

حديد الإمارات أركان  
emirates steel arkan

Sustainability Report 2022

# Shaping the Future Together



# About this Report

We are proud to present **Emirates Steel Arkan's 2022 Sustainability Report**. It is our first report after the merger of the two companies, **Emirates Steel and Arkan**, in October 2021. The report represents a comprehensive overview of our approach to integrating sustainability within our daily activities and operations.

The report highlights our sustainability-related programmes and achievements in addition to our economic, environmental, social, and governance (ESG) performance with respect to the relevant topics of material importance to us and to our stakeholders. We aim to improve our accountability and transparency as a responsible company and demonstrate our commitment to sustainability practices to our stakeholders by providing a clear and balanced picture of our current performance and what we aspire to achieve in the future with respect to our sustainability journey.

## Scope

This report covers Emirates Steel Arkan's sustainability performance for the calendar year 2022 and it covers all of Emirates Steel Arkan's operations under our direct control in Abu Dhabi.

## Reporting Guidelines

Emirates Steel Arkan has reported in accordance with the GRI Standards for the period from 1 January, 2022 to 31

December, 2022. The Global Reporting Initiative (GRI) is an international independent standards organisation that helps businesses, governments and other organisations understand and communicate their impacts on issues such as climate change, human rights, energy and corruption, among others. GRI Standards are the world's most widely used sustainability reporting standards. The report also aligns with the Certification Authority for Reinforcing Steel (CARES), Sustainable Constructional Steel (SCS) Scheme requirements, Abu Dhabi Securities Exchange (ADX) requirements and World Steel Association (WSA) requirements where applicable. In addition, we refer to several international and local frameworks such as the United Nations Sustainable Development Goals (UN SDGs) and Abu Dhabi's Economic Vision 2030, to demonstrate our contribution towards the sustainable development of the United Arab Emirates and, in particular, Abu Dhabi.

## Let us hear from you

We believe sustainability is an evolving process, therefore, we would like to hear your feedback and questions on the content of this report and on our sustainability journey.



Please contact us at:

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- [twitter.com/EMSteelArkan](https://twitter.com/EMSteelArkan)
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- [youtube.com/c/EmiratesSteelUAE](https://youtube.com/c/EmiratesSteelUAE)
- [linkedin.com/company/emirates-steel-arkan](https://linkedin.com/company/emirates-steel-arkan)
- [instagram.com/emiratessteelarkan](https://instagram.com/emiratessteelarkan)

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Read about **The Namaa' Project** case study p44

# Message from the Group CEO

**Saeed Ghumran Al Remeithi**

Group Chief Executive Officer  
Emirates Steel Arkan



**"We believe that we can lead by example and remain at the forefront of transformation in our industry."**

**I am delighted to be presenting the first sustainability report for Emirates Steel Arkan following the merger.**

In this report we detail the key activities that propel us on our continuing sustainability journey. Our holistic approach towards sustainability, risk management, and business continuity have been the source of our unwavering success while navigating uncertain markets. Despite this deteriorating market sentiment, increasing volatility in commodity prices and mounting concerns about inflation risks we have diversified our revenue sources by increasing our export markets, boosted the competitiveness of national products, and encouraged local production in support of the "Make it in the Emirates" campaign as part of the UAE's industrial strategy, Operation 300bn.

This report discloses Emirate Steel Arkan's performance across all its operations and facilities in alignment with GRI Standards, CARES SCS Scheme requirements, ADX requirements and WSA sustainability indicators. In offering the details of our organisation and its data, we hope to remain transparent in our commitments and accountable in the standards we have set for ourselves and the targets we aim towards.

At Emirates Steel Arkan, we believe that we can lead by example and remain at the forefront of transformation in our industry. We have undertaken measures to enhance the Group's overall resilience including strategic organisational changes, investing in new environmentally conscious products, intensive marketing programming and a prudent approach to cost control.

In 2022, we brought new products to market with ES600. This high-tensile steel reinforcement bar (rebar) supports customers' efforts to become more environmentally friendly and helps reduce the Group's carbon footprint for steel production. We also continue to work with our partners in mapping a comprehensive net zero plan, which is aligned with international carbon reduction targets, and our Building Materials Business is also developing plans for green cement, which harnesses low-carbon production processes.

We are proud to report our continuing journey to performance excellence. This year, we reduced our emissions intensity across our Steel Businesses by 19% compared to previous years. We signed on to the UAE Climate-Responsible Companies Pledge and ramped up our energy efficiency efforts. We also purchased clean energy certification for solar and nuclear energy totalling 7,272,000 GJ, which represented 13% of the total direct and indirect energy consumed by our Steel Businesses. Additionally, we continue to expand our product offerings in global markets while supporting the local economy in the UAE by increasing our spending on local suppliers.

As we enter 2023, we have developed our COP28 strategy and our roadmap to give clear direction, monitoring methodologies and control over the Group's sustainability efforts. We will continue to place sustainability at the core of our business and remain confident in the Group's future and our growth prospects. We have a clear strategy to expand geographically, to broaden our product range and continue delivering long-term value to our shareholders. We remain committed to supporting the UAE's economic growth and diversification goals by practicing sustainable and responsible industrial methods, adopting the latest technologies, investing in research and development (R&D), all while developing local talent.



Our finished products are shipped to over 70 countries worldwide.

# Key Performance Highlights

## Creating Shared Value

### AED 9.5bn

Revenue rose 10% year on year in 2022 to AED 9.5 billion, compared to a pro-forma AED 8.6 billion in 2021

### AED 508.5m

Net profit increased to AED 508.5 million in 2022 from a pre-merger pro-forma loss of AED 636.7 million in 2021

### Zero complaints

Had zero complaints against Emirates Steel Arkan from our suppliers

### AED 400m

The Group's "Namaa" cost reduction and transformation programme, launched in 2021, continued to yield positive results, contributing some AED 400 million to the Group's EBITDA.



### No monetary

sanctions or cases of non-compliance with laws and regulations were recorded

### AED 2,714m

A total of AED 2,714 million spent with local suppliers by the Steel, PVC, Bags and Blocks Businesses

### 80%

80% Supplier satisfaction rating

### 88%

88% of our local suppliers are ICV-certified

## Caring for People

### 161,414

161,414 hours of training delivered in Steel Businesses

### 99%

Increase in training hours since 2021 in Steel Businesses

### 23

23 hours of training per employee delivered at the Building Material Businesses

### 61

61 hours of training per employee delivered in Steel Businesses

### 57

57 emergency response drills successfully conducted

### 16m

16 million safe man-hours

### AED 741,204

spent on CSR

Received **Safety excellence award** from World Steel Association



## Producing Sustainable, Safe and High-Quality Products

### 92.5%

92.5% customer return rate



### Global reach

for our products to 70 markets



### AED 15,803,743

AED 15,803,743 savings from implementing employee ideas through our ThinkSmart platform

### AED 3,380,413

AED 3,380,413 spent on R&D

## Preserving the Environment

### "A" grade

in the Ministry of Environment and Climate Change's annual assessment



### 1,100 trees

Planted 1,100 trees



- Our Cement plant was awarded the Electrical Tariff Incentive Programme (ETIP) certificate with **"Excellent" rank**
- **7,272,000 GJ** energy consumption from clean energy sources (nuclear and solar)
- **2% decrease** in energy consumption intensity in our Steel Businesses
- Our CEO signed the UAE Climate-Responsible Companies Pledge
- Updated our company integrated policy to cover the commitments to energy in line with ISO 50001 (Energy Management System).

# Alignment with National Priorities

National Priority	Objective	Emirates Steel Arkan's Contribution
<b>Abu Dhabi Economic Vision 2030</b>	<ul style="list-style-type: none"> <li>Provide a framework for a long-term transformation of Abu Dhabi's economy.</li> <li>Enhance talents and capabilities of the local workforce.</li> <li>Build infrastructure resilience to withstand economic shocks.</li> </ul>	<ul style="list-style-type: none"> <li>Investing a total of AED 3.4 million in R&amp;D during 2022.</li> <li>Investing in sustainable and responsible products such as ES600.</li> <li>Emiratisation at Steel Businesses reached 26%.</li> </ul>
<b>UAE Industrial Strategy "Operation 300bn"</b>	<ul style="list-style-type: none"> <li>Develop the UAE's industrial sector.</li> <li>Increase the UAE's In-Country Value (ICV).</li> <li>Establish the UAE as a global hub for future industries.</li> <li>Build the reputation of the UAE's industrial products through the promotion of exports to global markets.</li> <li>Create quality job opportunities in the industrial sector.</li> <li>Promote the 'Made in the Emirates' brand and national products.</li> </ul>	<ul style="list-style-type: none"> <li>Investing in sustainable and responsible industrial practices.</li> <li>Adopting the latest technologies.</li> <li>Continuing to develop and nurture local talent through the launch of our Masaar and Future Leader programmes for UAE Nationals to advance their skills and strengthen leadership capabilities.</li> </ul>
<b>UAE Strategy for the Fourth Industrial Revolution (4IR)</b>	<ul style="list-style-type: none"> <li>Intelligent Supply Chains – develop the world's next generation intelligent terminals and logistics ecosystem to maximise productivity in a sustainable manner.</li> <li>Global 4IR Hub – create a global 4IR hub to promote a competitive national economy based on knowledge, innovation and the 4IR technologies and applications.</li> <li>Focus on advanced sciences and technologies (e.g., Bioengineering, Nanotechnology and Artificial Intelligence).</li> </ul>	<ul style="list-style-type: none"> <li>Aligning with the fourth industrial revolution through digital transformation including Artificial Intelligence and Virtual and Augmented Reality.</li> <li>Aiming to develop AI solutions by partnering with Mohamed bin Zayed University of Artificial Intelligence.</li> <li>Pushing forward proposals for 3D metal printing and partner with the Centre for Iron and Steelmaking Research (CISR) to drive our R&amp;D initiatives.</li> </ul>
<b>UAE Vision 2031</b>	<ul style="list-style-type: none"> <li>Generate AED 800 billion in non-oil exports.</li> <li>Raise the value of the UAE's foreign trade to AED 4 trillion.</li> <li>Enhance a forward society by achieving the prosperity of society by highlighting the capabilities of the citizens to maximise their effective contribution in all sectors.</li> <li>Enhance a forward economy by reflecting the UAE's belief in the importance of human capital as the main driver of the next 10-year development plan.</li> </ul>	<ul style="list-style-type: none"> <li>Our steel products have a global market presence, and now reach 70 markets worldwide including Europe, America, Asia, Middle East, and North Africa.</li> <li>Investing in and nurturing UAE talent through our Career Aspiration Programme (CAP). CAP is our pathway to creating future leaders in the UAE's industrial sector.</li> </ul>

National Priority	Objective	Emirates Steel Arkan's Contribution
<b>UAE and Dubai Innovation Strategy</b>	<ul style="list-style-type: none"> <li>Encourage private sector innovation by stimulating companies to establish innovation and scientific research centres, adopt new technologies, and develop innovative products and services.</li> </ul>	<ul style="list-style-type: none"> <li>Enabling employee innovation and contribution through our ThinkSmart Platform, which generated AED 15.8 million in savings.</li> </ul>
<b>UAE Centennial 2071</b>	<ul style="list-style-type: none"> <li>Invest in advanced technology-based education.</li> <li>Diversify non-oil imports and exports.</li> <li>Raise the productivity of the national economy.</li> <li>Support the knowledge economy by supporting UAE inventors and scientists.</li> </ul>	<ul style="list-style-type: none"> <li>Publishing 15 research articles in top journals such as IEEE and other Scientific articles.</li> <li>Acquiring two patents (and an additional patent under review) from the United States Patent and Trademarks Office, including one in collaboration with Khalifa University.</li> <li>Signing an MOU with Khalifa University to collaborate in different areas of research such as CO<sub>2</sub>, hydrogen, energy, and additive manufacturing.</li> </ul>
<b>National Climate Change Plan of the UAE 2017-2050</b>	<ul style="list-style-type: none"> <li>Identify, manage, and assess causes of climate change risks and impacts.</li> <li>Plan and successfully transition the UAE's economy to one that is resilient and sustainably driven.</li> <li>Manage UAE's GHG emissions with minimal disruptions to economic growth.</li> </ul>	<ul style="list-style-type: none"> <li>Our Group CEO signed the UAE Climate-Responsible Companies Pledge.</li> <li>Increasing greenery and planting to increase carbon sequestration. We planted 11,489 trees by 2022 and achieved 115 tonnes of CO<sub>2</sub> reduction from sequestration.</li> <li>Passing the annual assessment of the Ministry of Climate Change and Environment with "A" grade.</li> </ul>
<b>UAE Net Zero by 2050</b>	<ul style="list-style-type: none"> <li>Achieve net zero emissions by 2050.</li> <li>Align to international decarbonisation agendas.</li> <li>Increase size of UAE's green economy.</li> <li>Reduce GHG emissions across the UAE's sectors and industries.</li> </ul>	<ul style="list-style-type: none"> <li>Developing the decarbonisation strategy to reduce our emissions.</li> <li>Appointing ENGIE Impact to accelerate our sustainability transformation by assessing our carbon footprint.</li> </ul>

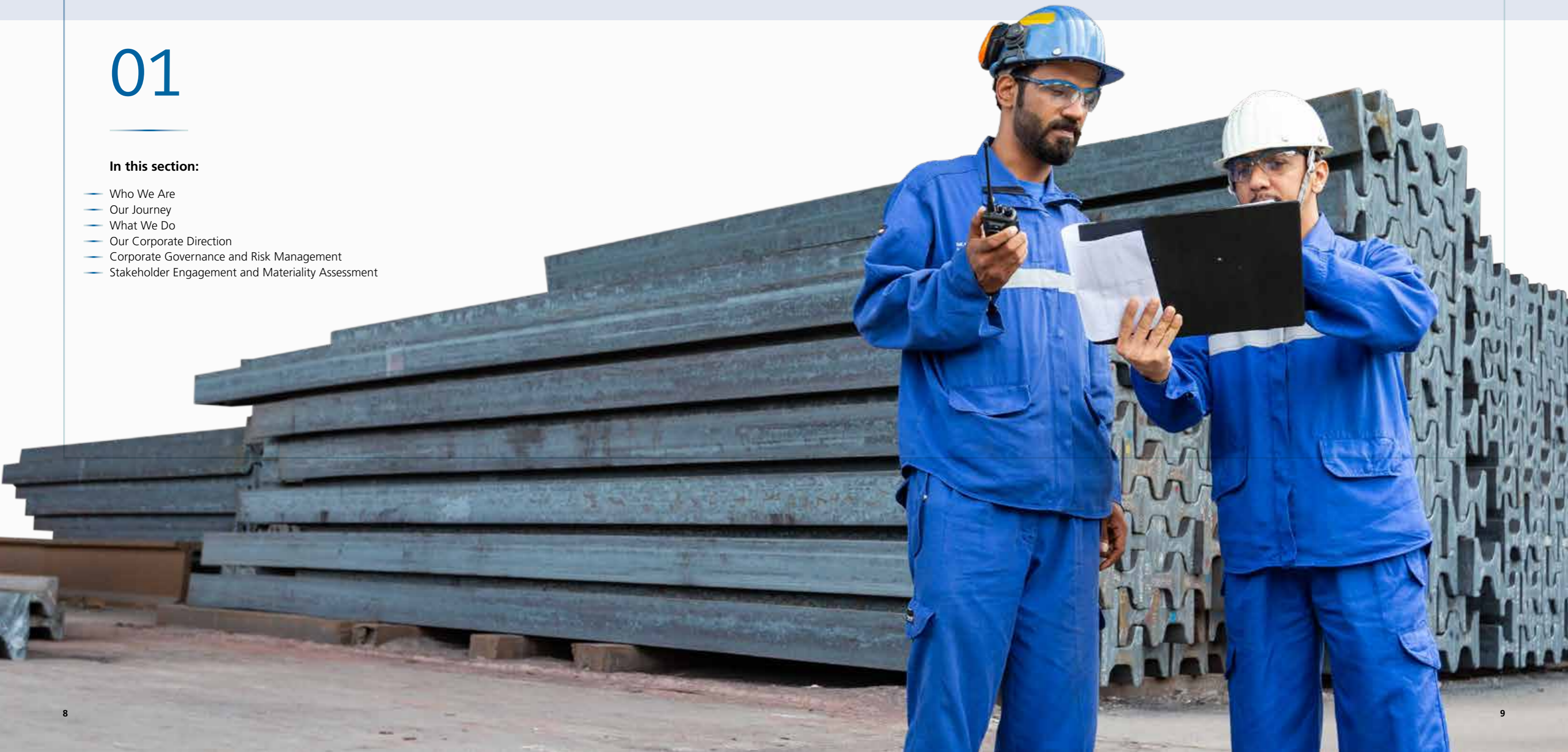
# Emirates Steel Arkan at a Glance



## 01

### In this section:

- Who We Are
- Our Journey
- What We Do
- Our Corporate Direction
- Corporate Governance and Risk Management
- Stakeholder Engagement and Materiality Assessment



# Who We Are

## About Emirates Steel Arkan

**Emirates Steel Arkan Group is a public joint stock company (ADX: EMSTEEL) and the UAE's largest steel and building materials manufacturer. The Group leverages cutting-edge rolling mill technologies to supply the domestic and international markets with high-quality finished products including wire rods, rebars, heavy sections and sheet piles.**

Additionally, the Group produces premium cement, blocks, pipes, and dry mortar, creating a one-stop shop for the manufacturing and construction sectors. Emirates Steel Arkan is the largest producer of heavy and jumbo sections and the only producer of hot rolled sheet piles in the region and is only the fourth steelmaker in the world to receive the ASME accreditation to produce nuclear grade rebar. The Group also works with customers globally to provide bespoke solutions, delivered in a timely manner, that are helping build cleaner, safer and more durable buildings and infrastructure around the world. Emirate Steel Arkan's production

process uses 40% less carbon than its competitors due to a range of decarbonisation initiatives, spearheaded by the utilisation of the carbon capturing facility.

Emirates Steel Arkan was the first steelmaker in the world to capture its CO<sub>2</sub> emissions and the first manufacturing company in the Middle East to be verified for (LEED) green building system documentation. The Group is committed to continue harnessing innovative cutting-edge technologies to further reduce its carbon footprint and introduce new, innovative low-carbon products to the

market. The range of new products include ES600, a new lightweight/hi-tensile and sustainable product that will set new standards in the construction industry.

The Group is actively contributing to the UAE's industrial strategy 'Operation 300bn' by delivering market-leading products to local industries, creating job opportunities for UAE Nationals, and enhancing its sustainable practices. People are at the heart of the Group's business and the priority of Emirates Steel Arkan is to ensure the health and well-being of its employees. The Group leads in safety within the industry,

recognising the significance of a safe work environment for the career growth and development of its employees.

Through SENAAT, Emirates Steel Arkan is majority owned by ADQ, one of the region's largest holding companies with a broad portfolio of major enterprises spanning key sectors of Abu Dhabi's diversified economy.

Our steel and building materials have been used in some of the UAE's most iconic construction projects, including the Burj Khalifa, Emirates Palace, Etihad Towers, Yas Island, and more.

We are the fourth steelmaker in the world to receive the ASME accreditation to produce nuclear grade rebar. Moreover, we were the first steelmaker in the world to capture its carbon dioxide (CO<sub>2</sub>) emissions and the first manufacturing company in the Middle East, as well as among the first 50 companies in the world, to be verified for Leadership in Energy and Environmental Design (LEED) green building system documentation.

