Disclosures	103 (304)	Management Approach: Biodiversity		p. 64	6,7	
	103 (305)	Management Approach: Emissions		p. 63	6	
	103 (306)	Management Approach: Effluents & Waste		p. 73	7	
	103 (401)	Management Approach: Employment		p. 28-29		
	103 (403)	Management Approach: Occupational Health & Safety		p. 22-25	1, 5	
	103 (404)	Management Approach: Training & Education		p. 29-30	3, 5	
	103 (405)	Management Approach: Diversity & Equal Opportunity		p. 31	1	5
	103 (406)	Management Approach: Non-discrimination		p. 16, 31		
	103 (411)	Management Approach: Rights of Indigenous People		p. 41	1, 3	
	103 (412)	Management Approach: Human Rights Assessment		p. 41	1, 3	
	103 (413)	Management Approach: Local Communities		p. 34-38	1, 2, 9, 10	

GRI Topic	GRI Standard Disclosure	Information	Source	ICMM Principles	Prioritized SDGs
Economic Performance	201-1 Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations, and other community investments, retained earnings and payments to capital providers and to governments		p. 37, 50-54	9	5, 7, 8, 9
	201-2 Financial implications and other risks and opportunities due to climate change	Ma'aden is committed to responsible management of climate-related risks. We prioritize efficiency across our operations, and carefully assess and manage our environmental impacts. We recognize the need for climate resiliency in our long-term physical assets, and contribute to climate change mitigation efforts through our proactive operational planning, diversification of supply chains, implementation of leading technologies, and growing investments in alternative energies.		6	
Indirect Economic Impacts	203-1 Infrastructure investments and services supported	In addition to hiring nationals, Ma'aden provides skill training and professional development to advance its local content strategy and programs throughout its value chain to the fullest extent possible. We strive to persuade supply chain partners to apply our values of local procurement, employment and training of the local workforce, and technology transfer.	p. 51-54	9	5, 7, 9, 11
	203-2 Significant indirect economic impacts		p. 48, 50-52		
Procurement Practices	204-1 Proportion of spending on local suppliers	Maaden defines "local" as within the King of Saudi Arabia. The topic includes all locations of operation.	p. 44, 47-48, 76	2, 9, 10	12
Anti-corruption	205-1 Operations assessed for risks related to corruption	100% our operations have been assessed for risks related to corruption.	p. 76	1	16
	205-2 Communication and training about anti-corruption policies and procedures	100% of Ma'aden's governance body members, employees, and business partners have been communicated the organization's anti-corruption policies and procedures.	p. 76	1	16
Anti-competitive Behavior	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	They are no (zero) legal actions for anti-competitive behavior, anti-trust, or monopoly practices or related fines or sanctions to report.			

GRI Topic	GRI Standard Disclosure	Information	Source	ICMM Principles	Prioritized SDGs
Materials	301-1 Materials used by weight or volume		p. 72-73, 77	6, 8	8, 12
Energy	302-1 Energy consumption within the organization		p. 66	6	7, 8, 12, 13
Water and Effluents	303-1 Total water withdrawal and water withdrawal by source		p. 56	6	6
	303-3 Water recycled and reused		p. 57	6, 8	6
Biodiversity	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Ma'aden does not have (zero) operations owned, leased, managed, located in, adjacent to, or that contain protected areas and areas of high biodiversity values.	p. 64	2, 6	6, 14, 15
	304-2 Significant impacts of activities products, and services on biodiversity	There are no (zero) material off-site impacts on biodiversity to be reported.		7	6, 14, 15
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	No (zero) relevant cases reported within Maaden or its affiliates.		6, 7	6, 14, 15
Emissions	305-1 Direct (Scope 1) GHG emissions		p. 63	6, 10	12, 13, 15
	305-2 Energy indirect (Scope 2) GHG emissions		p. 63	6, 10	12, 13, 15
Effluents and Waste	306-2 Waste by type and disposal method		p. 73, 77	6, 8	6, 12
	306-3 Significant spills and environmental incidents	There were no (zero) environmental spill incidents in 2019, ensuring no off-site or long term impacts.		6, 8	6, 12
	306-4 Transport of hazardous waste	No (zero) relevant cases reported within Ma'aden or its affiliates.			6, 12
Environmental Compliance	307-1 Non-compliance with environmental laws and regulations	Ma'aden has not incurred any fines or non- monetary sanctions for non-compliance with environmental laws or regulations.		6	16