## Highlights

 <b>+3,000</b> Employees	 <b>70</b> Markets	 <b>500+</b> Happy Customers	 <b>100+</b> Awards and Certificates
 <b>11%</b> Share Of Abu Dhabi's Manufacturing Activity Output	 <b>3.5m</b> Tonnes Total Steel Production Capacity Annually	 <b>4.6m</b> Tonnes Total Cement Production Capacity Annually	 <b>60%</b> UAE's Steel Market Share

## Our Facilities

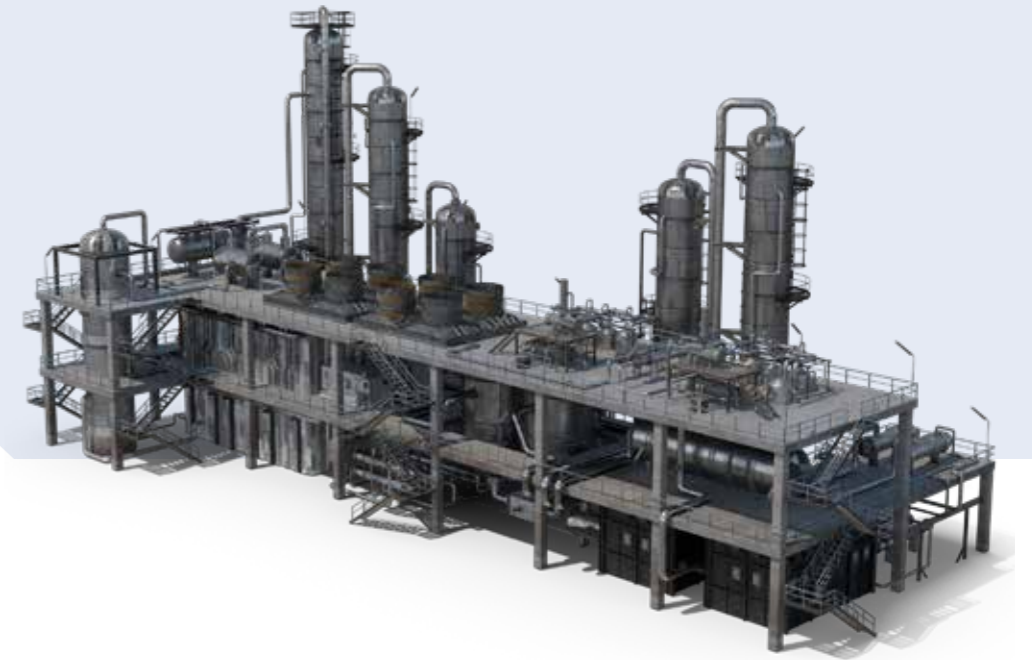
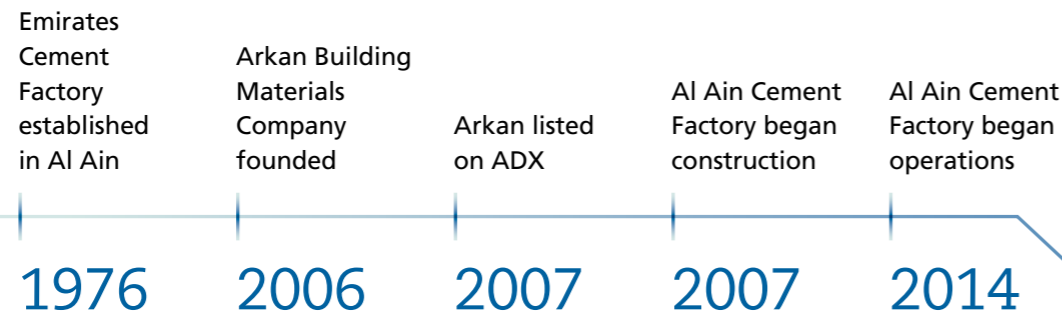
- Emirates Steel
- 
- Al Ain Cement Factory
- 
- Emirates Blocks, Pavers and Dry Mortar
- 
- Anabeeb Pipes
- 
- Arkan Bags

## Our Memberships

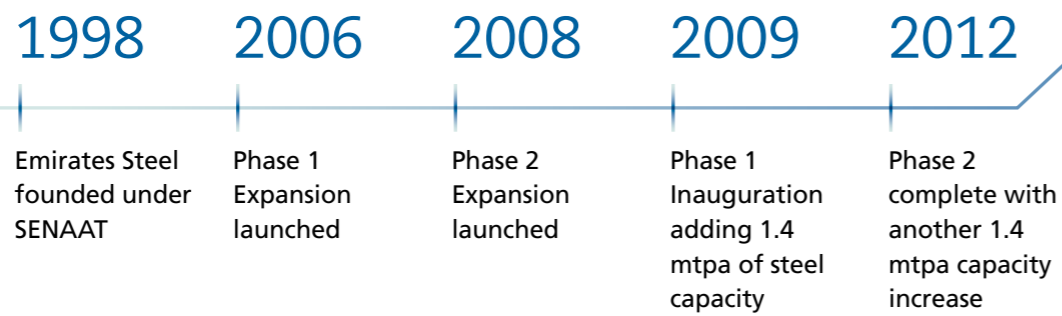
Emirates Steel Arkan is a key member of several national and international organisations, sharing the sector's best practice and promoting the concept of sustainable business:

- Emirates Green Building Council
- World Steel Association
- CARES Sustainability Technical Committee
- Arab Iron Steel Union
- Arab Union for Cement and Building Materials
- AUCBM General Secretariat
- UAE's Steel Producers Committee (SPC)
- Green Business Network (GBN)

# Our Journey



Emirates Steel and Arkan forged individual paths of growth and innovation, coming together in 2021 to form Emirates Steel Arkan Group, thus solidifying position at the forefront of our industry and creating sustainable value for all our stakeholders.



After the merger we became the UAE's largest steel and building materials manufacturer



# What We Do



Emirates Steel Arkan at a Glance

**We strive to be a world-class steel manufacturer of steel and building materials that provides customers with first-rate products, services, and solutions. We are committed to refining our manufacturing processes, creating steel, and building materials sustainably and safely as well as fostering a culture of innovation in the UAE's industrial sector.**

Our resilient business model has been instrumental in our success. Our business methodology and expansion plans have not only helped us add value to our business but have helped us carve a niche for ourselves in the global steel, building and construction materials manufacturing industry.

The direction in which we have manoeuvred our business has enabled us to stand out as one of the few manufacturers with a diverse portfolio of products and solutions-based expertise. The strategic ambitions of the Abu Dhabi Government have played a vital role in shaping the commercial and reputational growth of Emirates Steel Arkan.

At Emirates Steel Arkan, we deliver an extensive range of products, services and solutions that cater to a wide variety of sectors and industries, including construction, energy, and

transportation. Our finished products, manufactured in Abu Dhabi, are shipped to more than 70 countries worldwide and are used in applications including maritime engineering, the construction of skyscrapers and buildings, to infrastructure projects in the United States.

As a Group, we pride ourselves on the quality of our products and take the necessary steps to ensure we exceed our customers' expectations by delivering high-quality steel products and building materials. At every stage of the manufacturing process our products are subject to extensive quality assurance measures, which are implemented throughout the manufacturing process.

Our steel products are certified by CARES in parallel with country-specific certifications for individual export markets.

## Emirates Steel Arkan products conform with local and global green buildings rating systems

We are among the lowest CO2 emitters of all steel producers across the world as we were the first steelmaker in the world to capture its CO2 emissions.

Our headquarters has been awarded the LEED Platinum Rating for our compliance with its rating system. Our products also comply with Abu Dhabi ESTIDAMA programme and the Pearl Building Rating System, making us the first manufacturing company in the Middle East to be verified for LEED documentation. This is part of our efforts to boost sustainable development and promote environmental, social and economic sustainability locally and globally.

Emirates Steel Arkan obtained the Recycled Content Certification (RCC) and the Health Product Declaration (HPD) from SCS Global Services, the USA-based accreditation and audit organisation. The two certifications, along with Emirates Steel Arkan's Environmental Product Declaration (EPD) promote our leading position as the first manufacturing company in the Middle East to comply with LEED documentation and be verified by the Green Business Certification Inc.

The HPD provides a framework to report and disclose information about product contents and associated health information, while the EPD helps quantify environmental information on the life cycle of a product and guides consumers who are

environmentally focused when choosing goods or services. However, the RCC allows companies to demonstrate that their products contain materials that may conform with the Material and Resources criteria for RCC for building products according to the LEED rating system. This trusted certification label helps manufacturers lead in global markets.

These achievements culminate in our commitment to supporting sustainable development and our endeavours to increase our market share and participation in green building projects, adding a considerable edge over our competitors and bringing value to our products and customer base.

## Our Product Lines



A leading producer of high-quality **rebar** with a production capacity of **2 million tonnes annually**.



**Steel billets** are processed into rebar, wire rod or coil in the Group's rolling mills.



A prominent **wire rod** producer in the GCC with a production capacity of **550,000 tonnes annually**.



The only producer of **hot rolled sheet piles** in the MENA region.



The largest producer of **heavy and jumbo sections** in the GCC with a production capacity of **1 million tonnes annually**.



**Rebar in Coils** provides greater efficiencies and cost savings.



High-quality **cement** with a production capacity of **3.1 million tonnes** and **clinker** with a production capacity of **4.6 million tonnes annually**.



**GRP and PVC Pipes** largest centrifugal casting pipe factory in the world with **33,000 tonnes annual capacity**.



**Concrete blocks** with a production capacity of **85 million blocks annually** and **dry mortar** used in local construction.



**Bags** with a production capacity of **62 million sacks annually**.

What We Do continued

Our Production in 2022

Steel (in '000 tonnes)



**3,466**

Direct Reduction Iron (DRI)

**3,211**

Steel making plants (Billet, Blooms, and Beam Blankets)

**2,704**

Rolling mills (Rebar, rebar in coil, wire rod and heavy section)

Cement (in '000 tonnes)



**1,302**

Ordinary Portland Cement (OPC)

**102**

Sulphate Resistant Cement (SRC)

**164**

Portland Limestone Cement (PLC)

**3,244**

Clinker

**60**

Slag

Blocks and Dry Mortar Products



**70,638**

Blocks and interlocks (in Equivalent Units)

**272**

Pavers (in Sq metre)

**132**

Dry mortar (in tonnes)

Pipes (in tonnes) and Bags



**7,295**

GRP pipes

**12,987**

PVC pipes

**12**

LDPE

**7**

PPR

**140**

Plastic bags

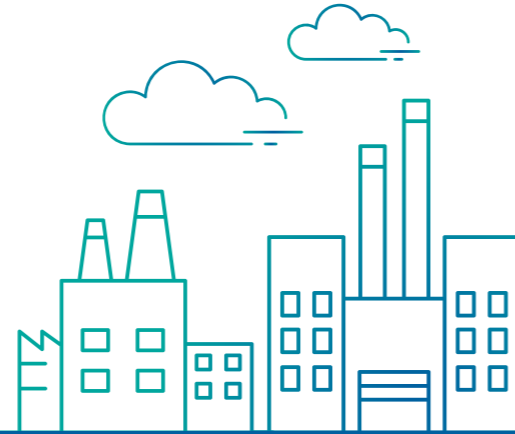
**3,886**

Paper sacks

What We Do continued

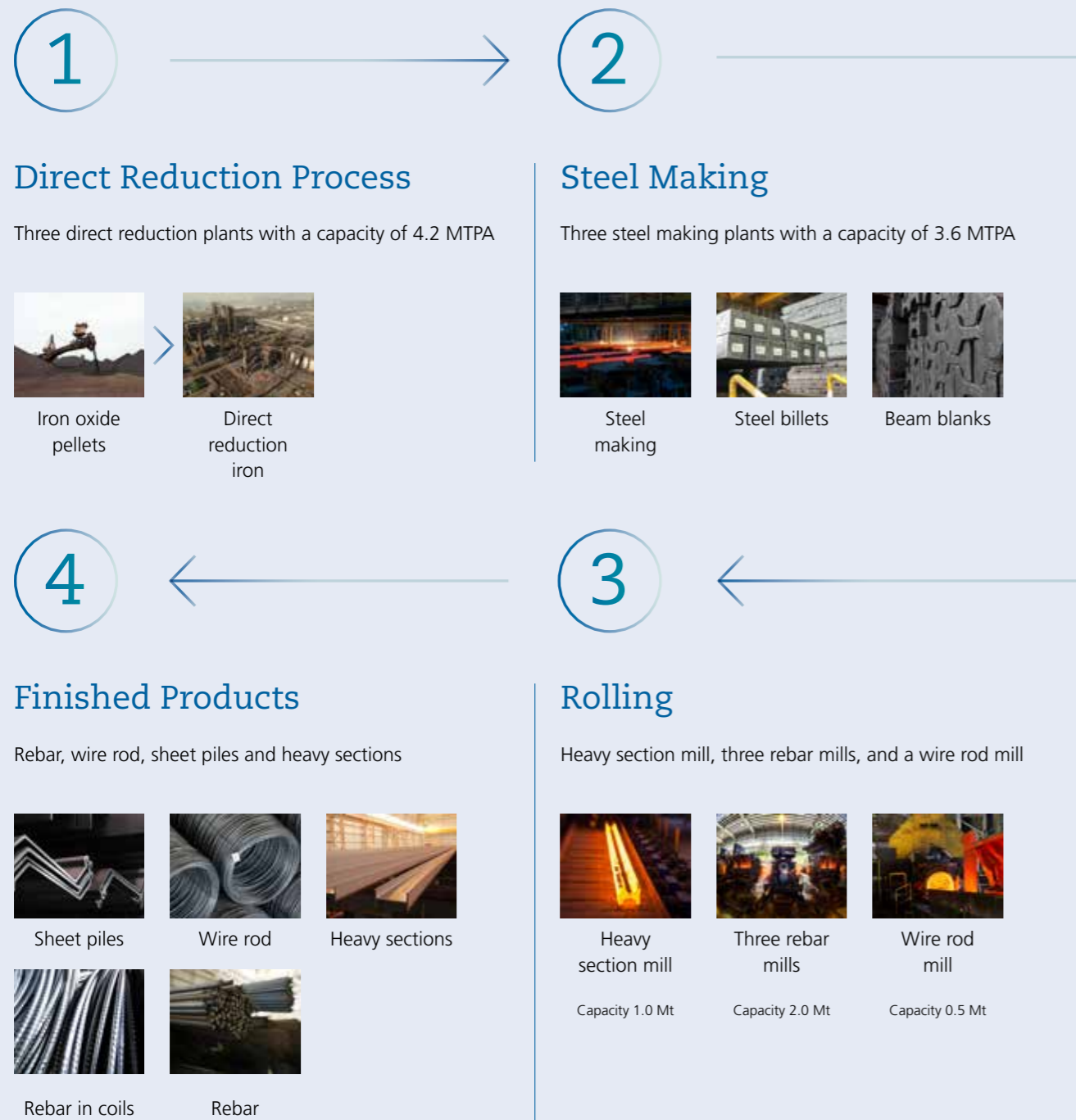
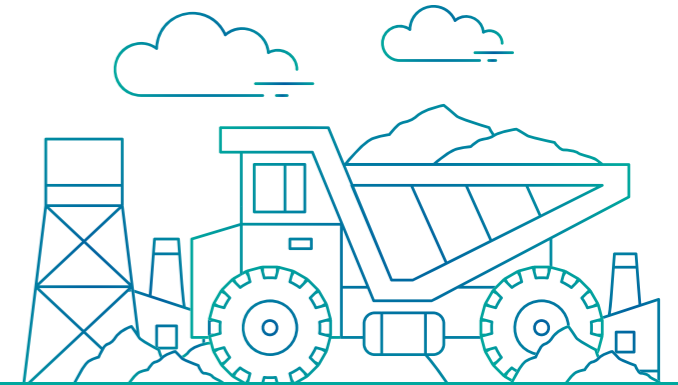
Production Process

Steel Business



Cement Unit

Al Ain Cement Factory



# Our Corporate Direction

## Corporate Philosophy

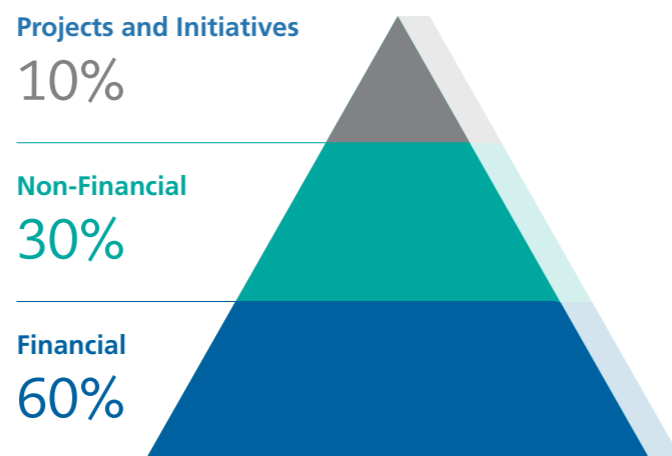
One of the major outcomes with our merger is the convergence of our vision, mission as well our strategic and corporate objectives to collectively drive our sustainability path.

Vision	Mission	Core Values
To be a world-class steel and building materials manufacturer providing the highest quality products, services and solutions to our customers and maximising returns to our shareholders.	<ul style="list-style-type: none"> <li>To provide the construction, manufacturing and industrial sectors with their requirements of high-quality steel and building materials products.</li> <li>Maintain safe and environmentally friendly work practices across our operations.</li> <li>Create employment opportunities and inspire our workforce to excel.</li> <li>Contribute to the industrialisation and diversification of the UAE economy in line with the national Industrial Strategy "Operation 300bn".</li> </ul>	<ul style="list-style-type: none"> <li>Honesty, Integrity, Creativity, Innovation, and Quality.</li> <li>Pursuit of continuous improvement across all aspects of our business.</li> </ul>

## Strategic and Corporate Objectives

Emirates Steel Arkan's overall strategic direction was set by defining its mission, vision, and core values. In 2022, we set strategic and corporate objectives, built upon interconnected pillars, that are essential in supporting us to maintain long-term visibility and returns for our shareholders as well as recognising our duty to meet our customers' expectations and care for our human capital. Our objectives and pillars are essential in supporting our contribution to building a more sustainable future.

### Emirates Steel Arkan 2022 strategic and corporate pillars



## Future Plans

In 2023, Emirates Steel Arkan will introduce ESG objectives and KPIs.

ESG Category	Area	KPI
Environmental	Climate change	Total reduction of intensity of portfolio companies' emissions
Social	Diversity and equality	% of women in management positions in portfolio companies
Governance	ESG policies	% of portfolio companies with a publicly disclosed ESG policy
	Board	% of portfolio companies where ESG issues are reviewed at board level
ESG	ESG rating exercise	ESG rating score

## 22 Parameters measured in ESG Scores

Environmental Management	Water Management	Waste Management	Human Rights, Nationalisation	Equal Opportunities	Audit and Internal Control
Biodiversity Management	Atmospheric Emissions	Prevention of Pollution	Prevention of Anti-Competition	Employee Training	Product Safety
Energy Consumption	Customer Relationships	Prevention of Corruption	Data Privacy and Security	Health and Safety	Nationalisation
Community Initiatives	Impact on Community	Board Independence	Supply Chain Management		

## Our Corporate Direction continued

### Case Study:

# Emirates Steel Arkan Sustainability Plan



In 2022, Emirates Steel Arkan established a sustainability implementation plan covering targets and objectives for different materiality topics:



#### Market Presence:

- Increase the local purchasing by 5%.



#### Emissions:

- Reduce GHG emissions intensity by 5%.



#### Waste Management:

- Increase waste recycling by 5%.
- Decrease waste sent to landfill by 5%.



#### Local Communities:

- Increase community initiative rate by 5%.



#### Health and Safety:

- Improve performance through decreasing LTI rate, total number of injuries, number of fires and number of vehicles incidents.
- Increase behavioural observations.



#### Emiratisation:

- Increase the number of Emiratis in the job market and their contribution.



#### Training and Education:

- Improve employee competency through increasing the number of training hours per employee.



# Corporate Governance and Risk Management

## Corporate Governance

At Emirates Steel Arkan, transparency and sound corporate governance are the foundations to everything we do. We have achieved significant progress in developing and establishing a programme and governance system that is in line with the goals of the shareholders and the requirements of relevant government agencies.

We believe that fundamentally good corporate governance promotes the long-term interests of not just our shareholders but all our stakeholders - shareholders, customers, employees, and society. It strengthens the accountability of the Board of Directors (BoD) and management and helps build public trust.

We aim to implement the rules of transparency, fairness and accountability of our management based on global best practices and international standards of the principles of governance that provides an effective framework for corporate governance that will protect shareholders, the business, and our employees.

Through SENAAT, Emirates Steel Arkan is majority owned by ADQ, and is responsible for ensuring that its activities are carried out, to the satisfaction of the shareholder and in the long-term interests of Emirates Steel Arkan, the local community and business partners, and is doing this safely, securely, and reliably.

Our corporate governance policies and procedures, as approved by the BoD, are in line with the Corporate Governance guidelines issued by the Securities and Commodities Authority's (SCA) Board. This outlines the rules, standards and principles that are applied in regulating the Group, which covers accountability, fairness, disclosure, transparency, and responsibility to enable shareholders to exercise their rights to obtain information that affects their investment decisions and ensures that the Company acts responsibly to other stakeholders. Our corporate governance system also includes rules governing disclosures and guidelines for transactions or deals that might involve a conflict of interest.

## The Code of Conduct and Business Ethics

Our governance structure includes a strong Code of Conduct and Business Ethics which details the principles, values and expectations that guide ethical behaviour and the conduct to be observed by our employees, interns and workers who perform work for and on behalf of Emirates Steel Arkan. It also governs the conduct between our employees and customers, suppliers, vendors, contractors, agents, and other stakeholders. All employees at Emirates Steel Arkan must be aware of the Code of Conduct and Business Ethics as well as comply with it in their day-to-day activities and interactions.

The Code of Conduct and Business Ethics include our policies on:

Employees Rights, Responsibilities, and Accountabilities	Environment, Health, and Safety
Business Conduct	Protecting Company Assets and Reputation
Anti-corruption	Conflict of Interest
Anti-bribery	Supplier Relations
Respect to Human Rights	Workplace Etiquette
Diversity and Equal Opportunity	Adherence to Professional Standards and Applicable Laws
Discrimination and Harassment	Whistleblower Policy

## Board of Directors

Our BoD has seven board members including our Chairman and Vice Chairman. The BoD provides long-term strategic direction and ensures adequate controls are in place to achieve our vision and objectives in line with Abu Dhabi's Economic Vision 2030.

Our independent BoD is committed to ensuring Emirates Steel Arkan adheres to the laws and requirements of the SCA, ADX and other regulatory authorities by implementing and applying the Corporate Governance Manual approved by the SCA.



**Hamad Abdullah Mohammed Al Shurafa Al Hammadi**  
Chairman



**Jamal Salim Al Dhaheer**  
Vice Chairman



**Saeed Ghumran Saeed Salim Al Remeithi**  
Member / GCEO



**Abdulaziz Abdulla Ismail Mohamed Alhajri**  
Member



**Nabeel Qadir**  
Member



**Fatima Abdullah Muhammad Sharif Abdullah Al Fahim**  
Member



**Farah Abdullah Muhammad Ali Al Mazrui**  
Member

## Corporate Governance and Risk Management continued

Board of Directors	2019	2020	2021	2022
Percentage of seats occupied by women (%)	14	14	29	29
Percentage of independent board members (%)	100	100	86	86

The board has established the following committees to assist the board in discharging its oversight responsibilities:

- Audit and Risk Committee.
- Nominations and Rewards Committee.
- Strategic Investments Committee.
- Insider Trading Committee.

These committees discharge their roles and responsibilities as laid down in the respective Charters approved by the BoD.

### Executive Committee

Our Executive Committee (EXCO) is mainly responsible for ensuring that the corporate objectives set by our BoD are met and that all our daily management activities are conducted with established policies and procedures. EXCO is also entrusted by our BoD for endorsing governance, management policies and procedures, and supervising their implementation and monitoring compliance. Additionally, the EXCO is responsible for ensuring that our senior

management is empowered to conduct their functions independently, efficiently and in a timely manner in accordance with the requirements of the Delegation of Authority (DoA) Manual. It is also the responsibility of the EXCO to maintain appropriate levels of communication, coordination, cooperation and accountability checks as well as address additional matters delegated to them by our BoD, the Chairman and/or the Group CEO.

The EXCO prepares summary briefings for the BoD on a quarterly basis to report on Emirates Steel Arkan's performance against approved business objectives, risk assessment of delivering our business objectives, and on global, regional, and local issues that may significantly impact our business strategy.

The EXCO oversees and gives priority to conducting business activities at Emirates Steel Arkan on the following:

- Health and safety of all employees and workers.
- Compliance with applicable environmental regulations.
- Compliance with applicable UAE laws and regulations.
- Maintaining a responsible relationship with the society in which Emirates Steel Arkan conducts its business activities.
- Ensuring the Company's image and brand name are held in high esteem.



## Group CEO Awards in 2022

**We are proud to announce that our Group CEO Eng. Saeed Al Remeithi has been placed amongst Forbes' list of Top 100 CEOs in the Middle East 2022 for the second year in a row, ranked 73rd of 100 on the list. This achievement highlights his powerful influence as a regional industry leader.**

Moreover, our GCEO was named among the Top CEOs by the Etihad Credit Insurance (ECI). The ECI, the UAE Federal export credit company, joined hands with CEOforLife, an international community of sustainability movers and impact makers headquartered in Rome, Italy, to honour global CEOs who have introduced and inspired sustainability initiatives as an integral part of economic and social development.

Held simultaneously at the St. Regis in Rome and Terra Auditorium at the Sustainability Pavilion of Expo 2020 Dubai, the CEOforLife-ECI United Arab Emirates and Global Awards witnesses the recognition of 14 UAE companies and CEOs who have set new standards of excellence in incorporating sustainability as an important pillar of their leadership and business models. Emirates Steel Arkan was among the winning UAE companies that have been distinguished in the development of innovative products and services with high added value, in line with the UN SDGs and with particular attention to the environmental and social impact of the business.



## Corporate Governance and Risk Management continued

### Integrated Management System

We built the IMS using management principles derived from academia and industry best practices with methodologies uniquely designed to capture best practices that can be adapted specifically for Emirates Steel Arkan.

#### Certified Integrated Management System

Our IMS has been established to facilitate effective management of processes with a unified and effective direction across the organisation, addressing the requirements and best practices of the following Management Systems:

- Quality Management System conforms to ISO 9001 certified by CARES.
- Environment Management System conforms to ISO 14001 certified by TUV Middle East.
- Occupational Health and Safety Management System conforms to ISO 450001 certified by TUV Middle East.

In 2022, our Energy Management System at the Cement Businesses was ISO 50001 certified, and we aim to achieve this certification in 2023 at our Steel Businesses as well.



The IMS covers the policies, procedures and processes of Emirates Steel Arkan that are established to demonstrate its ability to consistently provide products and services that are in line with the highest standards and that exceed the needs, wants and expectations of customers and other stakeholders such as certification bodies and relevant regulatory bodies. It also defines and governs the way our people execute their jobs and deliver value in a safe, effective, and collaborative manner, steering our journey to achieve and sustain Emirates Steel Arkan's vision. Additionally, it contains Emirates Steel Arkan's Management Systems Policy which includes our commitments on quality, environment, health, safety, sustainability, innovation, and knowledge management.

The IMS contains Emirates Steel Arkan's Management Systems Policy, which includes Emirates Steel's commitments on quality, environment, health, safety, sustainability, innovation, and knowledge management.

Emirates Steel Arkan's business processes are documented as per the IMS requirements to ensure an integrated functioning between interrelated processes. This results in diverse parts of our business that can complement each other to achieve common objectives and goals.

We ensure the continuing suitability, adequacy, and effectiveness of the IMS and its alignment with Emirates Steel Arkan's strategic direction through ongoing performance evaluations and continuous improvements. As such, the top management, Senior Vice Presidents, Vice Presidents and Heads of Departments conduct periodic reviews of our IMS through various meetings such as the EXCO meetings, management meetings, business planning meetings, Audit and Risk

Committee meetings as well as Health, Safety and Environment (HSE) meetings in addition to customer meetings and strategy meetings. If required, other employees may be invited to attend these meetings.

Emirates Steel Arkan established and maintained an IMS internal audit programme to allow our management to monitor the performance of our activities and accurately assess their effectiveness. The frequency of internal audits is determined according to the effectiveness of the system and the significance of individual system activities. Under the supervision of the Quality Assurance and Environment (QA&E) Manager, the IMS internal audits are performed by suitably trained and qualified personnel who are not directly responsible for the area being audited. Internal audits are performed in line with documented procedures and/or checklists, all findings are documented, and any non-conformities observed are recorded and reported to the responsible personnel to take corrective actions.



### Risk Management

Risk management is integral to Emirates Steel Arkan's business continuity and to the achievement of its long-term goals and vision. As a result, Emirates Steel Arkan developed a Risk Policy and Enterprise-Wide Risk Management (ERM) System to identify enterprise risks at various functions, and to assess, prioritise and manage them to maintain a risk profile within the acceptable risk appetite and tolerance levels.

The Risk Management Section (RMS) at Emirates Steel Arkan facilitates the implementation of the Risk Policy and ERM System and it provides oversight and monitors and consolidates the risk management activities within the whole Company. Risks are identified via multi-level risk identification that includes structured risk assessments, audit findings, incidents, brainstorming, business strategy processes, management review meetings and inputs from risk owners, which are the departments and processes. In coordination with these risk owners, the RMS evaluates the risks while considering the effectiveness of existing controls and it assigns ratings as required.

Additional mitigation, control and monitoring requirements are identified to manage the risk taking into account risk appetite and tolerance. In the organisational context, needs and expectations of interested parties, impact on the environment, local economy, sustainable production, health and safety, and compliance obligations are also considered in determining risks and opportunities. Subsequently, the top risks and key indicators are considered in strategic business planning and processes.

The Risk Management Committee (RMC) ensures on behalf of the board, that appropriate risk management methodologies are operating, and that Emirates Steel Arkan's risk profile remains within the risk appetite and tolerance levels approved by the board.

We document the identified risks with relevant control descriptions and mitigation plans in a risk register which is uploaded to the eGovernance portal, allowing the Abu Dhabi Accountability Authority (ADAA) to audit the register at a defined frequency in line with local regulatory requirements. Additionally, we manage, control, and document the aforesaid enterprise risk management activities through the Risk Policy, Risk Management Procedure and RMC Procedure.

We also have specific procedures in place to manage specific types of risks such as risks arising from the sustainability and environmental aspects which are managed through the identification and evaluation of the Environmental Aspects Procedure. Likewise, we manage the occupational health and safety risks from operational activities through the Hazard Identification and Risk Assessment Procedure.

The identification of opportunities to reduce risks, address sustainability/ environmental aspects, address internal/ external issues, enhance the IMS and company performance are integrated in the risk assessment, aspect evaluation, performance evaluation, and business strategy processes. The opportunities are considered in subsequent objectives and action plans are developed accordingly. The actions taken to address risks and opportunities are integrated into our IMS and the effectiveness of these actions is evaluated through corporate internal audits and various systems reviews such as the Health and Safety System reviews.





## Corporate Governance and Risk Management continued

### Business Continuity

The key to a successful long-term business is related to the ability to serve the market, retain customers, and withstand the unexpected events that could affect the Company's success and continuity. In the previous years, the Covid-19 pandemic was one of the events that had impacts on businesses and affected the continuity of several businesses worldwide. Additionally, cyber-attacks are rising nowadays, as well as climate change effects which are becoming more frequent and intense. As such, it has become crucial for businesses to establish proper planning for the unforeseen circumstances and set the requirements needed to keep their business operations active during these times.

Emirates Steel Arkan works to continually develop its ability to effectively manage and respond to unexpected disruptions, disasters, or serious events and conditions that could affect its people, communities, and business continuity.

We have a Business Continuity Plan Procedure that covers the recovery requirements for the Risk and Business Continuity Management (BCM) Department, and it provides direction to enable the successful and timely invocation of the department in response to any incidents or crises declared by the Crisis Management Team (CMT). The procedure ensures all critical activities resume operations in accordance with identified processes and requirements such as the Recovery Time Objective (RTO), Recovery Point Objective (RPO), and Maximum Acceptable Outage (MAO).

#### Scope of the Business Continuity Plan Procedure

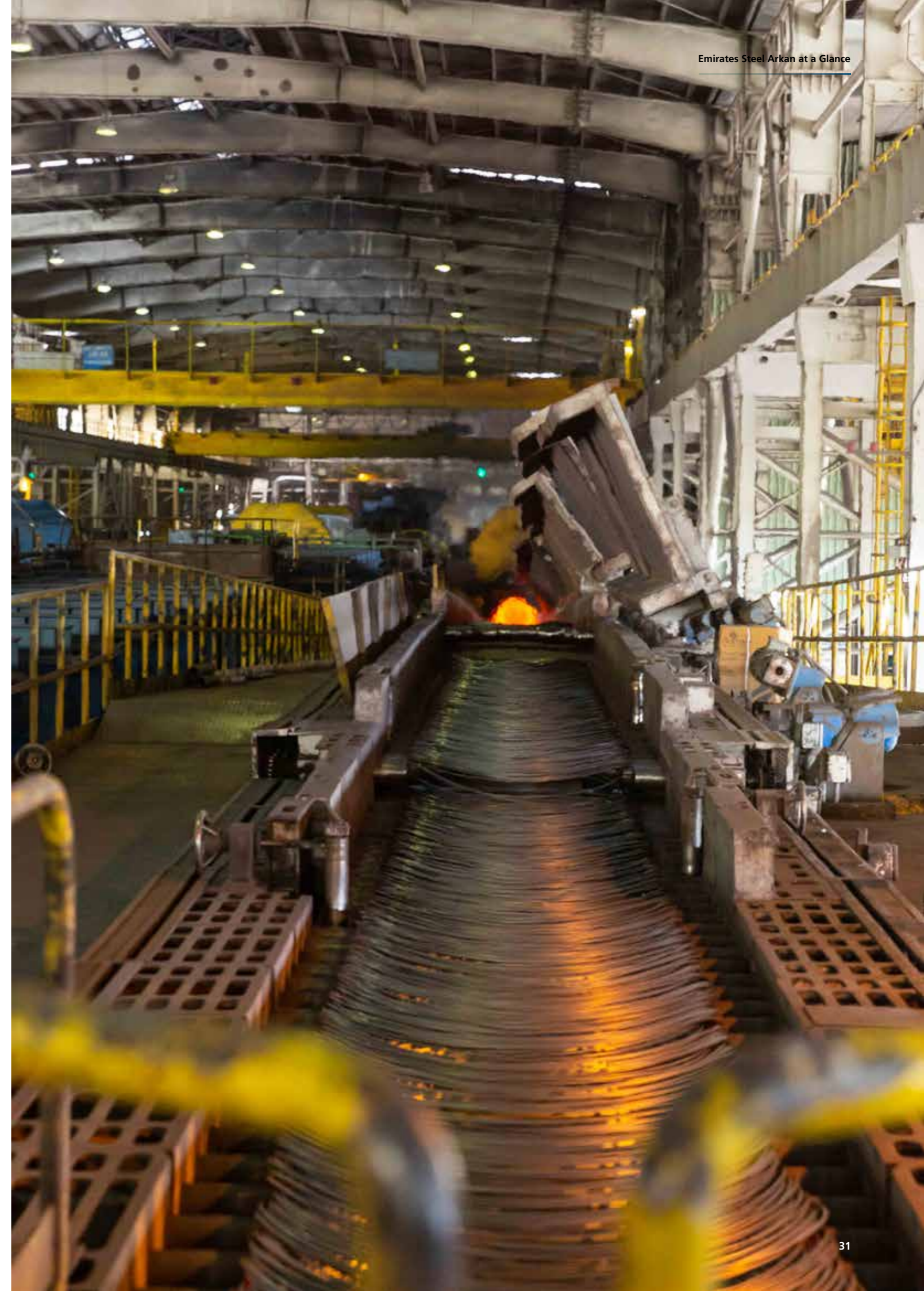
The procedure addresses 5 core effects:

- Loss of Building.
- Non-availability of staff.
- Denial of Access.
- Loss of Technology including Power.
- Loss of Critical Vendor or Supplier.

Moreover, our BCM Policy and Governance Framework sets out the roles and responsibilities of the personnel accountable for BCM at Emirates Steel Arkan, such as our Business Continuity Champions. The main responsibility of the Champions is to develop, review, and maintain all BCM system documents such as Business Impact Assessments (BIA) and Business Continuity Plans (BCP), based on the direction and support of the BCM Department and in coordination with the managers of respective departments.

The BCPs provide Emirates Steel Arkan's departments with strategies, roadmaps, and detailed processes that enable quick and efficient reaction and recovery steps as a response to unpredictable events. The goal is to keep essential services up and running and in the event of an incident, to provide for recovery in the shortest possible timeframe.

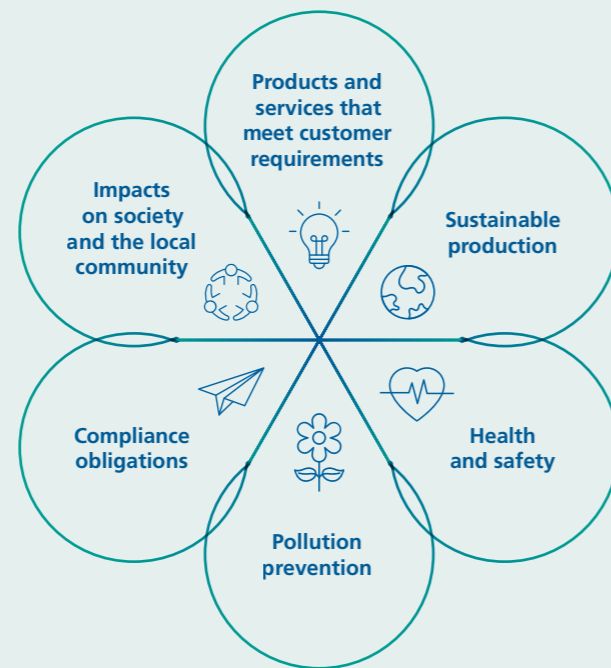
Emirates Steel Arkan will continue to review its approach to risk and business continuity management and continuously implement, administer and improve the various BCPs that it has put in place, while also formulating new BCPs as the need arises.



# Stakeholder Engagement and Materiality Assessment

## Stakeholder Engagement

We understand that obtaining a balance between the needs and expectations of our stakeholders is essential in delivering our commitments and maximising our shared value creation. As a result, we established a systematic approach to plan and implement stakeholder engagement activities at Emirates Steel Arkan, aiming to understand the needs and expectations of our stakeholders in addition to the risks and opportunities relevant to:



**We engage regularly with our stakeholders through various communication channels to ensure we consider and respond to their needs and expectations on the issues that matter to them.**



We determine relevant stakeholders by identifying the individuals, groups of individuals or organisations that affect and/or could be affected by our activities, products or services, compliance obligations and associated performance, such as lenders and financial institutions, employees, customers, suppliers, service providers, and contractors.

We engage regularly with our stakeholders through various communication channels to ensure we consider and respond to their needs and expectations on the issues that

matter to them. We regularly review and discuss these needs and expectations during management meetings, HSE meetings and other relevant meetings.

The concerned departments and the QA&E Manager maintain and review the records of the stakeholder engagements' outcomes and the top management reports and review any relevant critical stakeholder issues or concerns.

For more information about our stakeholder engagement, please refer to Appendix B.

## Materiality Assessment

We focus our efforts on the sustainability issues that matter most to our business and our stakeholders. Thus, we conducted a materiality assessment in 2022 in which we engaged with our internal stakeholders to identify and prioritise the economic, governance and environmental issues relevant to our business that are sufficiently important for our Company, Emirates Steel Arkan, to report on. In 2023, we aim to engage with our external stakeholders to obtain their perspective and evaluation on our potential list of topics to update our materiality matrix and list of material topics.

In line with the materiality assessment process set forth in the GRI Standards, we followed a 4-step approach to perform our materiality assessment as illustrated below.

- 1 Identify**

We identified several sustainability topics of potential importance based on an analysis of Emirates Steel Arkan's sustainability context. This analysis included a review of the materiality of a list of comparable regional and international peer companies in the steel, mining, and building material industries and Emirates Steel's 2021 materiality matrix. We also conducted a desk review of multiple sustainability frameworks and standards including the GRI Standards and the CARES SCS scheme requirements.

As a result, we identified 39 relevant topics that cover economic, governance, environmental, and social aspects and merit inclusion in our sustainability report.
- 2 Engage**

We engaged with our internal stakeholders by conducting a workshop following the identification of the list of potential sustainability topics. During the workshop we obtained from our internal stakeholders the evaluation on the relative significance of the economic/governance, environmental and social impacts of each of the topics. We ultimately prioritised the sustainability topics based on the level of impact that each topic has on Emirates Steel Arkan as well as on the economy, environment and society.

We also conducted a detailed peer benchmarking analysis of our peers' materiality to acquire the external stakeholders' input and ultimately identify the influence that each topic has on stakeholders' assessments and decisions.
- 3 Analyse**

We processed, analysed and consolidated the ratings obtained during the workshop, with internal stakeholders, with the results of the benchmarking analysis to generate insights and determine the ranking, prioritisation and categorisation of the topics as material or non-material.

We developed a materiality matrix for Emirates Steel Arkan and ultimately obtained a list of material topics.
- 4 Validate**

We shared the list of material topics and the materiality matrix with our leadership for their review and validation; thus, ensuring that the range of topics included in our sustainability report provides a complete and balanced representation of our Company's sustainability performance and significant impacts.

As a result of the validation step, we were able to develop our final list of material topics and materiality matrix which is included in this report.

Understanding the perspectives of a wide range of stakeholders is critical to identifying and managing our sustainability priorities. Therefore, in the upcoming years, we plan to engage with our key external stakeholders to gather their insights on the most material topics for Emirates Steel Arkan and identify the influence each topic has on their assessments and decisions.