GRI Topic	GRI Standard Disclosure		Information	Source	ICMM Principles	Prioritized SDGs
<b>Employment</b>	401-1	New employee hires and employee turnover		p. 29, 30	3	5, 8
<b>Occupational Health &amp; Safety</b>	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities		p. 22-23	4, 5	3, 8
	403-4	Worker participation, consultation, and communication on occupational health and safety		p. 22-25	4, 5	8
	403-5	Worker training on occupational health and safety		p. 22-25, 29-30	5	8
	403-9	Work-related injuries		p. 22	5	3, 8
<b>Training and Education</b>	404-1	Average hours of training per year per employee	Average number of hours per Saudi (male) employee is 45 (2019), 53 (2018), 45 (2017). Average number of hours per non-Saudi (male) employee is 30 (2019), 31 (2018), 30 (2017).		5	4, 5, 8
	404-2	Programs for upgrading employee skills and transition assistance programs		p. 29-30	3, 5	8
	404-3	Percentage of employees receiving regular performance and career development reviews	Percentage of employees receiving regular performance and career development reviews is 58%.	p. 30, 39		5, 8
<b>Diversity and Equal Opportunity</b>	405-1	Diversity of governance bodies and employees	At Ma'aden, we have created a diverse and inclusive working environment, aligned with national laws and local customs. Our HR and sustainability practices reflect our commitment to inclusion, gender equality, and equal employment opportunity in our workplace. In accordance with the local customs where we operate, female employment is illegal in the mining industry, but Ma'aden is advancing initiatives in this regards by employing female employees at our HQ.			5, 8
<b>Non-discrimination</b>	406-1	Incidents of discrimination and corrective actions taken	Zero incidents.	p. 16		
<b>Child Labor</b>	408-1	Operation and suppliers at significant risk for incidents of child labor	Zero incidents.	p. 76	3	8, 16

GRI Topic	GRI Standard Disclosure	Information	Source	ICMM Principles	Prioritized SDGs
<b>Forced or Compulsory Labor</b>	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Zero incidents.	p. 76	3	8
<b>Rights of Indigenous Peoples</b>	411-1 Incidents of violations involving rights of indigenous peoples	Zero incidents.	p. 41	1, 3	2
<b>Human Rights Assessment</b>	412-2 Employee training on human rights policies or procedures	100% of Ma'aden's employees in 2017, 2018, and 2019 have been trained in human rights policies or procedures concerning aspects of human rights that are relevant to our operations.	p. 30	1, 3	
	412-3 Significant investment agreements and contracts that include human rights clauses that underwent human rights screening	100% of Ma'aden's agreements include obligatory provisions relating to human rights.	p. 42	2	
<b>Local Communities</b>	413-1 Operations with local community engagement, impact assessments, and development programs	100 of Ma'aden's operations and community programs implement local community engagement initiatives.	p. 76	2, 3, 9	
<b>Socioeconomic Compliance</b>	419-1 Non-compliance with laws and regulations in the social and economic area	Ma'aden has no (zero) cases of non-compliance with laws and regulations in the social and economic area.	p. 76	4	16



## INDEPENDENT ASSURANCE STATEMENT

DNV·GL

### Scope and Approach

DNV GL Business Assurance Group AS - Dubai Branch (DNV GL), has been commissioned by Saudi Arabian Mining Company ('Ma'aden' or 'the Company', Commercial Registration Number (CRN) 1010164391) to undertake independent assurance of the Company's Sustainability Report 2019, in its printed format ('the Report') including references to the Company's Annual Report 2019 for the calendar year ending 31st December 2019.

The sustainability disclosures in this Report have been prepared based on the identified material topics and related performance disclosures based on the Global Reporting Initiative (GRI) Sustainability Reporting Standards ('GRI Standards') and the Core option of reporting covering the economic, environmental and social performance for the activities undertaken by the Company for the calendar year 1st January - 31st December 2019.