## Stakeholder Engagement and Materiality Assessment continued

### Materiality Assessment Results

In line with our materiality assessment results, we identified 25 topics that our management and stakeholders believe are important to report on. Hence, our performance on these material topics and our approach for managing them are presented in the following sections of our sustainability report. These topics are:

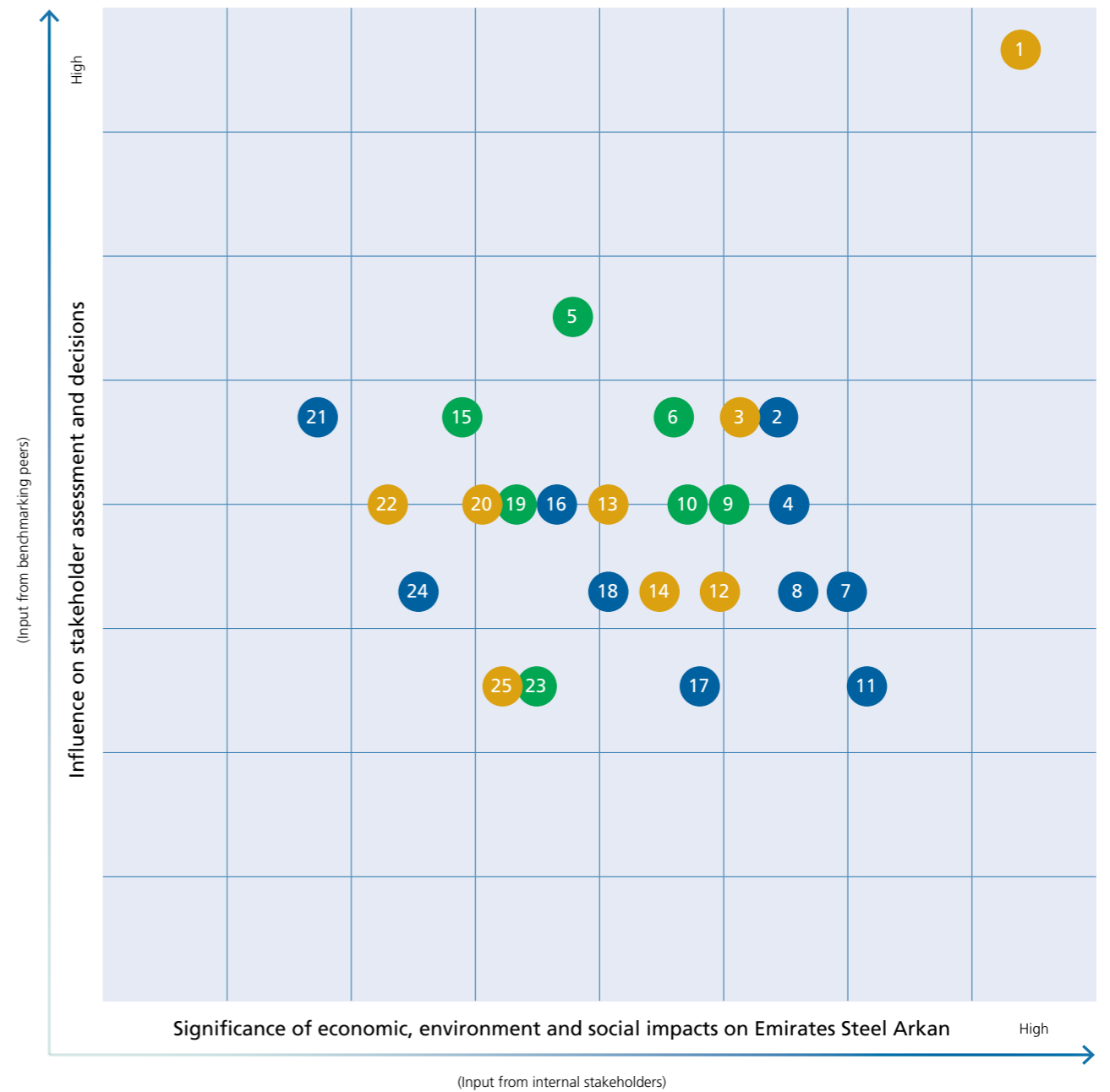
## Material Topics

- |   |  |
|---|--|
| 1 Occupational Health and Safety                              | 14 Emergency Preparedness                        |
| 2 Product and Service Quality                                 | 15 Water and Effluents                           |
| 3 Customer Satisfaction                                       | 16 Supply Chain Management                       |
| 4 Business Integrity and Ethics                               | 17 Product Cost                                  |
| 5 Emissions   | 18 Market Presence                               |
| 6 Waste   | 19 Environmental Controls and Management Systems |
| 7 Operational Efficiency                                      | 20 Employment and Fair Compensation              |
| 8 Economic Performance  | 21 Technology, Product and Process Innovation    |
| 9 Energy  | 22 Local Communities                             |
| 10 Environmental Compliance                                   | 23 Materials                                     |
| 11 Stable Production and Supply                               | 24 Socioeconomic Compliance                      |
| 12 Standards and Health and Safety (HS) Regulatory Compliance | 25 Emiratisation (Nationalisation)               |
| 13 Training and Education                                     |  |

### Materiality Matrix

The materiality matrix below represents our 25 material topics, incorporating the input from our internal stakeholders on the X-axis and the input from the peer benchmarking analysis on the Y-axis.

For more information about our maturity assessment, please refer to Appendix C.



# Creating Shared Value



## 02

### In this section:

- Management Approach
- Economic Performance
- Business Integrity and Ethics
- Market Presence
- Supply Chain Management



# Management Approach

**The merged entity, Emirates Steel Arkan, brings together two critical industries for the infrastructure, projects, and the more general construction, sectors. The merged business has been established at a time when Abu Dhabi and Dubai are embarking on key infrastructure projects, together with further commercial and residential developments.**

In the context of ongoing global supply chain uncertainties this regional steel and building materials champion brings an element of certainty to the sector. Combining the two businesses has already boosted their performance and supported the economic development of Abu Dhabi and the UAE.

Emirates Steel Arkan strives to explore new markets and increase its production and efficiency levels to enhance its international competitiveness. Our expansion strategy is aligned with the objectives of the National Strategy for Industry and Advanced Technology "Operation 300bn", which aims to increase the contribution of the industrial sector to

the country's Gross Domestic Product (GDP) from AED 133 billion to AED 300 billion by 2031.

Emirates Steel Arkan aims to maintain its shared values and strives to enhance its market position by keeping pace with industrial trends and fluctuating market demand. Our sustainable partnerships and collaborations, in addition to our market presence in MENA, the Americas, Europe, and Asia, collectively enhance our products' competitiveness and adds value to both our business and to our customers.

We continue to build strong relationships within a range of sectors, including transportation, oil and gas,

energy and maritime as well as the key construction sector. We will continue our strong financial performance, primarily by benefitting from the UAE's economic recovery and growth, in particular the growth of the real estate sector. We are proud to have supplied our high-quality steel and building material products to some of the UAE's flagship projects, including EXPO 2020, Ain Dubai (the world's tallest Ferris wheel), Burj Khalifa, Emirates Palace, Etihad Towers, Yas Island, and more.

We continue to support the national non-oil economy through our local procurement practices. We ensure that our relationships with our suppliers are

maintained with a high standard of business ethics and integrity as per our Code of Conduct and internal policies. We screen our suppliers, following a stringent selection criterion, with the aim to advance this further to include a wider set of environmental and social considerations.

This section discloses our efforts to create a shared value - between us, our employees, our suppliers, customers, shareholders and other stakeholders. It highlights our economic performance, our business integrity and ethics, market presence and sustainable procurement practices. These topics have been identified as significant for Emirates

Steel Arkan and its stakeholders during our materiality assessment which underpinned the development of this report. The material topics have been aligned with the GRI Standards and have been broadly correlated to the UN SDGs, the CARES SCS scheme and ADX requirements to demonstrate our contribution to sustainable development - globally and locally.



The merger of Emirates Steel and Arkan Building Materials Co. represented a real opportunity to enhance the performance of the two businesses: by creating a regional steel and building materials champion, a business which supports the development of Abu Dhabi and the UAE. In our sustainability journey, we continually look for development opportunities, both locally and internationally, which will further enhance shareholder value."



**Stephen J. Pope**  
Group Chief Financial Officer

Material Topic	GRI Standard	UN SDGs	CARES SCS
<b>Economic Performance</b>	201 (2016)		5.5, 5.6
<b>Business Integrity and Ethics</b>	2-23 (2021)		2.9, 5.4
<b>Market Presence</b>	202 (2016)		-
<b>Supply Chain Management</b>	204,308 and 414 (2016)		2.10, 5.1

# Economic Performance

**In these times of global recession, the UAE's economic performance is a rare 'bright spot', and our nation is on track to realise strong growth in the medium and longer term. The outlook for the Group's growth is promising and the positive impact of merging Emirates Steel with Arkan has been delivered in 2022; we were committed to improve our economic performance in comparison to that during the Covid-19 pandemic.**

Emirates Steel Arkan also strives to play a leading role in developing the UAE's metals sector by creating opportunities for small and medium enterprises, including both our suppliers and customers.

The merger delivered benefits for Abu Dhabi as it supported the Emirate's goal of developing the local stock market, the ADX. The two companies separately supported the economic development of Abu Dhabi and the UAE and currently, the merged entity aims to deliver the needs of its customers - the developers building new infrastructure projects. Combining the two firms has already boosted their performance, driven by higher sales volumes and prices, enhanced operational efficiencies and a supportive commodity market environment.

In 2022, our first quarter's results highlighted the key role that Emirates Steel Arkan is playing as the nation's largest steel and building materials company: supporting domestic growth; and enhancing the "Made in UAE" brand. For the second quarter of this year, our revenues also rose, reaching AED 2.75 billion in the second quarter of 2022 compared to AED 1.95 billion in the corresponding quarter in 2021.

Although Building Materials is the smaller business line, the business's performance has improved significantly since the merger and our aim is to export material to enhance performance of the Building Materials Businesses even further. We also aim to continue our strong financial performance by benefitting from the UAE's economic recovery and the growth of the real estate sector, further

developing our export footprint, and by developing more strategic partnerships to develop the industrial sector and support innovation and sustainability.

We are supporting the development of the UAE's economy by supplying our products to major projects such as Etihad Rail and the Guggenheim Abu Dhabi. Building on our wide range of high-quality products, we are now working on introducing new steel products to broaden our customer base to include manufacturers, complementing our traditional base of construction customers. The added value products being produced harness advanced technologies and environmentally friendly processes, using significantly less energy than traditional coal fired furnaces and will allow us to further reduce our carbon footprint.

In 2022, the Namaa' project was introduced across the Building Materials Businesses and the finance, human capital, commercial and HSE functions of the expanded Group are now operated as centralised shared services centres.

## Recovery of Steel Businesses - Post-Pandemic

The year ended 31 December, 2022 reflected a strong recovery in the performance of Emirates Steel. Volumes of prime products shipped totalled 2,712,000 tonnes compared to 2,477,000 tonnes in 2021. In addition to a recovery in volumes the business also witnessed a recovery in average sales prices of its finished products. In addition to these prime product sales the Company also shipped strong volumes of semi-finished products: 447,000 tonnes of steel billets and 118,000 tonnes of direct reduced iron.

As a result of the above the Steel Business reported a net profit for the year of AED 605 million, reflecting a strong turn-around against the loss of AED 35.24 million reported in 2021. In addition to the benefits of a stronger market, and the continuing agility of management to recognise and secure benefits from these market opportunities, it is also clear that progress has been made in our operational planning procedures and general levels of production efficiencies - efficiencies secured whilst maintaining a 100% focus on the health and safety of our workforce and of our environment.

This turnaround in profitability was also driven by enhanced volumes of high margin export business: the major export markets serviced representing the Americas and Europe. Domestic and regional markets remained relatively quiet, but it is apparent that increasing numbers of projects are being initiated in both Abu Dhabi and Dubai which should support the Company's commodity rebar sales in 2023 and beyond.

## Development of the Steel Businesses' Global Footprint

The Company is now actively exporting products to over 70 countries; such exports principally represent its high value-added products: sections, sheet piles and value-added grade wire rod. The Company's commodity grade wire rod and rebar being primarily delivered to customers on domestic and regional markets, with the Company continuing to retain a 60%+ share of the UAE rebar market. The development of Emirates Steel as a recognised global brand is a testament to the core values of quality and customer service as observed throughout our operations.

This focus on export markets has clearly supported the sustainability of the Company's operations; being less reliant on the somewhat volatile domestic construction sector. Whilst the Company is relatively 'young' when compared to its regional and international peers it is clearly evident by the management's success that the brand is now globally recognised, particularly in niche sectors such as sheet piles, and is supporting the country's 'Made in the UAE' initiative.

## Development of Value-Added Steel Products

In the context of an over-supplied domestic market the Company is focusing efforts in de-commoditising its range: in an over-supplied commodity market the only basis for competition being the price. New value-added products, such as ES-600, a high tensile range of rebar materials, are under development. ES-600 is scheduled to be formally launched in 2023 and it is expected that this product will be sold at a premium price given that less material will be required in the construction process as a result of its enhanced strength. ES-600 will also bring environmental benefits driven by reduced volume of commodity steel necessary plus a range of associated benefits: reduced cost of transportation via road network and facilitating faster building execution on the construction sites. Other value-added products reflect the further extension of the Company's range of sheet pile products - a range which is being exported across the globe.



## Economic Performance continued

### Carbon Footprint

The Company has engaged an international consulting agency to understand the Company's current carbon footprint and to establish a clear strategy to reduce it in line with the published targets of the UAE. It is noted that Emirates Steel's current carbon footprint is lower than that of many of its regional and international peers as a result of the carbon capture and sequestration of carbon dioxide as undertaken in partnership with Abu Dhabi National Oil Company (ADNOC). The Company's decarbonisation strategy will include the increased use of scrap and ultimately the use of green hydrogen in its plants; projects which will enable the Company to better compete in the global markets, which are demanding lower carbon steel materials, and will mean that the Company will be a regional champion in terms of the decarbonisation of the steel sector.

The Group is also working with advisors to investigate the carbon footprint of the Cement manufacturing plant and similarly establishing a roadmap to reduce the emissions levels of the plant in line with the UAE's targets.

In line with the Group's overall decarbonisation objectives we are engaged in feasibility studies on two important projects: the establishment of a low-carbon steel hub in Abu Dhabi in conjunction with Itochu Corporation and JFE Steel of Japan, and a joint feasibility study with TAQA associated with the production of steel using green hydrogen – a project which would transform Emirates Steel's carbon footprint and progress it towards its ambitions of being a net zero carbon business.

### Building Materials

Overall, the Building Materials Businesses has had a strong year, turning a pre-impairment loss of AED 42 million in 2021 to a profit of AED 66

million in 2022. The enhanced level of performance is testament to the decision to merge the Arkan Building Materials Business with that of Emirates Steel in Q4 2021, creating a regional champion in the steel and building materials sector.

The profit enhancement has primarily been driven by the performance of the Al Ain Cement plant, operating at increased efficiency levels and by securing strong growth in its sales prices despite the general level of oversupply in the market. The downstream Cement Business, Blocks and Dry Mortar have had a more challenging year and the Pipes Businesses have delivered stronger levels of profitability than that reported in 2021. Overall, 2022 has been a year of integration for the Building Materials Businesses and further enhancements in performance are targeted for the year ahead.

### Economic Performance in Steel Businesses

Description	Unit	2020	2021	2022
Direct economic value generated (revenue)	AED million	5,055	7,858	8,589
Total economic value distributed	AED million	5,000	7,415	7,667
Operating costs	AED million	4,203	6,713	6,927
Employee wages and benefits	AED million	682	663	706
Dividends paid to stakeholders (including non-controlling interest)	AED million	0	127	0
Interest payment made to providers of loans	AED million	96	18	34
Payments to government by country	AED million	0	0	0
Community investments	AED million	1.2	0.5	0.7
Community investment as a % of company revenue	%	0.024	0.007	0.009
Economic value retained	AED million	55	-	949

### Economic Performance in Cement Businesses

Description	Unit	2020	2021	2022
Direct economic value generated (revenue)	AED million	477	477	555
Total economic value distributed	AED million	485	466	469
Operating costs	AED million	386	397	394
Employee wages and benefits	AED million	57	37	38
Interest payment made to providers of loans	AED million	42	33	38
Economic value retained	AED million	(8)	10	86

### Economic Performance in Blocks Businesses

Description	Unit	2020	2021	2022
Direct economic value generated (revenue)	AED million	202	171	188
Total economic value distributed	AED million	202	171	188
Operating costs	AED million	177	148	173
Employee wages and benefits	AED million	31	28	30
Capital expenditure	AED million	6	7	4
Economic value retained	AED million	(7)	(4)	(16)

### Economic Performance in Pipes and Bags Businesses

Description	Unit	2020	2021	2022
Direct economic value generated (revenue)	AED million	186	176	183
Operating costs	AED million	127	138	141
Employee wages and benefits	AED million	32	27	26
Payments to government by country	AED million	14	14	14
Capital expenditure	AED million	1	1	6
Economic value retained	AED million	14	(2)	3



## Economic Performance continued

### Case Study:

# The Namaa' Project

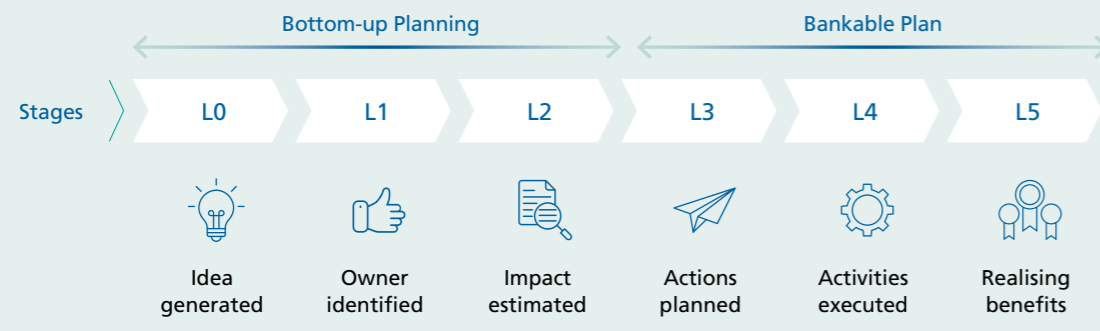


The Namaa' project is part of our business transformation which consolidates all of Emirates Steel Arkan's business improvement ideas (operational and commercial) into one platform that can be controlled and monitored. This initiative, which is driven by suggestions and proposals from our workforce, is adding real value to our business, creating clearly documented and monitored links between the concerned departments to ultimately deliver commercial benefits.

The objective of this project is to increase Emirates Steel Arkan's competitiveness by delivering a sustainable USD 200 million annual EBITDA uplift for the Emirates Steel and USD 25 million for the Building Materials Businesses; targets which will be delivered by transforming key business processes to enhance sustainability.

The stage gate process followed is defined below:

### Stage Gate Process



In 2022, Emirates Steel Arkan launched the third wave across its businesses, Steel and Building Materials, where 23 initiatives were related to sustainability with an estimated savings of USD 27 million at stages L3, L4 and L5 of the stage gate process. We have 3 initiatives at L3, 1 initiative at L4 and 18 initiatives at L5.

### Examples of Namaa 2022 Sustainability Initiatives

<p><b>Waste Heat Recovery Project</b> L3 stage</p> <p>At the L3 stage, we have the Waste Heat Recovery Project for the Al Ain Cement Plant where we will utilise waste heat to generate 13-15 MW of power. The aim is to install a low temperature waste heat recovery plant for the clinker kiln, making use of the gases currently vented to the atmosphere to produce electricity. During this project, both ORC (Organic Rankine Cycle) and SRC (Steam Rankine Cycle) technologies will be studied.</p>	<p><b>Electrode Coating System</b> L4 stage</p> <p>At L4 stage, Emirates Steel has the Electrode Coating System to reduce the consumption of Graphite Electrodes and enhance productivity. In the steelmaking process, graphite electrodes represent a high-cost consumable. Electrode coating will reduce electrode consumption, and marginally reduce energy consumption, which will crystallise economic benefits for the businesses.</p>	<p><b>Material Replacement Initiative</b> L5 stage</p> <p>Similarly at Emirates Steel we have at the L5 stage an initiative for the partial replacement (20- 25%) of Fe-Si-Mn bulk material by Fe-Si-Mn briquetted materials to reduce the conversion costs in our steel melt-shops. The briquetted material has almost the same specification at a lower cost in comparison to the bulk material that we currently use in SMPs.</p>
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# Business Integrity and Ethics

**Standing still on a foundation of strong work ethics and integrity, we continue to maintain relationships with our suppliers and customers based on mutual trust. We are meticulous in ensuring compliance with all laws and anti-corruption policies.**

## Compliance

Emirates Steel Arkan operates in compliance with applicable standards and regulations, including local labour laws. We developed and published our Code of Conduct (COC) to ensure our commitment towards combatting bribery, fraud and other forms of corruption. We are passionate about safeguarding our business against fraud risk and adopting a zero-tolerance policy.

In 2022 no monetary sanctions or cases of non-compliance with laws and regulations were recorded.

Only one case of corruption was recorded through our Whistleblowing channel and the full scope of our operations, a total of 42 operating plants, were assessed for corruption related risks. The Ethics Review Committee investigated the case raised in the year, reported this to the Audit and Risk Committee and corrective actions were taken as per the Emirates Steel internal policies and procedures.

The COC is an institutional guide that governs our professional behaviour and testifies to our business integrity. These are reiterated as strict guidelines in the Group's disciplinary procedures. The COC tool is available online for all employees to access and sign-off. All new employees are also required to attend a COC training as a mandatory segment of our on-boarding programme as well as sign the COC at the time of joining the Group. We have to set system-generated reminders to all employees for re-acknowledgement of compliance with our COC. Professional level employees are required to acknowledge the COC in the system every 3 years whereas entry level employees and outsourced employees are required to declare and acknowledge their commitments to the Code once every year.

## The Code of Conduct and Business Ethics includes the Group's Policies on:

Discrimination and Harassment	Protecting Emirates Steel Assets and Reputation
Workplace Violence	Dress Code
Unethical Behaviour	Non-disclosure/Confidentiality
Drugs and Alcohol	Conflict of Interest
No Smoking Policy	Receiving/Giving Gifts or Benefits
Solicitations	Workplace Etiquette
Environment, Health and Safety (EHS)	Whistleblowing Policy
Employee Privacy	



Additionally, we conduct internal audits on a regular basis, and we ensure our staff and clients have gained a clear understanding of compliance and procedural protocols including:

- Integrated Management System QEHSS Company Policy
- Code of Conduct
- Supplier Code of Conduct
- HR Manual including our Policy and Procedures
- Code of Conduct Procedure
- Code of Ethics Policy
- Fraud Control Policy
- Whistleblowing Policy and Channels
- Disciplinary Process (incl. investigation and penalties for violations)
- Employee Handbook
- Procedures on Employee Contracts and Pay Slips
- Policies on Attendance and Access Control
- Provision of Employee Services and Recreation such as the Happiness Committee, Women's Committee and Youth Council
- Grievance Reporting Mechanism



## Business Integrity and Ethics continued

### Ethical Incidents and Complaints

We recently developed a sustainability implementation plan where we set a target (a maximum level) for the total number of ethical incidents recorded. The latter includes harassment and discrimination in the workplace, whistleblowing or social media rants, ethics in accounting practices, non-disclosure and corporate espionage as well as technology and privacy practice and it excludes violation for health and safety. This target was set to improve our employees' awareness on business ethics and to encourage people to report on whistleblowing.

We also had zero ethical incidents and complaints that resulted in the issuance of enforcement and/or prohibition notices by an external regulator as well as zero ethical incidents and complaints that resulted in a successful prosecution by an external regulator.

In 2022, we only had two incidents of abusive behaviour reported where foul and abusive language was used. A warning letter was issued for these cases and the employees pledged in writing that they would not repeat these actions and behaviours.

In the past 3 years, we had zero ethical incidents and complaints recorded and reported to an external regulator.

#### Short and Long-term Actions:

We will conduct specific training for the new joiners on ethics, whistleblowing, fraud and code of conduct.



The conflict-of-interest declaration form will be signed by each employee on an annual basis.



We will implement the anti-bribery and gifts declaration.



We will conduct integrity testing for the supply chain through sanction screening.



We will restructure the Ethics Review Committee.



#### Case Study:

## Fraud Awareness Session



As part of our efforts to maintain employees' security and ensure they are aware of fraud, which includes activities such as theft, corruption, conspiracy and bribery, the Happiness and Well-being Committee conducted a Fraud Awareness Session in October 2022 for all Emirates Steel Arkan employees.

We also held a Fraud Risk Assessment Survey as part of our commitment to combat fraudulent practices and to ensure our compliance with the Fraud Policy is in place.

#### Human Rights

As part of our commitment to human rights, we developed a Human Rights Policy at Emirates Steel Arkan, and we have a Disciplinary and Conduct Policy with a list of panellists against any violation. In 2022, no formal grievances have been filed regarding incidents of discrimination or harassment.

Moreover, our minimum hiring age at Emirates Steel Arkan is 18 years old as we are committed to prevent child and/or forced labour. We cover this commitment in our disciplinary process which is implemented across our operations and facilities.

# Market Presence

**Emirates Steel Arkan has maintained a market share of c. 60% of the UAE rebar market and aims to increase this figure by adding new and sustainable products. We are considering the expansion into new markets in Asia and Africa, which will enhance our international competitiveness.**

We aim to explore new markets and increase our production and efficiency. Market share for our other products, including wire rod and sections for the Steel Business, and the range of products offered by the Building Materials Business achieve lesser market share levels than our core Rebar Business; this is an area of targeted development in the coming year.

As we take further measures to enhance shareholder value, our ability to produce high-quality products tailored to the needs of our clients, together with our safe and efficient production lines and our low carbon footprint facilities will continue to give us a competitive edge.

Our strategy for diversifying our revenue sources includes increasing exports via various marketing channels, in addition to boosting the competitiveness of national products, supporting the unified industrial identity: "Make it in the Emirates". It is noted that our export business currently accounts for 45% of our total revenues.

In the UAE, we already have a market leading position, providing the local market with 60% of its rebar requirements. The Group targets the development of its market share for its other products and to further enhance our export business; at the end of 2022 we were actively exporting to 70 countries compared with 56 markets at the start of the year.

# Supply Chain Management

**At Emirates Steel Arkan, a real commitment is exercised towards contributing to the local economy as we maximise our efforts to identify local suppliers based on locations through the SAP Ariba platform in parallel to our partnership with the In-Country Value (ICV) National Programme.**

We publish our Supplier Code of Conduct in the registration process, and we require strict compliance from all our suppliers. We also require contractors entering our sites to attend an HSE induction which includes sustainability awareness as well as critical health and safety issues. We screen our suppliers based on audits and stringent environmental requirements stated in our terms and conditions as per the UAE laws. Addressing technical criteria such as quality, environment, safety, among others, it is set by the required department with the necessary weightage on each criterion. Additionally, we conduct a thorough background check on major social or political issues through our supplier audits and Moody's/ Orbis database, a supplier subscription covering corporate news around the world.

We register and report significant impacts of non-conformities which are subsequently discussed in our contract review meeting or through a formal letter. A non-conformity form has to be completed by the end user and sent to Supply Chain Management (SCM). Examples of non-conformities include the supplier not performing well or not complying with contractual expectations that are usually established in the Request for Quote (RFQ), Purchase Order (PO) or the Contracts, including our HSE requirements. We have a monthly HSE meeting which covers the environmental aspects, hours worked by contractors and EHS concerns. We also have systems in place to monitor contractors' hours as per the labour law where an alert will be triggered if overtime is exceeded.

We recently updated the Contractor Scope of Work and the Technical Evaluation Form template to include social impacts as a criterion as well should the technical end user wish to include it as a requirement. We also updated the Supplier Registration Questionnaire to include responses on sustainability and we aim to conduct a full assessment, including all requirements and criteria, during the coming year.

In July 2022, we conducted a social impacts awareness session for all Emirates Steel Arkan contractors and suppliers. Moreover, we conducted a sustainability awareness session for our contractors during the Contractor Safety meeting. In addition, we conducted an awareness session with the Ministry of Industry and Advanced

Technology on the NAFIS scheme to encourage our suppliers to sign up for this programme to employ Emiratis.

We delivered the set KPIs and objectives for 2022, including those related to financial savings. For Namaa', we implemented sourcing and negotiation projects to achieve these savings. Additionally, we have completed auctions and created long-term contracts to ultimately reduce the spending and achieve financial savings.

In 2023, we will continue to promote NAFIS scheme for our suppliers to employ Emiratis and we will enable access to the Online Sourcing Platform to the Building Material Group. Additionally, we aim to implement ISO 50001 (covering the energy purchase requirements) in the coming year.

During the next years, we aim to continue to secure savings in line with the set targets, and further embed the Building Materials team into Procurement.

In 2022, we achieved an 80% Supplier Satisfaction Rating, and we delivered our Contract Review Target, the latter being a platform that enables our suppliers to meet with the buyer and our stakeholders. We received zero complaints against Emirates Steel Arkan from our suppliers across all of our sites.



## Case Study:

# Steel Businesses receive High ICV Score



We identify local suppliers through their physical location as detailed on their initial registration to our Online E-Sourcing Platform. These suppliers need to have a UAE Trade License to verify their locality and they need to have an (In-Country Value) ICV Certificate to qualify them as suppliers to initiatives.

Our Steel Businesses' procurement department joined the Emirate's ICV Committee, chaired by the Ministry of Industry and Advanced Technology (MOIAT), to further embed the ICV approach, driving our suppliers to have the ICV certificate. The Ministry's ICV initiative aims to promote the use of locally sourced products and services. We spent a total of AED 2.6 billion on suppliers in the UAE in 2022, demonstrating our commitment to contributing to the expansion of the industrial sector in accordance with the UAE's national industrial strategy. Currently, 88% of our local suppliers are ICV-certified, and we intend to reach 80% across the board.

In 2023, the ICV Certificate will be mandatory for Arkan Group suppliers as well.

## Supply Chain Management continued

### Total Spending on Procurement and Suppliers and Total Number of Suppliers in Steel Businesses

Description	Unit	2020	2021	2022
Total procurement spends	AED million	4,293	6,861	7,215
Procurement spends on local suppliers	AED million	1,903	2,351	2,559
Percentage of spend on local suppliers	%	44.3	34.3	35.5
Total number of local suppliers engaged	Number	614	675	743

### Total Spending on Procurement and Suppliers and Total Number of Suppliers in Cement Businesses

Description	Unit	2020	2021	2022
Total procurement spends	AED million	407.89	320.99	290.27
Procurement spends on local suppliers	AED million	336.56	276.75	273.62
Percentage of spend on local suppliers	%	83	86	94
Total number of local suppliers engaged	Number	269	250	230

### Total Spending on Procurement and Suppliers and Total Number of Suppliers in Blocks Businesses

Description	Unit	2020	2021	2022
Total procurement spends	AED million	109.01	100.25	115.62
Procurement spends on local suppliers	AED million	108.98	98.74	114.54
Percentage of spend on local suppliers	%	99.97	98.5	99.1
Total number of local suppliers engaged	Number	130	119	122

### Total Spending on Procurement and Suppliers and Total Number of Suppliers in Pipes and Bags Businesses

Description	Unit	2020	2021	2022
Total procurement spends	AED million	104.90	109.30	133.30
Procurement spends on local suppliers	AED million	55.20	45.60	39.10
Percentage of spend with local suppliers	%	52.6	41.7	29.3
Total number of local suppliers engaged	Number	152	150	152

### Suppliers that were Screened using Social Criteria in Steel Businesses\*

Description	Unit	2020	2021	2022
Percentage of new suppliers that were screened using social criteria	%	100	100	100
Number of suppliers assessed for social impacts	Number	292	295	380
Number of suppliers identified as having significant actual and potential negative social impacts	Number	0	0	0
Significant actual and potential negative social impacts identified in the supply chain	Number	0	0	0

\* Other businesses processes and procedures will be aligned with Steel Businesses in 2023

### Suppliers that were Screened using Environmental Criteria in Steel Businesses\*

Description	Unit	2020	2021	2022
Percentage of new suppliers that were screened using environmental criteria	%	100	100	100
Number of suppliers assessed for environmental impacts	Number	292	295	380
Number of suppliers identified as having significant actual and potential negative environmental impacts	Number	0	0	0
Significant actual and potential negative environmental impacts identified in the supply chain	Number	0	0	0

\* Other businesses processes and procedures will be aligned with Steel Businesses in 2023

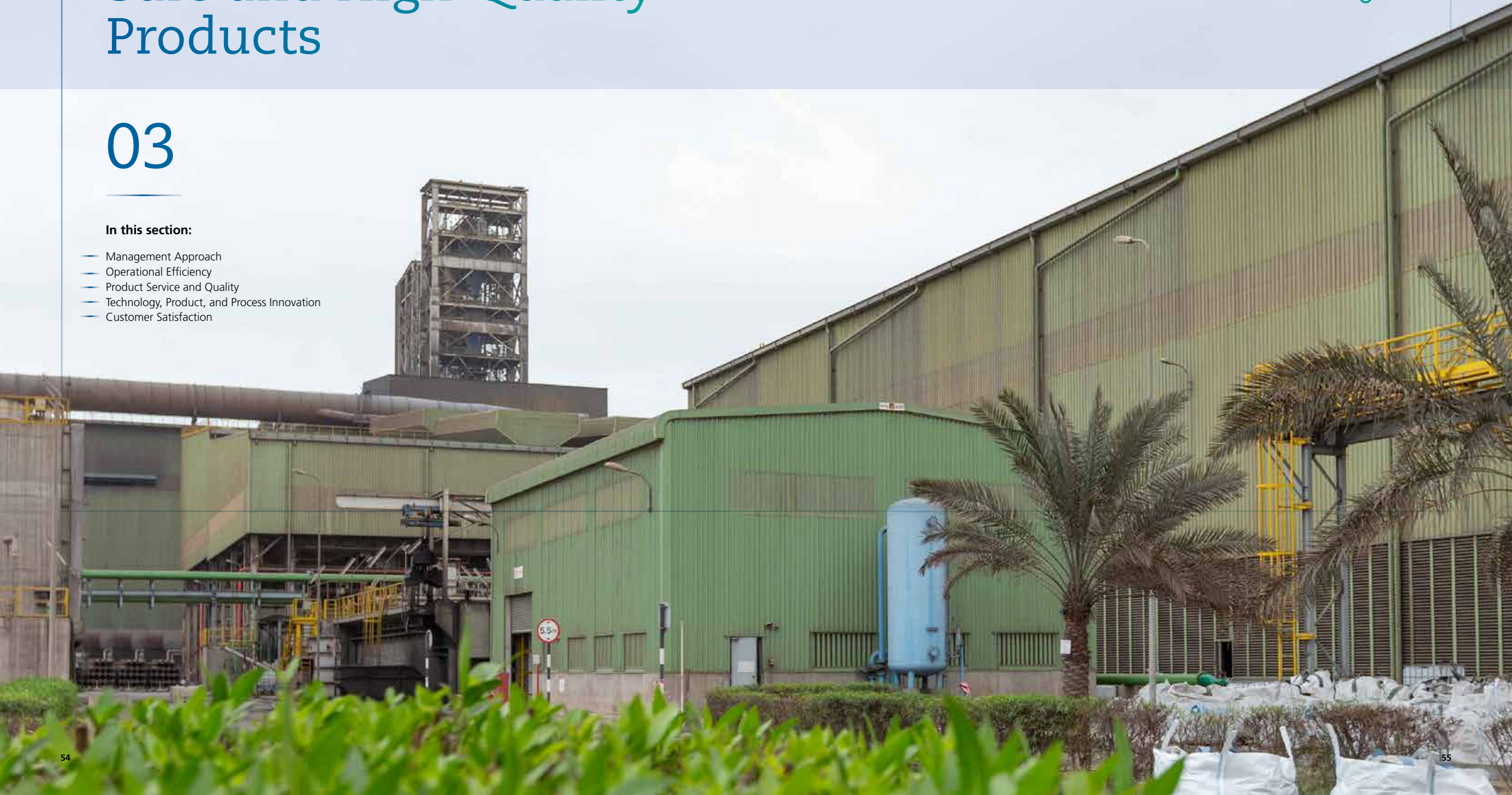
# Producing Sustainable, Safe and High-Quality Products



## 03

### In this section:

- Management Approach
- Operational Efficiency
- Product Service and Quality
- Technology, Product, and Process Innovation
- Customer Satisfaction



# Management Approach








**Emirates Steel Arkan is continuing its excellent operational performance, as operational efficiency is imperative to our continuity as a leading steel and building materials manufacturer.**

We continue to refine our internal procedures to focus on higher production, yields, reduced costs, all while sustaining quality. All our products are subjected to extensive quality assurance measures in the pursuit of continuous improvement. We ensure that innovation is integrated as a core competency seeking ways to integrate cutting-edge technology into our production lines. Throughout our merger, we took measures to ensure the Group's overall resilience by incorporating organisational changes and limiting costs.

As a world-class steel and building material solutions provider, we believe that creativity is homegrown and therefore nurture a supportive space for people to pitch ideas and bring their successful propositions into practice. Through our rigorous assessments and cost-benefit analyses, we investigate the feasibility of putting their proposals into practice.

Customer satisfaction is vital to our organisational performance. We provide high-level technical specifications and manuals to increase transparency and guide customer purchasing decisions. We value our customer's feedback and incorporate their comments into our internal self-assessment to revamp our processes.

This chapter highlights our performance on topics including operational efficiency, product cost, stable production and supply, product service and quality, technology, product and process innovation, and customer satisfaction. We identified these topics as material to Emirates Steel Arkan and its stakeholders. The material topics have been aligned with the GRI Standards and have been broadly correlated to the UN SDGs, the CARES SCS scheme and ADX requirements to demonstrate our contribution to sustainable development globally and locally.

Material Topic	GRI Standard	UN SDGs	CARES SCS
Operational Efficiency	3-3 (2021)	 	4.3
Product Cost	201 (2016)	 	5.1, 5.3
Stable Production and Supply	201 (2016)		5.4
Product Service and Quality	2 (2021)		5.1, 5.5
Technology, Product, and Process Innovation	2 (2021)		5.3
Customer Satisfaction	2-29 (2021)	-	5.1



We embed transformation, innovation and continuous improvement in our strategy, and our product stream builds on the high-calibre standards we uphold”.

**Eng. Medhat Hashem**  
Acting Chief Operating Officer



# Operational Efficiency

**The direct impact of operational efficiency on our production yield, quality, and product competitiveness makes it instrumental to our supply chain and production process. Our commitment to efficiency is formed by our company directive of being a frontrunner in the steel and building materials industry with a penchant for meticulous quality assurance and improvement.**

Our manufacturing hub for our steel production is segregated into three business units where all our processes are streamlined to meet the needs of our product categories. These business units are Direction Reduction Plants (DRPs), Steel Making Plants (SMPs), and Rolling Mills (RMs). We ensure the implementation of safety Key Performance Indicators and conduct weekly safety meetings with all business units. Our manufacturing of pipes and bags takes place under Anabeeb, blocks and dry mortar products under Emirates Block Factories (EBF), and cement under Abu Dhabi Cement Factory (ACF).

## Direct Reduction Plants (DRPs)

Through 2022 we conducted multiple performance assessments of our plants, and introduced upgrades to our internal safety routines and operational processes as follows:

- Heat Stable Salts (HSS) removal unit is being used in DRP.

- Successfully installed boxy valves for process gas suction filters to enable filter element replacement activity without shutdown in DRP1.
- 17 new eMOCs (electronic Management of Changes) raised and total of 14 MOCs modifications implemented. 3 MOCs follow up is in progress for further execution.
- Completed DRP2 Safety Integrity Level Assessment survey.
- Completed DRP2 Asset Criticality Assessment exercise.
- DRP2 P&IDs updated for modification.
- Dry dedusting system for cold DRI charging system has been taken in for service.
- Hazard identification and risk assessment (HIRA) reviewed and updated 58 work instructions and routine activities in IMS.
- Asset Criticality Assessment near completion for DRP1.
- DRP1 reactor refractory replacement done.

We ensure the continuous enhancement of our product quality by following the standard operating procedures and periodic reviews, as well as conducting regular inspections of our raw materials and product quality. ESA maintained a high DRI (Direct Reduction Iron) quality throughout the year with Metallisation > 94.0% and Carbon > 2.4%, where metallising refers to coating metal on the surface of objects. This ensures that our customers quality expectations are met as evidenced by our sales and exports totalling over 130,000 tonnes of DRI.

## Steel Making Plants (SMPs)

We enhanced our performance and resource efficiency as we:

- Adjusted plants productivity according to market situation, by using the Value in Use (VIU) model to manage scrap requirements, which was presented during weekly scrap meetings.

- Adapted furnace melting profile according to the feed mix to reduce power consumption and energy loss.
- Hot charging of billets from the caster to RM2 was normalised by enhancing yard management and productivity of the rolling mills coupled with efficient gas consumption.
- Increased plant productivity while producing Value-Added Grade (VAG) open stream by adding new technology of "Twins Casting".
- Produced Slab product to cover the Heavy Section Mill's requirements for Z-pile rolled format.
- Expanded Value-added Grade production and quality.
- Produced 130 x 130 mm billets to cope with market requirements.
- Started commissioning phase with Tenova's iDRI® technology in SMP1 Electric Arc Furnace (EAF) Process Optimisation.

We ensure the quality of our process sampling from the steel making station (furnace, ladle furnace and CCM) to confirm the quality as per the required production standard and follow up by the Technical Support team. We ensure close monitoring during process execution followed by stringent internal and external audits. Additionally, we conduct bi-weekly meetings with SMPs and the Technical Service Department to review the quality performance. In 2022, we installed a new system to measure hydrogen content in the steel to improve quality, as well as a new system to measure FeO% content in slag at Ladle Refining Furnace (LRF) station to improve quality and SMP yield. Emirates Steel Arkan procures the best quality of ferro alloys and slag builder materials to improve quality and reduce impurities irrespective of material cost. We always carry out meetings between SMPs, Quality Control (QC), Rolling Mills and Sales before implementing any new requirements.



## Operational Efficiency continued

### Rolling Mills (RMs)

At our Rolling Mills, our operational efficiency initiatives included:

- Installed protection barrier at the bar counter area for Safe operation in RM05.
- Studied special length products, above 12 meters for the European market.
- Full study for RM03 cooling conveyor upgrade.
- Trial for new standard ASTM GR40, G80, and GR100.
- Completed alignment for RM03 waterbox and QTR, which had a positive impact on RM03 protection.
- Ensured proper maintenance for RM03 oil forming/compactor area during Major Shutdown (MSD), which had a positive impact on RM03 production.
- Stabilising RM03 performance in smaller sizes by controlling equipment stability and parameters.
- Completed implementation of Management of Change (MOC) as per plan. RM03 produced new

product sizes P8.5 and P10.5.

- ES 600 new grade was produced successfully in RM01 and RM02.

### Heavy Section Mill (HSM)

At our Heavy Section Mill, some of our main achievements include:

- Development of sheet piles from the slags for the products ESZ 38X700 and ESZ 26X700 has been achieved and is of a high-quality. Previously, ESZ 26X700 was rolled from Beam Blanks.

In 2023 we aim to improve power cost savings in our HSM by the provision of a permanent power supply. We also hope to achieve productivity improvement as well as develop an in-house design team and software for foundation solutions and steel structure projects.

### Anabeeb Operations

Within our Anabeeb GRP operations, we are committed to reducing overall electricity consumption by 5%. We aim

to decrease consumption by improving the power factor and installing power harmonic filters. Installation and commission were completed in July 2022, and this project will lead to improvement of power quality, the reduction of the overall maintenance costs plus a direct reduction of the electricity bill.

Despite a highly volatile market compounded by high raw material and shipping prices, as well as shipping delays, we managed to accomplish a few feats in 2022. We installed and commissioned two new PVC extruders, and power control panels as well as power harmonic filters. We also received Sharjah Municipality approval for GRP structural manholes and chambers. Lastly, we were able to expand to wider markets through exporting our GRP pipe products to France.

### EBF Blocks and Dry Mortar Operations

Emirates Blocks utilises both recycled aggregates, including steel slag around (10% to 15%) in the blocks production mix. We use recycled products such as steel slag and manufacture eco-friendly products like thermal blocks, which we then supply to our customers. In 2022, we refurbished our Mafrq MASA plant, leading to a plant upgrade from S5 to S7.

### ACF Cement Operations

We enhanced our performance and resource efficiency in our cement operations through:

- Optimising the raw material composition in comparison with 2021 and adjusted the consumption accordingly.