The reporting scope and boundary encompasses economic, environment, and social performance of Ma'aden's operations excluding subsidiaries (i.e., performance) pertains to Ma'aden's operations including affiliates and its Corporate Office located in the Kingdom of Saudi Arabia, as brought out in the Report in the section 'About this Report'.

We performed a limited level of assurance engagement based on the International Standard on Assurance Engagements 3000 (ISAE 3000) Revised\* and GRI's Principles for Defining Report Content and Quality. Our assurance engagement was planned and carried out during March 2020 - July 2020 using assurance methodology VeriSustainTM1, which is based on our professional experience, ISAE 3000 and GRI's Reporting Principles.

1 The VeriSustain protocol is available on [www.dnvgl.com](http://www.dnvgl.com)

\* Assurance Engagements other than Audits or Reviews of Historical Financial Information

### Responsibilities of the Management of Ma'aden and the Assurance Provider

The Management has the sole responsibility for the preparation of the Report and are responsible for all information disclosed in the Report as well as the processes for collecting, analyzing, and reporting the information presented in the printed Report, and maintaining the integrity of referenced information/disclosures presented on the Company's website. In performing this assurance work, DNV GL's responsibility is to the Management of the Company; however, this statement represents our independent opinion and is intended to inform the outcome of our assurance engagement to the management and stakeholders of Ma'aden.

We provide a range of other services to Ma'aden, none of which in our opinion, constitute a conflict of interest with this assurance work. Our assurance engagements are based on the assumption that the data and information provided by

Ma'aden to us as part of our review have been provided in good faith and free from misstatements. We were not involved in the preparation of any statement or data included in the Report except for this Assurance Statement. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.



## INDEPENDENT ASSURANCE STATEMENT

DNV·GL

### Basis of our Opinion

As part of the assurance process, a multi-disciplinary team of sustainability and assurance specialists performed remote assessment through DNV GL's remote assessment methodology and sampled the disclosures related to its material topics. Considering a limited level of assurance, we did not carry out any engagement with external stakeholders as part of this assurance engagement. We undertook the following activities:

- Reviewed the approach to stakeholder engagement and materiality determination process and the outcome as brought out in this Report.
- Reviewed the process of reporting on Organisational Profile, Strategy, Ethics and Integrity, Governance, Stakeholder Engagement, and Reporting Practices based on GRI Standard 2016:102, for the GRI Standards: Core option of reporting.
- Reviewed the disclosures related to the following selected GRI Standards:
  - GRI 205: Anti-corruption 205-2, 205-1-2016
  - GRI 303: Water 303-3, 303-1-2016

- GRI 307: Environmental Compliance 307-1-2016
- GRI 403: Occupational Health and Safety 403-2-2016
- GRI 413: Local Communities 413-1-2016
- Reviewed the performance disclosure related to the identified material topics and related GRI Standards remote assessment of the processes for gathering and consolidating performance data related to identified material topics and, for a sample, checking the data consolidation to assess the Reliability and Accuracy of reported performance disclosures based on GRI topic-specific Standards.
- Interviewed personnel responsible for management of sustainability issues related to the five selected GRI topic-specific Standards and reviewed selected evidences to support issues disclosed in the Report.
- Considering the outbreak of the COVID-19 pandemic worldwide and related restrictions, we carried out remote assessments of Ma'aden's operations to review the processes and systems for aggregating affiliate level sustainability information i.e., reviewed

sustainability disclosures related to the five selected topic-specific GRI Standards for MPC (Ma'aden Phosphate Company), MWSPC (Ma'aden Wa'ad Al Shamal Phosphate Company), IMC (Ma'aden Industrial Minerals Company), MBAC (Maaden Bauxite and Alumina Company), MAC (Ma'aden Aluminum Company), MRC (Ma'aden Rolling Company), and MGBM (Ma'aden Gold And Base Metal Company).

- Carried out a gap assessment of the Report against the requirements of GRI.

During the assurance process, we did not come across limitations to the scope of the agreed assurance engagement. Our assurance was limited to assurance of the GRI 102: General Disclosures as per the GRI Standards: Core option of reporting, and five selected GRI topic-specific Standards. We understand that certain reported financial and nonfinancial data/information was referenced to Ma'aden's Annual Report 2019. The review of these references in the Annual Report was excluded from our scope of work.