- Studying and optimising of idle equipment's running time to reduce power consumption and increase equipment lifetime.
- Utilised Kiln at capacity with a target of 103.3% in 2022, totalling 3.2 million tonnes of clinker.
- Installed two new air compressors (Hertz) to substitute the present under capacity Atlas Copco compressors.
- Removal of Cement Mill 2 and 3 inlet dampers, to enhance the gases flow and decrease the power consumption.
- Addition of a belt conveyor for transporting limestone directly from the stacker to the reclaimer belt hopper, to increase the line reliability and utilisation.
- Introduction of Atlas Copco's OPTIMZER 4.0 to regulate the Air Compressor operation to save power.

- New design of water spray system in Cement. This has reduced water consumption from 5.6m<sup>3</sup>/h to approximately 2.6m<sup>3</sup>/h.
- Installed ceramic lining inside outlet duct of both Raw Mills to increase the ducts' lifetime.

In 2022, we safeguarded power consumption efficiency by decreasing consumption per kWh/tonnes of clinker, resulting in 60.7 kWh/tonnes clinker from the allocated 63 kWh/tonnes design. We also decreased natural gas consumption at both levels of cement and clinker manufacturing to 3.31 MMBtu/tonnes clinker from the budgeted 3.43 MMBtu/tonnes clinker. To increase the amount of recycled product used we use other industries' products as alternatives to raw materials in clinker production.

### Sustainable Production Initiatives

We are committed to sustainable and safe production, and in 2022 we implemented a number of initiatives to enhance the sustainability of our products. These initiatives included:

#### Environmental Initiatives

- Recycling, re-charging home return scrap (metal recovery / Pit Scrap and Ladle Furnace and Tundish skulls).
- Charging shredded tires rubber crumbles with the carbon injection to reduce the carbon consumption/ recycle tires.
- Close monitoring and control of process variables to sustain production efficiencies.
- Increase scrap charging percentage in all SMPs to achieve the global carbon footprint reduction and cost optimisations.
- Steel scrap is recycled in the furnace to produce quality rebars for the construction industry.
- Using rubber from automobiles as a partial substitute for carbon injection material without negatively impacting the environment.
- Sending used bricks for recycling to refractory manufacturing companies.
- Recycling used graphite electrodes at carbon manufacturing companies.
- Recycling Tire Wire scrap in the furnace to improve furnace foaming slag quality.
- Controlled the carbon injection and carbon charge consumption to minimise the CO and CO<sub>2</sub> generation from the furnace.
- Consuming the Pit scraps (metal recovery) generated from the Electric Arc Furnace and Ladle Furnace Slag and selling the remaining slag.
- Partially recycling Fume Treatment Plan dust within Arkan.

#### Operational Initiatives

- Conducting a process safety audit and sharing improvement between SMPs.
- Reviewing the work instructions and job safety analysis (JSA)s as per the plan.
- Using ladle thermal camera to measure the ladle temperature as an additional control.





## Operational Efficiency continued

### Product Cost

As a key regional distributor of steel and building material solutions, Emirates Steel Arkan strives to maintain cost advantages to drive competitive pricing. We don't view market value proposition and competitive pricing as mutually exclusive. As such we set clear directions for cost saving, unlocking revenue streams, and generating profit for shareholders.

### Stable Production and Supply

In 2022, we employed several measures that enabled us to deliver excellent results whilst navigating uncertain and volatile global conditions. We kept our inventory of raw materials and finished products to the minimum, which freed up some of our working capital and positioned the Company well to limit the potential future impact from global market volatility. We also took measures to enhance the Group's overall resilience including strategic organisational changes, investing in new environmentally friendly products, intensive marketing programming and a prudent approach to cost control.

At Emirates Steel Arkan, we regulate our internal processes and conduct regular inspections to have visibility on our production and supply stability. We ensure operations remain uninterrupted and standard operating procedures (SOPs) are strictly followed. Product traceability is at the core of Emirates Steel Arkan's quality system. We do so by monitoring all the components of product origin as the product moves along the supply chain, from quarries to finished products at the customers' side. For example, at our Anabeb operations we ensure GRP Pipe traceability by stencilling each pipe with a unique serial number and production

date, this is generated automatically by machine software (feeders). The same information is recorded on SAP and the quality control database. Similarly, for traceability in UPVC pipes, each pipe has its diameter, standard reference date or production, machine number, shift number and time of production details printed directly on the pipe.

In 2022 we saw the highest annual DRI production for DRP2 with 1.880 million tonnes produced. Production of all DRP plants (DRP 1, 2, and 3) totalled 3.453 million tonnes. The DRPs also achieved a high plant availability in 2022 of 95%. Looking forward to 2023, we aim to install boxy valves in DRP2 as has been done in DRP1 already. This is aimed for process gas suction filter to enable carrying out the filter element replacement activity without shutdown. Additionally, for DRP1 and DRP2 we are planning to install a process gas preheat line to protect the compressor impeller and improve filtering efficiency, as well as install a PGH fire detection system, and complete the DRP2 HMI alarm rationalisation that is currently in progress.

We focus on improving quality and reducing conversion costs and ensure our agility in the current dynamic market. In spite of market fluctuations, we have been able to develop the Value-Added Grade (VAG) production family and sell 70,000 tonnes of different products in this range. Within our SMPs, we plan to implement a dust suppression system in 2023, to minimise the dust effect on the plants' environment, as well as installing a system for billet length optimisation and a water-cooling panel to replace the graphite electrode with slag doors. Additionally, we aim to use dolomite ladles to reduce refractory costs and

install an Automated Process Optimisation (APO) system for refractory monitoring/performance improvement. Lastly, we are currently analysing the potential use of lime injection to minimise the impact on the SMP environment and improve efficiency of steel production.

For our Rolling Mills we are committed to conducting a technical study for gas consumption optimisation in 2023 for the RM01 heating furnace. Additionally, we aim to upgrade mill stand gearboxes to improve productivity and reliability for RM01 Stand Numbers 2, 5, and 10. We also aim to replace obsolete drive systems to ensure sustainability of our operations and increase RM03 availability, productivity, and production yield by reducing the pulled-out cobbles due to misalignment of water boxes. Lastly, we are planning to install a billet welding machine for RM02 and fabricate a bundle folding platform. Some of our additional longer-term plans include:

- Investment in critical spares for high-speed block to improve reliability.
- Cooling conveyor setup change to roll special grade to increase profitability with expansion compensating arrangement and individual drive.
- Rolling Mill 01 Recuperator for re-heating furnace to be changed due to the end of its life span.
- Introduction of mill equipment criticality analysis system.
- Upgrade RM01 roughing and finishing stands.

### Production Quantities by Business Unit (DRP, SMPs, RMs)

Direct Reduction Plants	Products	Production in tonnes		
		2020	2021	2022
DRP1	Direct Reduction Iron (DRI)	1,329,488	1,899,275	1,508,689
DRP2		1,582,005	1,759,007	1,880,119
DRP3		50,074	-	64,994
<b>Total</b>	<b>2,961,567</b>	<b>2,961,567</b>	<b>2,961,567</b>	<b>3,453,802</b>

Steel Making Plants	Products	Production in tonnes		
		2020	2021	2022
SMP1	Billet	1,356,872	1,620,998	1,501,729
SMP2	Billet, Blooms, and Beam Blanks	1,282,806	1,308,430	1,488,417
SMP3	Billet	82,470	92,997	221,305
<b>Total</b>		<b>2,722,148</b>	<b>3,022,425</b>	<b>3,211,451</b>

\* Other businesses processes and procedures will be aligned with Steel Businesses in 2023

Rolling Mills	Products	Production in tonnes		
		2020	2021	2022
RM01	Rebar	545,812	658,774	732,785
RM02	Rebar	660,374	724,040	794,799
RM03	Rebar in Coil	93,218	132,742	89,220
	Wire Rod	392,454	355,844	418,361
RM04	Heavy Section	475,787	450,884	556,383
RM05	Rebar	106,889	164,143	112,381
<b>Total</b>		<b>2,274,534</b>	<b>2,486,427</b>	<b>2,703,928</b>

In our Anabeb Business we have made a few enhancements to make our production more stable. We converted all lights to LED lights and upgraded our water chillers to reduce the electricity consumption. Machines software Programmable Logic Controller (PLCs) has been developed and upgraded to enhance the machines' reliability and performance. We have tested alternative raw products to reduce the production cost and have successfully implemented the alternative products. Additionally, we have switched to producing shorter pipe lengths (less than the standard 6m) for manhole shafts to reduce the amount of scrap sent to landfill. Lastly, we aim to continuously update and improve our products as evidenced by the replacement of two of our oldest PVC pipe extruders (model 1980 and 1982) to the latest model in 2022. Through these pipe extruder upgrades we have enhanced our product portfolio (to 54 types of pipes) and output to 245 tonnes/month.

## Operational Efficiency continued

### Production Quantities at Anabeeb

Production	Anabeeb Pipes and Bags Production (tonnes/year)		
	2020	2021	2022
GRP Pipes	15,268	12,963	7,295
PVC Pipes	13,537	12,568	12,987
LDPE	86	46	12
PPR	55	36	7
Plastic Bags	147	162	140
Paper Sacks	4,375	3,913	3,886
<b>Total</b>	<b>33,468</b>	<b>29,688</b>	<b>24,327</b>

### Production Quantities at EBF

Production	Blocks and Dry Mortar Production		
	2020	2021	2022
Blocks and Interlocks (in equivalent units)	72,107,000	65,210,000	70,637,941
Pavers (m2)	369,908	207,000	271,920
Dry Mortar (tonnes)	158,000	171,000	131,927

### Production Quantities at ACF

Production	Cement Production (tonnes/year)		
	2020	2021	2022
Ordinary Portland Cement (OPC)	1,770,916	1,474,075	1,301,641
Sulphate Resistant Cement (SRC)	184,872	186,347	102,371
Portland Limestone Cement (PLC)	184,984	161,907	164,395
Clinker (OPC)	2,490,414	2,574,021	3,101,546
Clinker (SRC)	162,319	222,644	142,876
Slag	141,088	100,028	59,987
<b>Total</b>	<b>4,934,593</b>	<b>4,719,022</b>	<b>4,872,816</b>

Emirates Steel Arkan remains committed to providing high-quality products for customers in the region and worldwide. This year, we continued developing partnerships which included welcoming a delegation from the Saudi Zakat, Tax and Customs Authority and having meetings with our loyal customers in the UAE and notably the Chief of CICON. The visits by the Saudi Zakat, Tax and Customs Authority, UAE's Federal Customs Authority, UAE's Ministry of Economy and UAE's Ministry of Industry and Advanced Technology were conducted to enhance the coordination efforts with related parties in order to support our product export. We invited our top rebar customer, CICON, for a discussion around our current work and future opportunities.



### Case Study:

## Emirates Steel Arkan, ITOCHU and JFE Steel in Talks to Create Green Iron Supply Chain



Emirates Steel Arkan partnered with ITOCHU Corporation and JFE Steel Corporation to consider the construction of a ferrous raw material production facility in Abu Dhabi that would become an integral part of a global low carbon emission iron supply chain.

We are proud to be leading efforts among steel makers in the Middle East to decarbonise amid an intensification of the global drive to curb CO2 emissions. By working together, we will carry out feasibility studies on the creation of a ferrous raw material steel hub at a project site in Abu Dhabi to meet the growing demand for green steel. As part of the initial plan, high-grade iron ore will be imported into Abu Dhabi to produce the ferrous raw material, which is currently expected to begin in the second half of 2025 and will be supplied to customers primarily operating in Asia, including JFE Steel.

If hydrogen reduction becomes an established technology in the production of steel, Emirates Steel Arkan will rapidly harness it to further reduce its carbon emissions. Ferrous raw material would initially be produced through an enhanced decarbonised process using natural gas to reduce the iron ore. The project also makes provisions for the adoption of renewable energy power sources, as well as green hydrogen for the reduction process.

In this ongoing project, ITOCHU will be responsible for sourcing the high-grade iron ore through the network built by trading and investment activities over the decades. Emirates Steel Arkan will utilise the experience of the successful operation of the direct reduction plant with carbon capture, utilisation and storage "CCUS" facility, which leads the way on carbon capture, and JFE Steel will use the ferrous raw material produced through this project as a steelmaking raw material and promote CO2 emission reduction.



# Product Service and Quality

**We continue to work with our partners to map out a comprehensive net zero plan aligned with international carbon reduction targets. In 2022, we committed to increasing the use of cementitious materials in cement production such as blast furnace slag and fine limestone, and our Building Materials Business is evaluating plans for green cement that would harness low-carbon production processes.**

We remain confident in the Group's future and growth prospects. We have a clear strategy to expand geographically, broaden our product range and continue delivering long-term value to our shareholders. Behind this, is a strong commitment to supporting the UAE's economic growth and diversification goals. We take our role in supporting the Government's Operation 300bn seriously and look forward to further contributing to the success of this strategic initiative through investing in sustainable and responsible industrial practices, adopting the latest technologies, investing in research and development, and continuing to develop and nurture homegrown talent.

Through digitalisation, Emirates Steel Arkan ensures that quality data is captured from procuring raw materials to the final product. All data is captured in SAP and Level 2 to acquire accurate information. All products are barcoded for serial identification, and materials are scanned at every stage gate to prevent mix-up. We ensure that all status records are kept for future reference and maintain constant quality control by monitoring the final product at least twice an hour – RM01, RM02, RM03, and RM05 are inspected for rebar and coil strands through periodic inspection. Additionally, we align our product quality with international standards and highlight product quality in our catalogues covering our pipes, rebars, and wire rods for credibility, client trust and in compliance with

stakeholder requirements. Some of the standards and certifications we abide by include, but are not limited to:

- CARES
- BIS (India)
- PAI (Kuwait)
- SASO (Saudi)
- ACRS (Australia)
- ESMA (UAE)
- ADQCC (Abu Dhabi)
- DCL (Dubai)
- CIDB (Malaysia)
- SIRIM (Malaysia)
- TUV Rhineland (Singapore)
- Ministry of Infrastructure (Italy)
- TUV Nord (Germany)
- PWL CEDD (Hong Kong)
- SIRIM (Malaysia)

Our various products hold the CE Mark, UK CA Mark, Kuwait Quality Mark, Saudi Quality Mark, Emirates Quality Mark, ISI Mark, and Product Conformity Mark. Our quality system is certified to ISO 9001:2015 and the test-houses are accredited to ISO 17025. Lastly, we ensure the upkeep of our plants through frequent maintenance, periodic inspections across our plants, and that standard operating procedures are followed with regular reviews.

In our Anabeeb operations all products are kite mark certified (BS Standard) and to date, we conduct both short and long-term quality tests as per approved frequency testing plan (FTP) for all finished good products as well as for raw materials, in addition to that lab equipment is calibrated annually by an approved third party. We ensure frequent testing to comply with local standards and client requirements.

Quality control in ACF is a continuous process. To produce high-quality cement, the mineralogical and chemical composition of raw materials as well as intermediate and finished products is being defined and controlled as per the international standards. At each stage of the production, samples have to be taken, processed and analysed to ensure quality control without gaps. To maintain constant product quality, each of the various production steps must be carefully controlled. This requires analysis of relevant elements in raw materials, intermediate process products and the final product. ACF is equipped with the latest process control instrumentation and quality control system. The quality control lab is manned by qualified personnel to ensure quality of product comparable to the highest standards.

Al Ain Cement Factory is certified by ISO 9001:2015 and ISO 14001:2015, Abu Dhabi and Dubai Central Labs accreditation. Customer follow-ups, complaints and aftermarket services are being managed following ISO standards.

Some of our main achievements this year include reducing natural gas consumption in the pyro process system from 3.43 MMBtu per tonne clinker to 3.32 MMBtu per tonne clinker, passing the Ministry of Environment and Climate Change's (MoCCA) annual assessment with an "A" grade, and achieving the clinker production budget of 3.2 million tonnes 24 days ahead of budget. Emirates Steel Arkan was also awarded a certificate for ranking "Excellent" by the Electrical Tariff Incentive Programme (ETIP).

This year we have expanded our offerings geographically and played a major role in constructing Mexico's Skyscrapers. Our products contributed to the building of Torre Reforma –the tallest skyscraper in Mexico City. This achievement shows our market leadership for our ability to deliver competitive products at the global level.



## Product Service and Quality continued

### Case Study:

# New Pipe Manufacturing Machines at Anabeeb



Over the past two decades, the production of our pipe commodity has been consistent and ever-present, however it was time to replace the timely machines with a new state-of-the-art PLC System with visualisation and CAN\_BUS Communication System that is capable to produce a total of 34 sizes in 80 different classes, compared to 3 sizes and 6 different classes.

As part of our strategic importance towards manufacturing the finest and most efficient product lines across the entire Group, Group CEO Eng. Saeed Al Remeithi as well as other high-ranking members from Anabeeb inaugurated two new piping machines at the Musaffah site, in Abu Dhabi.

From a financial perspective, the installation of the two lines, will help considerably to decrease the total impact of the cost reduction in manufacturing the products, while simultaneously increasing the profitability of Emirates Steel Arkan to more than AED 320,000 per month.

### Case Study:

# Supporting UAE Net Zero 2050



With the UAE established as a construction hub, there is an accelerating need for innovative construction solutions. As such, Emirates Steel Arkan held its second collaborative meeting with the Middle East Economic Digest (MEED) to introduce ES600 – our latest innovative product. The meeting was attended by Mr. Mohamed Al Afari, SVP of Marketing, Mr. Michael Rion, Vice President Sales, other high-ranking members from our organisation, market experts, designers, and architects, and many others.

ES600 is a new high strength reinforcement bar that has the potential to be a game changer within the construction industry. As the world moves towards stronger rebars in construction, ES600 rebar is expected to propel the construction industry and the economy to the next level.

The invention and development of ES600 will have a critical impact on the steel and construction industry and the entire economy. The decrease of steel consumption will lead to reduced carbon footprints, providing a cleaner and greener environment, supporting the UAE's Net Zero 2050 Vision.



# Technology, Product, and Process Innovation

**We keep pace with cutting-edge technologies and trends to maintain our industry stronghold. Innovation is our priority, and we are committed to strengthening the Group's presence in global markets and enhancing the competitiveness of Emirati products. Our steel products now reach more export markets worldwide including Europe, America, Asia, Middle East, and North Africa. We are always steadfast to upscale our product properties and internal processes to maintain our market leadership.**

To instil diversity, innovation and competitive advantage into our product line, we are invested in rigorous Research and Development (R&D) and feasibility studies. In 2022, we launched a product known as ES600, a high-tensile steel reinforcement bar (rebar) that supports customers' efforts to become more environmentally friendly and helps reduce the Group's carbon footprint for steel production. We aim to introduce a new "U-Pile" range and an additional larger size range to our "Z-Pile" category of hi-margin sheets.

We have invested in digitised state-of-the-art-structures and facilities and are gearing up for a new production facility featuring a main gas insulated switchgear, new reverse

osmosis (RO) plant, water treatment plan, compressed air house, air separation unit, primary and secondary storage and handling facilities, slag handling logistics and facilities, product storage and dispatch facilities.

To encourage ideation, we incentivise individuals to pitch ideas to improve our processes through our "Think Smart" platform. The platform provides people the opportunity to discuss their ideas, and individuals are rewarded should said ideas move to implementation. In 2022, 80 ideas were submitted on Think Smart, of which 6 have been implemented.

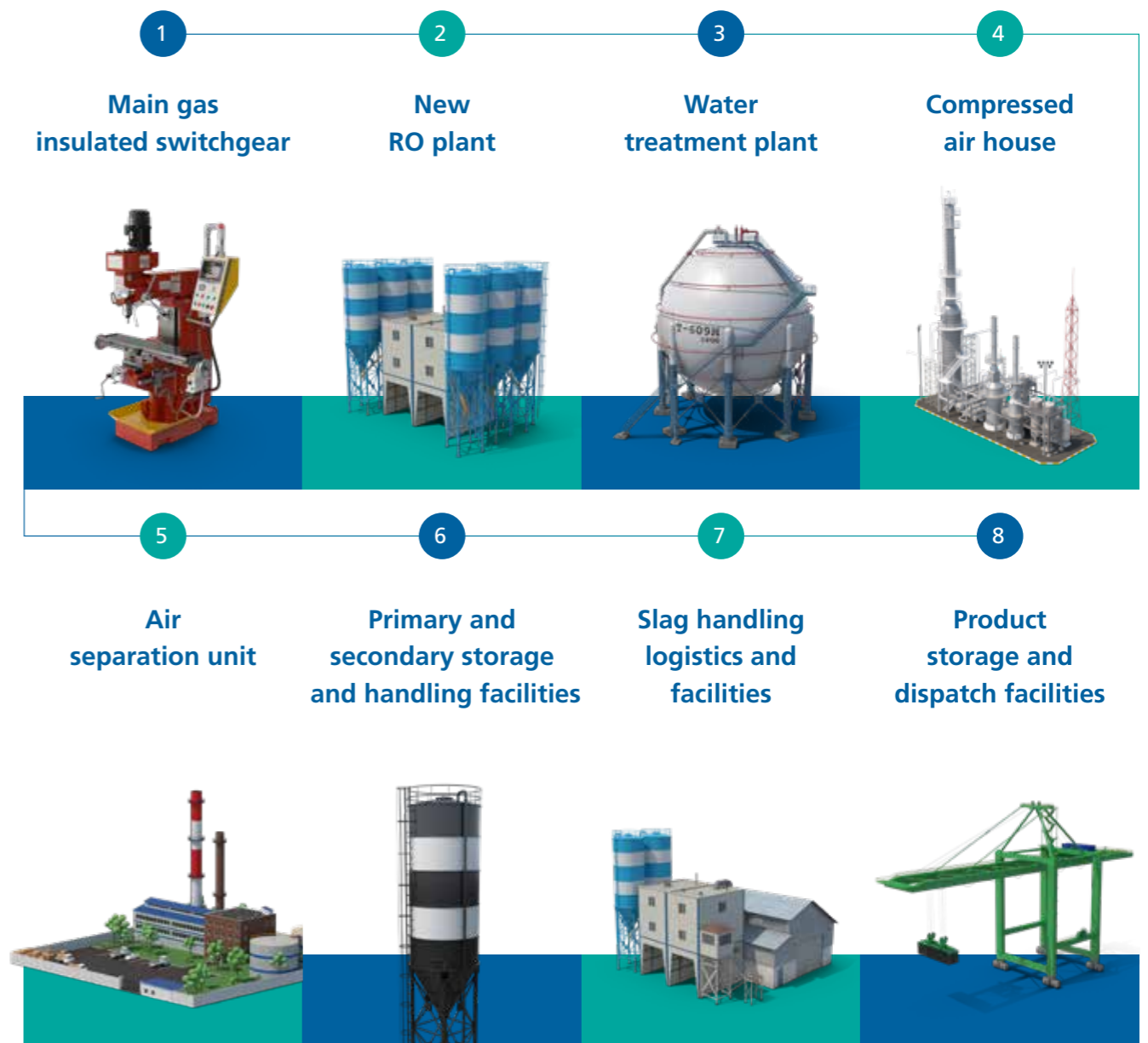
## Think Smart Initiatives

Idea	2022 Financial Benefit (AED)
Use of low-quality bricks (reasonable bricks) in furnace cold zone areas	19,803
Shrink fitted roll instead of integrated roll for Sheet Pile	694,524
Durapol coating to reduce corrosion in CO2 removal system in DRP	8,562,697
Main Ferro Alloys cost reduction	3,110,509
Reduce production charge mix material cost by using low-cost steel scrap material (Tire wire scrap)	2,124,333
Trial of Silicon Carbide (SiC) to replace Ferro Silicon in order to reduce Ferro alloys cost and use alternative material	1,291,877
<b>Total financial benefit</b>	<b>15,803,743</b>

## Investments in Research and Development in the Steel Business

Description	Unit	2020	2021	2022
Research and development expenditure	AED million	3.4	3.9	4.0

## New digitised state-of-the-art structures and facilities to feature



# Customer Satisfaction

**We provide state-of-the-art steel and building material solutions to our distinguished clients and are honoured to be recognised for our work by the World Steel Association, who ranked us third in the Arab world and Africa for crude steel production in 2021, with a total production capacity of 3.02 million tonnes.**

We always strive to provide better visibility of our products' technical specifications and certifications to our customer base by making our product catalogues available on our website. We also continue to brandish our products on the platform "Origin", which connects manufacturers with construction industry players. The platform allows us to present our product certifications, building codes, and design standards, therefore connecting us to potential customers based on their search specifications.

We nurture our customer relationships by hosting events to open dialogues with our clientele. We invited a Rebar leading customer from Kuwait to our premises to ensure Emirates Steel Arkan's focus on providing excellent customer satisfaction and to strengthen our relationship. Our Group CEO also

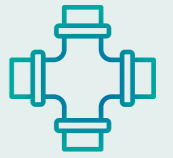
welcomed clients to a Suhoor event in 2022. We are always willing to support all our customers to gain value by leveraging this product to the best of their advantage. As such, we organised a seminar for customers in Dubai to introduce them to our new product, ES600. The innovative product helps reduce steel consumption by 18-24%.

Focusing and developing new relationships is pertinent to our commercial activity. We ensure our products are exposed to new customers, by participating in exhibitions and conferences. Emirates Steel Arkan showcased its sustainable pipe product range in 2022, participated in the 25th Arab International Cement Conference and Exhibition in November 2022, and participated in the 15th Arab Iron and Steel Union Summit.



## Case Study:

# Emirates Steel Arkan Showcase Sustainable Pipe Product Range at WETEX 2022



Emirates Steel Arkan participated in WETEX 2022, an event organised by Dubai Electricity and Water Authority (DEWA), to highlight our latest technological advancements in pipes used within various applications including wastewater, potable water, hydropower, industrial pipe systems, irrigation and drainage, and electrical and plumbing (MEP) elements, among other applications.



The forum's focus on the latest technological advancements will allow us to showcase our innovative, high-quality pipe and construction material products that are produced efficiently and sustainably, and that will set new standards in the construction and infrastructure sectors.

As the pioneer pipes producer of GRP and PVC pipes, as well as paper sacks for building materials, we shared our unique pipe product range with event delegates at WETEX and discussed the evolving requirements of the industry with attendees.

We showcased details about our facilities, for example our factory is the largest factory producing Centrifugal Casting Glass Reinforced Plastics (CC GRP) pipes in the world with 18 mould stations among 4 feeders. The factory supplies locally and exports to Europe, Asia, and African countries.

We are always looking to improve our products and services and ensure they meet our customers' tailored requirements.

## Customer Satisfaction continued



Emirates Steel Arkan participates in the 25th Arab International Cement Conference and Exhibition held in Amman, Jordan, from 8-10 November, 2022.

### Case Study:

## Emirates Steel Arkan at the 15th Arab Iron and Steel Union Summit



Held from 7-8 November, 2022 in Manama, Kingdom of Bahrain. Senior professionals in the Arab world were in attendance to celebrate the 50th anniversary of the Arab Iron and Steel Union. The summit provided a platform for the meeting of many Arab and international companies, steel industry experts, owners of modern technologies, in addition to investors interested in this industry.

### Data Privacy and Security

We are committed to ensuring data privacy and security at Emirates Steel Arkan. Thus, we have an Information Security Policy in place and a Data Privacy Policy where the implementation of the controls is IT focus.

We are also in compliance with UAE-NESA Standards which consist of 188 security controls to ensure data protection across Emirates Steel Arkan.

Additionally, we follow the UAE Information Assurance Standards which cover most of the ISO 27001 Standards and Controls. Currently, we are not certified but with the support of a third party, we are conducting a deep gap assessment against ISO 27001 as we aim to obtain this certification in 2023.

We normally perform periodic Vulnerability and Penetration tests on our IT Critical Infrastructure, and we perform mitigation accordingly to ultimately ensure data privacy and security. We also managed a Security Operations Centre (SOC) engagement.

### Managing and Capturing Customer Feedback and Complaints

We ensure high levels of customer satisfaction through satisfaction surveys. Our annual "Customer Satisfaction Survey" is an opportunity to capture honest feedback and seek improvements from the results. The survey allows customers to rate Emirates Steel Arkan against its competitors, we then compare the results against past surveys to monitor our progress in achieving our goal of continual improvement in our products

and services. We maintain a formal Customer Complaints Procedure as part of our IMS. The purpose of this procedure is to assess the system of obtaining, handling customer complaints and provide final resolution to customers. Our customer service procedures and process include customer enquiry procedures, customer registration process, order issuance and orders status follow up and complaints process.

Our Customer Satisfaction Survey comprises of multiple-choice questions to measure the level of satisfaction in areas like interaction with the sales teams, technical information, order registration rating, commercial documents rating, product quality, product range, delivery terms, and claim handling. Customers rate their satisfaction on a scale of 1 (extremely bad) to 4 (excellent). To ensure continual improvement, we share the results with the relevant operational units and develop tailored action plans. For example, our marketing team holds one-to-one discussions with key customers that rate us "less than good" or rates us lower than our competitors, this aids us in improving our customer perception and ratings. Our customer satisfaction rate for the survey conducted in 2022 was 85% at Arkan; the 2022 customer satisfaction survey for Emirates Steel will be conducted in 2023. Additionally for 2022, we achieved a 92.5% return rate (100% at Emirates Steel; 85% at Arkan). In 2023, we aim to dedicate a section in our Customer Satisfaction Survey to gain our customer's perception on ESA's responsible relationship with customers.

As a result of our 2021 Customer Satisfaction Survey, we reorganised our sales team to be more customer centric. This increased the number of customer visits, improved speed of response enquiries, and allowed us to monitor customer retention rate. The customer retention rate is reported on in monthly review meetings with EXCO members and was reported as 100% consistent. To enhance our customer satisfaction and experience we facilitate regular meetings with customers and engage EXCO members at various levels, as well as conducting VP and Manager-level meetings with all rebar stockists and section stockists.

Continuous improvement is achieved from customer feedback, which is why we have an established customer complaints process to ensure close follow up from receipt to resolution. As such we have a dedicated Customer Complaints Committee that performs root cause analysis, sets corrective actions, and submits official complaint closure letters to clients. In 2022, we resolved all 77 and 49 customer complaints received at Emirates Steel and at Arkan building material businesses respectively.

## Customer Satisfaction continued

### Our Customer Complaint Resolution Process:

- 1 **Complaint Reception:** Receival through designated customer complaints email account or via Sales Managers.
- 2 **Complaint Registration:** Registering the claim and giving it a reference.
- 3 **Receipt and Acknowledgement:** Providing a receipt acknowledging the claim and assigning a reference number.
- 4 **Identify and Assign:** Identify nature of complaint and assigning responsible team to investigate.
- 5 **Complaint Investigation Report:** Complaint investigation report with root cause analysis, and recommended corrective and preventative action.
- 6 **Report Communication:** Complaint investigation report communicated to the customer.
- 7 **Committee Approval:** Customer Complaints Committee agree/ approve the final corrective action to be implemented to resolve complaint.
- 8 **Complaint Closure:** Official closure letter with agreed/approved corrective action to be communicated to customer.



There have been a few significant changes and challenges that have affected our business practice by way of tailoring our practice to customer's needs. For example, we have implemented price control measures to adjust for the price fluctuation in raw materials and have controlled the range of our product mix to meet customer needs, as well as expanded our product range by adding British standards to meet certain market specifications in Dubai. For 2023, we hope to expand our geographical segmentation and increase our market share in the Northern emirates and Dubai.





# Preserving the Environment



## 04

### In this section:

- Management Approach
- Energy and Emissions
- Waste and By-product Management and Reduction
- Materials
- Water and Effluents
- Biodiversity and Ecotoxicity
- Commitment to Environmental Compliance



# Management Approach

**Emirates Steel Arkan is committed to preserve the environment and protect its natural resources in line with the UAE national and international commitments. We are aware of the environmental impacts caused by our operations and facilities, mainly by our energy consumption and Greenhouse Gas (GHG) emissions.**

We aim to minimise our environmental impact following our Integrated Management System (IMS) Policy and by integrating sustainability across our operations and facilities for manufacturing steel and building material. Our IMS includes a detailed procedure to identify and evaluate various environmental aspects. We also have an Operation Environment Management Plan (OEMP) that includes the initial review of our significant environmental and sustainability aspects as well as associated impacts, mitigation, and monitoring requirements.

Our Quality, Environment, Health, Safety and Sustainability (QEHSS) Policy articulates our commitments towards compliance with applicable legal standards and requirements. It also details our commitments towards conserving energy and resources, minimising our environmental footprint to prevent environmental damage, implementing

environmental best practices, adopting effective emission controls and treatment as well as identifying, managing, and reducing environmental risks. Our QEHSS Policy is regularly reviewed and signed by the senior management and our key environmental issues are reported to the board at each Board meeting with HSE being the first agenda item at each meeting.

We are keen to play an effective role in combatting climate change, so we are taking various actions to achieve this goal. We developed our Decarbonisation Strategy, signed the UAE Climate-Responsible Companies Pledge and attended the COP27 in Egypt to support the UAE Net Zero 2050 Strategic Initiative. We also developed our COP 28 Strategy and Roadmap as part of our contribution to the upcoming COP28 that will be held in the UAE in 2023.

At Emirates Steel Arkan, we developed fume treatment plants and de-dusting units to promote clean healthy working environments, adopted cutting-edge technologies to reduce our emissions, implemented waste management and water treatment activities, sequestered CO2 emissions from our Direct Reduction Plants (DRP) and increased our investments in preserving the environment.

Furthermore, as part of our long-term strategy and investment in decarbonisation, we partnered with ADNOC in which its Al Reyadah Carbon Capture, Utilisation and Storage (CCUS) facility processes the CO2 captured from our DRP operations to ultimately enhance its oil recovery. It has capacity to accumulate up to 800 kt of CO2 per year and pipe it to ADNOC's Rumaitha and Bab oil fields to support oil

extraction. We are also the first manufacturing company in the Middle East to be verified for LEED green building system documentation.

We regularly conduct environmental assessments, inspections, and audits to ensure our compliance with environmental laws and regulations. We monitor our emissions, wastes, and discharges using laboratories and consultants approved by relevant government agencies. We also installed air pollution treatment facilities with a continuous emission monitoring system for real-time control and monitoring of emissions to ensure they're within the permissible limits.

This section discloses our efforts to create a positive impact on our environment in 2022 and highlights our performance on energy, emissions,

materials, waste, water and effluents, and environmental compliance. These topics have been identified as significant for Emirates Steel Arkan and its stakeholders during our materiality assessment which underpinned the development of this report. The material topics have been aligned with the GRI standards and have been broadly correlated to the UN SDGs, the CARES SCS scheme and ADX requirements to demonstrate our contribution to sustainable development globally and locally.



We operate responsibly at Emirates Steel Arkan to preserve our environment and protect our natural resources. We take serious actions and measures to manage our energy consumption and achieve reduction in our CO2 emissions to ultimately reach net zero by 2050. We also take the required measures to manage our water consumption and reduce our waste generation across our operations and facilities.”



**Saeed Khalfan Al Ghafri**  
Chief Commercial Officer



Management Approach continued

Material Topic	GRI Standard	UN SDGs	CARES SCS
Materials	301 (2016)	 	3.2
Energy	302 (2016)	   	3.3
Water and Effluents	303 (2018)	 	3.3
Biodiversity	304 (2016)	  	3.4
Emissions	305 (2016)	    	3.5, 3.6, 3.7
Waste	306 (2020)	     	3.7
Environmental Compliance	2-27 (2021)	-	2.1



# Energy and Emissions

**Climate change is the most pressing global environmental problem with massive threats and consequences for sustainable development. Following the catastrophic events such as temperature rise, extreme weather events, depletion of natural resources as well as the alarming increase in global warming trends, businesses and governments around the globe are discussing emission pathways and effective climate action measures to limit global warming to below 1.5 degrees Celsius, as per the Paris Agreement.**

At Emirates Steel Arkan, we are committed to combatting climate change and integrating it into our sustainability approach. As such, we apply a rigorous framework to monitor energy and emissions related KPIs across our operations and facilities as part of our efforts on decarbonisation and combatting climate change. In line with our recently developed sustainability implementation plan, we focus on reducing our GHG emissions intensity with a target to be finalised after we conclude our decarbonisation strategy. We also updated our Company Integrated Policy in 2022 to cover our commitments to energy in line with the ISO 50001 (Energy Management System).

At Emirates Steel Arkan, we aim to reduce our energy consumption, improve our energy efficiency and reduce our emissions to ultimately reach net zero by 2050.

Emirates Steel Arkan celebrated World Environmental Day in 2022 and reaffirmed its support for the UAE's strategic approach to achieve climate neutrality by 2050, by implementing a variety of qualitative efforts to cut carbon emissions across all its operations.



## Case Study:

# Challenges and Opportunities of Net Zero



Our Group CEO participated in a closed-door roundtable that brought together global and regional CEOs and policymakers from the hard-to-abate industries to discuss the challenges and opportunities their organisations face in reaching net zero. The insightful discussions were held in partnership with the Office of the UAE Special Envoy for Climate Change and the Atlantic Council and co-hosted by Abu Dhabi Sustainability Week (ADSW).



The leaders gathered with great ambitions to have in-depth discussions on the challenges and solutions of decarbonisation and the realisation of the national climate goals – namely the Net Zero 2025 Strategic Initiative, the first national net zero target in the MENA region.

Discussions included the world's best innovative solutions for the current challenges of each industry and the detailed actionable roadmap towards the targeted outcomes, with the aim to drive the sustainability efforts forward while translating policies, strategies and plans into real tangible results.

Following the roundtable, the group has been tasked with identifying and developing solutions that will help hard-to-abate industries move to net zero. As per the plan, each CEO nominated a Champion within their organisation to take this initiative forward and this Champion was tasked with talking to the industry bodies to discuss and develop potential cross company commitments that were made at the COP27 and will be made at the coming COP28 in UAE.

Participants were invited to come back and meet at COP27 and update the group on the progress made to tackle challenges using the solutions discussed. The group will be engaged in semi-annual meetings at least until the end of the UAE's COP presidency.

## Energy and Emissions continued

### Case Study:

# Our Role in the Conference for the Parties (COP)



In November 2022, representatives from Emirates Steel Arkan attended the United Nations Climate Change Conference or more commonly referred to as COP27 as part of the UAE delegation representing over 70 public and private entities, policymakers, negotiators, business leaders, a number of youth and female entrepreneurs, as well as civil society organisations.



We were honoured to have been part of the United Nation's annual climate change meeting and look forward to seeing the positive outcome of its resolutions.

In 2023, COP28 will be held in the UAE, and it will be a significant moment as the first global stock take will be announced, which will be the indicator of all climate action projects and initiatives. As part of our contribution to the COP28, we committed to achieving the UAE Energy Strategy by 2050, focusing on clean energy usage, green hydrogen and alternative fuels, utilisation of scrap and recyclables as well as Carbon Capture, Utilisation and Storage (CCUS).

We also developed our ESA-COP28 Strategy and Roadmap that focuses on three pillars:

- Communicate the Group's initiatives, achievements and agreements in decarbonisation and ESG scores. Convey ESA decarbonisation roadmap to achieve net zero by 2050.
- Create awareness by highlighting the decarbonisation in the Steel and Cement Businesses through the voice of the Youth.
- Commit with potential partners to align actions and accelerate decarbonisation.

Additionally, we established our COP28 Implementation Plan, focusing on decarbonisation and increasing awareness.

### Increase awareness and activities across 2023 to establish ESA as a leader

- 1** Launch and Promote ESA's decarbonisation and sustainability strategy to support sales and marketing in key markets that establish ESA as leaders in this area.
- 2** Identify company spokespersons and proof- points to discuss decarbonisation and sustainability to key stakeholders across the world.
- 3** Participate in decarbonisation, digitalisation and sustainability events and become a thought leader across the globe.
- 4** Develop a COP 28 and decarbonisation communications plan and materials that positions ESA as a proof point for the UAE Government decarbonisation success.

### Energy

We are committed to conservation of energy across our operations and facilities in line with our QEHSS Policy. Thus, we monitor in real-time our energy consumption throughout our plants using a Level 2 Automation System. It is the responsibility of the Plant Manager to monitor and control the "Unit Power Consumption" of the respective plant, keeping it 5% lower than the baseline. Additionally, we assess and evaluate the environmental impact of energy use at our facilities through our Environmental Impact Assessment (EIA).

### We are keen to reduce our energy consumption and increase our energy efficiency across our operations and facilities. As a result, we have taken various measures including:

- Using Direct Reduced Iron (DRI) that is transported hot, directly into the Electric Air Furnace (EAF) to save energy.
- Controlling the use of our Heating, Ventilation and Air Conditioning (HVAC) system.
- Using the state-of-the-art technology Static VAR Compensator (SVC) for power quality parameters within specified limits.
- Repairing all compressed air leakages and minimising air leakages.
- Maintaining all HVAC regularly to improve the cooling efficiency.
- Controlling the timing of the switching on/off of lighting, HVAC, heater and other equipment.
- Upgrading reformer and process gas heater insulation materials to minimise heat losses.

As per Namaa project, the following energy saving initiatives were implemented:

Initiative	Saving in USD 000
Natural gas saving by increasing billet hot charging in RM02 with support up to 25%	460
Reduction in specific fuel consumption at RM02 by waste gas heat utilisation	197
Optimisation of specific fuel consumption at RM04	474
Reduction in specific fuel consumption by optimisation of air/fuel ratio for RM03 reheating furnace	73
Primary production plants process enhancement with engineering improvement DRPs major shutdown	4,869
Power cost saving by replacing conventional lights with energy efficient LED lights	92
Reduce natural gas consumption at SMP2-EAF by process enhancement	248
Hot gas generator (natural gas) consumption optimisation in cement mills	253
Optimise kiln gas consumption against last 5 years average Specific Heat Consumption (SHC) per tonnes of clinker.	720

## Energy and Emissions continued

In 2022, we made a commitment to decrease our natural gas consumption at both levels of our cement and clinker manufacturing, decrease the power consumption of kWh/tonnes of clinker, and relaunch our Waste Heat Recovery Project. We aim to maintain our Specific Power Consumption (SPC) target less than 96 kWh/tonnes for clinker, cement and OPC whereas our Specific Heat Consumption (SHC) target is to be maintained less than 4.43 MMBtu per tonne for clinker. We were able to ultimately achieve a reduction of 0.11 MMBtu per tonne of clinker in the pyro process system natural gas consumption across our

cement factory from 3.43 MMBtu per tonne of clinker to 3.32 MMBtu per tonne of clinker. In 2023, we aim to start the Alternative Fuel Project at our cement factory.