# INDEPENDENT ASSURANCE STATEMENT

DNV·GL

## Opinion and Observation

On the basis of the assurance undertaken, nothing came to our attention to suggest that the Report does not properly describe Ma’aden’s sustainability performance including adherence to the Principles for Defining Report Content including GRI 102: General Disclosures 2016 and disclosures related to the GRI topic-specific Standards (Anti-corruption, Water, Environmental Compliance, Occupational Health and Safety, Local Communities) and related requirements as per GRI 103: Management Approach 2016. Without affecting our assurance opinion, we provide the following observations against the principles of VeriSustain and GRI Reporting Principles:

### MATERIALITY

The process of determining the issues that is most relevant to an organization and its stakeholders. The Report explains the process through which Ma’aden has carried out its materiality determination exercise in 2018 based on consultations with internal and external stakeholders, and its key outcomes. Further, the Report prioritizes 10 critical issues for reporting as brought out in the section ‘Materiality Assessment’ of the Report. Nothing has come to our attention to believe that the materiality process has not missed out any known material topics based the current business of Ma’aden and

overall sustainability context, however the selected reporting scope and boundaries may be extended to cover additional material topics in future reports.

### STAKEHOLDER INCLUSIVENESS

The participation of stakeholders in developing and achieving an accountable and strategic response to Sustainability. The Report has explained the process of identification of stakeholders and their key concerns in the section ‘Engaging Stakeholders’ of the Report. The Report indicates that Ma’aden has considered the AccountAbility AA1000 Stakeholder Engagement Standard as well as the International Association for Public Participation (IAP2) Standards to develop its own process of stakeholder identification and engagement. Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Stakeholder Inclusiveness, however the Report needs to further bring out the frequency of engagement with key stakeholders.

### RESPONSIVENESS

The extent to which an organization responds to stakeholder issues. The Report brings out details on how Ma’aden responds to the five identified material issues (Anti-corruption, Water, Environmental Compliance, Occupational Health and Safety, Local Communities)

through organizational policies, strategies, and management systems including selected performance indicators considering the GRI Standards: Core option of reporting.

Ma’aden may further strengthen the management approach disclosures based on requirements of GRI 3-103 (i.e., impacts created and governance in line with the ESG frameworks adopted by Ma’aden). Nothing has come to our attention to believe that the Report has not met the Principle of Responsiveness for the five selected GRI topic-specific Standards.

### RELIABILITY

The accuracy and comparability of information presented in the report, as well as the quality of underlying data management systems. Ma’aden has developed a spreadsheet-based sustainability disclosure system to capture key sustainability disclosures across its reporting boundaries. The majority of data and information verified by us were found to be fairly accurate and reliable.

Some of the data inaccuracies identified during the verification process of the sample data sets verified were found to be attributable to transcription, interpretation, and aggregation errors. The data inaccuracies have been communicated for correction and the related disclosures were reviewed for correctness.



## INDEPENDENT ASSURANCE STATEMENT





### COMPLETENESS

How much of all the information that has been identified as material to the organization and its stakeholders is reported. The Report has attempted to apply GRI's Principle of Completeness as defined in the GRI 101: Foundation 2016, with respect to coverage of the five selected material topics for its chosen reporting boundaries; however, Ma'aden may further strengthen its disclosures in future reporting periods by including performance related to all its entities/affiliates including its key supply chain partners where these material topics creates impact, and based on key concerns of stakeholders. Nothing has come to our attention to suggest that the Report does not meet the Principle of Completeness.

### NEUTRALITY

The extent to which a report provides a balanced account of an organization's performance, delivered in a neutral tone. The Report brings out disclosures related to Ma'aden's sustainability performance including key concerns and challenges faced during the reporting period in a neutral tone in terms of content and presentation. Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Neutrality.

For DNV GL Business Assurance Group AS - Dubai Branch

 Thamizharasi Kaliaperumal Lead Verifier DNV GL Business Assurance	 Amit Bhatia Verifier DNV GL Business Assurance
 Vadakepatth Nandkumar Assurance Reviewer DNV GL Business Assurance	 Balamurugan Sambasivam Branch Manager DNV GL Business Assurance Group AS- Dubai Branch

15 July 2020, Dubai, United Arab Emirates

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