At our cement factory, we study and optimise the idle equipment's running time to reduce the power consumption and increase equipment lifetime. We also removed Cement Mill 2 (CM2) and CM3 inlet dampers to enhance the gases flow and ultimately decrease power consumption. Moreover, we introduced Atlas Copco's OPTIMISER 4.0 to regulate the air compressor operation in order to save power.

Our cement plant was awarded the Electrical Tariff Incentive Programme (ETIP) Certificate with "Excellent" rank.



### Case Study:

## World Steel Association (WSA) Step Up Programme



In line with our commitment towards reducing our Steel Businesses carbon footprint, Emirates Steel Arkan has joined the World Steel Association (WSA) Step Up Programme. The site performance was analysed (2020-2021) against top performers in the area of Raw Materials, Energy, Maintenance and Reliability, and Process Yield.

The report's recommendations:

- Check the energy consumption of each process using the world steel energy benchmarking system and determine where the energy can be optimised better for use or recovery.
- A detailed audit of the energy system to allow honing in on the root causes and devising strategies to tackle them.
- It is important to track all the energy and material losses at the important stages of the process.

At our Steel Businesses, we are aware of the energy intensive nature of our operations therefore we ensure monitoring our energy intensity in relation to the tonnage of material produced across our facilities. In 2022, the energy intensity was 16.9574 GJ/tonne which is 2% less than that in 2021.

### Energy in Steel Businesses

Description	Unit	2020	2021	2022
Total fuel consumption from non-renewable sources (natural gas and LPG)	GJ	39,852,250	44,178,218	45,626,745
Total electricity consumed*	GJ	7,393,504	8,163,317	8,806,361
Total energy consumed	GJ	47,245,754	52,341,535	54,433,107
Energy intensity	GJ/tonne	17.36	17.32	16.95

\*Energy from EAF coal, pellets, burnt lime, burnt dolomite, and Gas based DRI are also considered

### Energy in Cement Businesses

Description	Unit	2020	2021	2022
Total fuel consumption from non-renewable sources (natural gas)	GJ	9,424,777	10,419,808	11,555,456
Total electricity consumed	GJ	82,689	914,187	936,840
Total energy consumed	GJ	9,507,466	11,333,995	12,492,296
Energy intensity	GJ/tonne	3.08	3.73	3.60

### Energy in Blocks Businesses

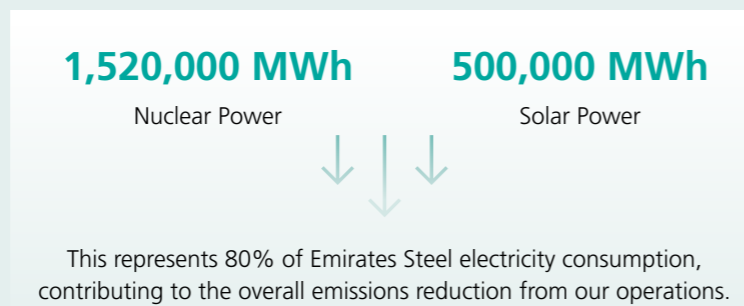
Description	Unit	2020	2021	2022
Total fuel consumption from non-renewable sources	GJ	134,954	151,000	173,475
Total electricity consumed	GJ	16,761	16,650	14,504
Total energy consumed	GJ	151,715	167,650	187,979

### Case Study:

## Clean Energy Certificate



In 2022, we had a total electricity consumption of 7,272,000 GJ (2 million MWh) from clean resources purchased as a clean energy certificate, as per the following breakdown:



## Energy and Emissions continued

### Energy in Anabeeb Businesses

Description	Unit	2020	2021	2022
Total fuel consumption from non-renewable sources	GJ	12,105	8,214	21,948
Total electricity consumed	GJ	46,236	39,333	38,494
Total energy consumed	GJ	58,341	47,547	60,442
Energy intensity	GJ/tonne	1.74	1.60	2.48

### Emissions

Our Quality Assurance and Environment Department is responsible for regularly collecting and submitting data from our steelmaking facilities to CARES to calculate our carbon footprint. We also work with the World Steel Association (WSA) for the purpose of calculating and monitoring our carbon and energy intensity across these facilities according to ISO 14404.

We also manage and monitor our performance through the CO2 calculator in place and by following the decarbonisation project action plan as well as the ISO 50001 action plan. We report on our GHG performance in our sustainability report, and we report this

performance to the Industrial Development Bureau (IDB) and UAE Ministry of Climate Change and Environment (MOCCA). (MOCCA).

Moreover, we have received a 5-year recognition, the Climate Action Data Provider Certificate of Appreciation from the WSA as a result of our participation in the WSA's CO2 Emissions Data Collection programme. This was possible through our partnership with Al Reyadah Carbon Capture Facility, located close to our steelmaking plants. This Carbon Capture, Utilisation and Storage (CCUS) project aims to capture up to 800,000 tonnes of CO2 emitted from Emirates Steel factory.

We passed the semi-annual assessment of MOCCA with a score of 92%, "A" grade, where an inspection was conducted by the Ministry based on the approved OEMP and their criteria for the Cement Businesses.

### Case Study:

## Emirates Steel Arkan and ENGIE Impact



In 2022, Emirates Steel Arkan Group appointed ENGIE Impact to accelerate its market-leading green track record. ENGIE Impact is a global advisory firm dedicated to accelerating the sustainability transformation of companies which will assess the business' CO2 footprint, further strengthen Emirates Steel Arkan's pioneering sustainability initiatives, and convert this vision into a detailed roadmap for the next 10-15 years.

The appointment is in line with our leading position as one of the world's steel producers with the lowest CO2 emissions per tonne.



### Case Study:

## Working on Emirates Steel Arkan's Decarbonisation Strategy



We developed our Decarbonisation Strategy to continue our efforts to reduce our CO2 emissions. Our ultimate goal is to set the roadmap to be in line with the UAE Government's climate ambition to reduce national GHG emissions. The objectives of this strategy are to:

- Assess our CO2 footprint.
- Identify the best path towards decarbonisation.
- Convert the vision into a detailed roadmap for the next 10-15 years.
- Evaluate the related risks and costs against the potential opportunities.

For the Steel Businesses, our Decarbonisation Strategy focuses on carbon capture, green hydrogen, clean energy, utilisation of scrap, and energy efficiency.

In 2022, we started working on our decarbonisation strategy across our cement facilities and operations. Our different workstreams included calculating the carbon footprint of building materials – cement, comparing our position to other cement industries, assessing future demand for green cement products and developing a cost optimised actionable decarbonisation roadmap for our Cement Business.

## We were able to complete a Building Materials Carbon Footprint, Benchmark and Market Assessment.

In 2023, we aim to achieve the implementation of the Decarbonisation Strategy reports and certificates such as Responsible Steel, Carbon Disclosure Project (CDP) and ISO 50001.



## Energy and Emissions continued

In 2022, we were able to decrease our total emissions (scope 1, 2 and 3) in our Steel Businesses by around 13% in comparison to 2021 due to an increase in carbon capture and a clean energy certificate. Our total emissions also decreased in our Anabeeb Businesses by around 4% in 2022 in comparison to 2021. On the other hand, our total emissions increased across our Cement and Blocks Businesses by around 6% and 7% respectively in 2022 in comparison to 2021.

### Emissions in Steel Businesses

Description	Unit	2020	2021	2022
Total direct scope 1	tCO2e	1,904,805	2,094,888	2,024,973
Total indirect scope 2 (location-based)	tCO2e	1,434,462	1,226,861	1,323,254
Total indirect scope 2 (market-based)	tCO2e	1,434,462	1,120,521	249,220
Total indirect scope 3*	tCO2e	3,106,028	2,070,612	2,331,525
Scope 1 + 2 intensity (market-based)	tCO2e/tSteel	1.09	1.08	0.70
Scope 1, 2 and 3 intensity	tCO2e/tSteel	1.72	1.77	1.43

\*Scope 3 covers: Purchased goods and services, fuel and energy-related activities, upstream transmission and distribution, waste and water, employee commuting, downstream transportation and distribution, processing of sold products, and end of life treatment of sold products.

### Emissions in Cement Businesses

Description	Unit	2020	2021	2022
Total direct scope 1	tCO2e	1,922,422	2,068,790	2,296,921
Total indirect scope 2	tCO2e	125,891	128,408	131,444
Total indirect scope 3*	tCO2e	520,221	559,539	483,755
Scope 1 + 2 intensity	tCO2e/t	0.67	0.713	0.70
Scope 1, 2 and 3 intensity	tCO2e/t	0.86	0.89	0.85

\*Scope 3 covers: Purchased input materials, other upstream activities, and downstream activities

### Emissions in Blocks Businesses

Description	Unit	2020	2021	2022
Total direct scope 1	tCO2e	9,092	10,522	11,890
Total indirect scope 2	tCO2e	4,890	4,403	4,100
Total indirect scope 3*	tCO2e	80,114	76,317	82,010

\*Scope 3 covers: Purchased input materials, other upstream activities, and downstream activities

### Emissions in Anabeeb Businesses

Description	Unit	2020	2021	2022
Total direct scope 1	tCO2e	3,323	3,439	3,964
Total indirect scope 2	tCO2e	6,481	5,519	5,401
Total indirect scope 3*	tCO2e	87,664	66,525	63,311

\*Scope 3 covers: Purchased input materials, other upstream activities, and downstream activities

### Case Study:

## UAE Climate-Responsible Companies Pledge



Emirates Steel Arkan has joined the UAE Climate-Responsible Companies Pledge, an initiative by the Ministry of Climate Change and the Environment, which aims to drive the engagement of the private sector in advancing national decarbonisation efforts to support the UAE Net Zero 2050 Strategic Initiative.

In 2022, our CEO signed the pledge which forms the basis of future collaboration between the private sector, NGOs and international organisations, in association with strategic partner, the World Wildlife Fund (WWF).

21 companies from key sectors joined the pledge including Emirates Steel Arkan and this pledge supports the Ministry's efforts to scale up the UAE's climate action in line with the Glasgow Climate Pact, an outcome of the COP26 climate conference, which requires countries to adopt higher GHG emission reduction targets.



### Other Air Emissions

We monitor emissions from our plants to ensure compliance with permissible limits through the online Continuous Emission Monitoring System (CEMS) and regular stack sampling. Our aim is to reduce the number of real emission exceedance CEMS by 20% compared to the baseline. Thus, we developed an emission log sheet to track exceedances, action closure and to conduct trend analysis.

### Other Air Emissions in Steel Businesses

Description	Unit	2022
Particulate Matter (PM)	tonnes	173
Sulfur Oxides (SOx)	tonnes	533
Nitrogen Oxides (NOx)	tonnes	1,075
Carbon Monoxide (CO)	tonnes	1,497



## Energy and Emissions continued

### Pollution Prevention

We promote a clean, healthy, and safe working environment through our fume treatment plants that remove dust and particles from emissions generated by our operations and facilities. We ensure continuous water spraying to suppress the dust and enhance the surrounding air quality. Additionally, at our cement factory, we have chutes installed in high rise building for the purpose of cleaning and getting less fugitive dust and ultimately achieving ease of transportation of the waste to be reused in the process again. We also conduct frequent maintenance for baghouse filters, and we have replacement of bag filter plans in place.

We store wastewater in septic tanks that is frequently collected and approved by Environment Service Provider (ESP). We continuously analyse our emissions and wastewater and measure the noise levels to ensure our compliance with local environmental laws and regulations.

We conduct quarterly monitoring plans as per the OEMP and the report is submitted to EAD for their review and approval. The monitoring plan covers the following:

Ambient air
Stack emissions (stationary sources)
Workplace air quality
Ambient noise
Groundwater
Ambient marine water
Marine sediment intake
Wastewater discharge
Recycled water for irrigation
Sludge

We continue to conduct regular inspections where in 2022, we were able to conduct 44 inspections, exceeding the annual target of 36 planned inspections. We also prepared an Aspect and Impact Register for all activities across the Steel Businesses and an action plan is prepared every year and communicated with all area owners to ensure the registers are up to date.

As part of our commitment to prevent pollution, we utilised clean energy, and we partnered with ADNOC in which CO2 was captured from our DRP plants by its Al Reyadah facilities. We also regularly monitor, at Abu Dhabi Cement Factory (ACF), our stack emissions which include GHG data. The EHS Department is responsible for collecting and analysing this data, checking the variances or abnormality, and discussing the data with the process team to enhance process mitigation control.

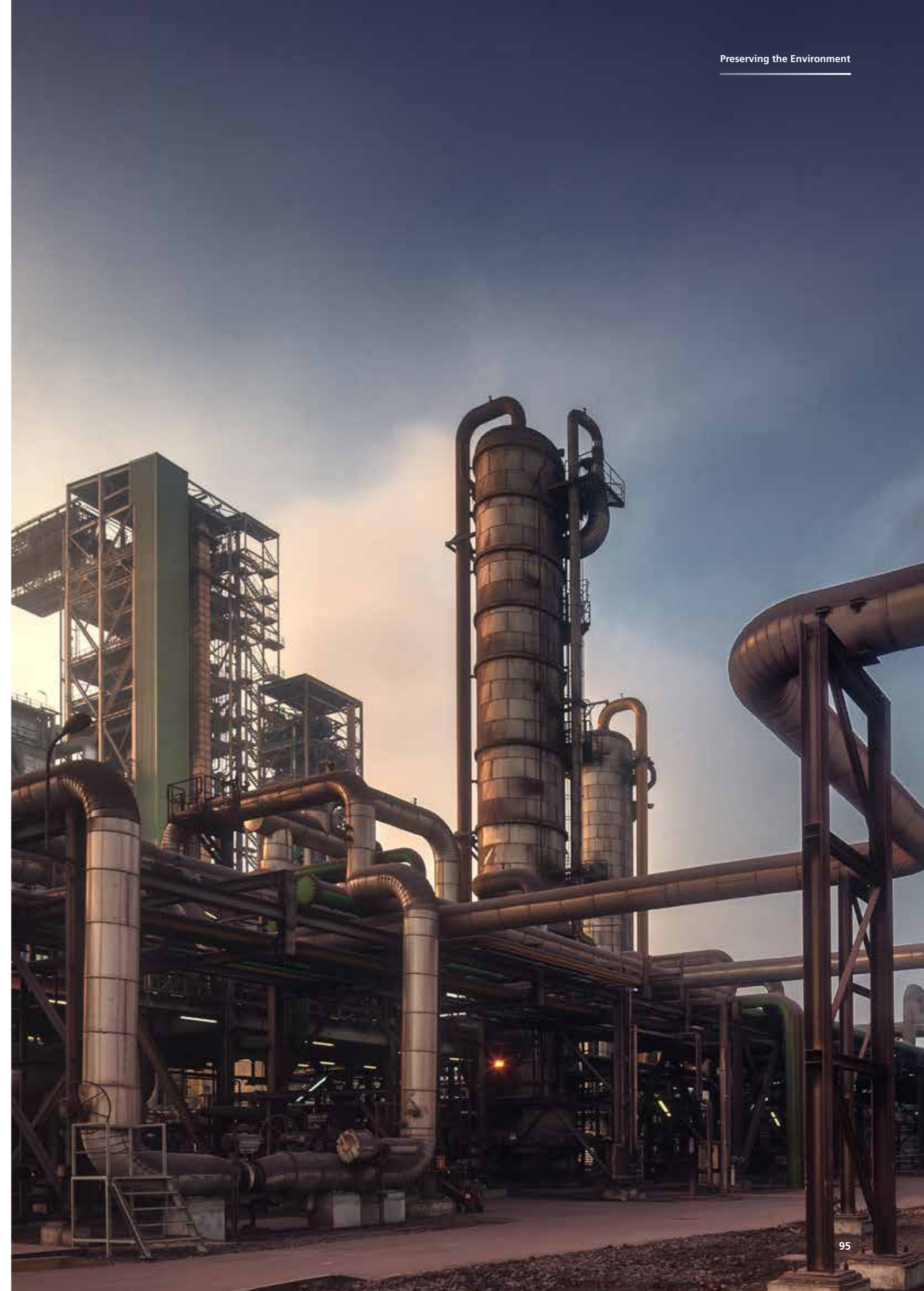
### Transport Impacts

We are committed to monitoring and reducing the environmental impacts of transport at Emirates Steel Arkan. Thus, we continuously assess and evaluate our transport impacts using the EIA and the OEMP. We also launched Project Falcon which is an initiative addressing inefficient truck flow, long waiting time, and congestion in order to optimise and manage the transport. This initiative helped us reduce the vehicle emissions, ambient noise, near-misses, and incidents as well as complaints from our customers.

Moreover, we regularly monitor our transport and logistics activities through selected supply chain management KPIs in order to reduce costs and environmental impacts. We are also in the process of developing our Ariba SAP functionality and a new long-term strategy for land transportation to minimise our transport impacts and achieve the best possible options, including shipment in bulk options and dealing with sustainability by adopting companies such as Maersk.

As part of our environmental commitments, we tested the usage of electric cars instead of petrol cars to visit our plants; thus, providing an opportunity to reduce our carbon footprint and ultimately prevent pollution and protect our environment.

We estimate our employee transport patterns, per bus and for employees that use their own cars, to record and assess these transport impacts. We also record business travels as per employees travel requests on SANAD (our HC digital transformation project) to ultimately record and assess our transport impacts.



# Waste and By-product Management and Reduction

**We are a production facility which generates waste and by-product from our various operations, mainly from our Steel activities. We are aware that lack of proper management of this waste might lead to waste-related impacts.**

We aim to reduce and manage waste generated as well as achieve our respective targets for waste management and reduction across our large-scale industrial operations and facilities. We are also aware of the significant amounts of by-product waste that we have to reduce and manage at our Steel Businesses. Thus, we tackle this matter as a priority at Emirates Steel Arkan by incorporating waste management and reduction as a key component in our IMS Policy.

In line with our recently developed sustainability implementation plan, our main objective is to focus on increasing waste recycling intensity where our target is to increase waste recycling by 5% from baseline. We also have an objective to focus on decreasing the

intensity of waste sent to landfill where our target is to reduce waste landfill by 5% from baseline.

Emirates Steel Arkan's Environmental Impact Assessment (EIA) and Operation Environmental Management Plan details the assessment of our waste. The by-product and Waste Management Procedure describes the different waste streams in Emirates Steel Arkan and how it is managed and monitored. We have implemented numerous improvement opportunities to maximise the reuse and recycling of by-products and wastes internally and externally. We also follow a waste management plan for each department, section, and the main contractor where the plan includes the waste specification, source of

generation, classification, methodology and the annual quantity generated. Additionally, we have an Online Sourcing Platform, a paperless system, and we have electronic invoicing which can be uploaded to the platform to reduce paper consumption and ultimately reduce the paper waste generated across our facilities and operations.

Keeping in mind that steel is unique with its tremendous capacity to be recycled without losing its valuable properties and performance, we have made significant investments in research and development to integrate circularity in our value chain and ultimately reduce our waste generation.

Part of our due diligence in this context of waste management and reduction is to maintain complete oversight of our waste in both hazardous and non-hazardous categories. The hazardous category includes chemical, electronic, and medical waste whereas the non-hazardous category includes

wooden pallets, non-ferrous materials, and other organic waste.

Additionally, we implement spill prevention and clean-up control measures for minor spill incidents, and we dispose of materials or surfaces as hazardous waste in the occurrence of oil-contamination incidents. Across our Anabeeb Businesses, we provided automatic diesel fuel pump nozzles to prevent occurrences of spillage while filling the forklift.

We also have a contract with environmental service providers that are approved by local authorities to collect, transport, treat, and dispose of our hazardous and controlled waste that we manage to store in secured areas with proper labelling and containment and in line with the legal requirements.

In the Steel Businesses, as a result of applying our management approaches and recycling schemes for our waste and by-product, we achieved the highest material efficiency rate ever of

99.63% ahead of the global average benchmark set by the World Steel Association (97.34%) and ranked in the top 15% steel performers in material efficiency KPI (% of solid materials converted to products and co-products).

The waste generated by our steel operations and facilities increased by 11% in 2022 compared to 2021 due to an increase in production. In 2020 and 2021 we had a housekeeping campaign to clean the sites at our Cement Businesses where most of the waste was removed in these two years, hence, causing a 99.7% decrease in our waste in 2022 in comparison to the past year. We were also able to decrease our waste generated at our Blocks Businesses by 77.5% in comparison to 2021, in addition to a slight decrease of around 4% in the waste generated at our Anabeeb operations and facilities.



## Waste and By-product in Steel Businesses

Description	Unit	2020	2021	2022
Total weight of waste generated	tonnes	20,833	26,445	29,381
Total weight of by-product generated	tonnes	632,193	627,160	734,354
Waste and by-product intensity	tonne per tonne of steel produced	0.24	0.22	0.24

## Hazardous Waste by Categories in Steel Businesses

Description	Unit	2020	2021	2022
Chemical	tonnes	2,311	1,987	2,562
Electronic	tonnes	3	7	92
Medical	tonnes	0.22	0.21	0.19

## Waste and By-product Management and Reduction continued

### Non-Hazardous Waste and By-product by Categories in Steel Businesses

Description	Unit	2020	2021	2022
Paper, cardboard, and bottles*	tonnes	33	66	66
Wooden pallets	tonnes	1,893	901	902
General industrial waste	tonnes	40	1,884	1,996
Metal, shredder waste (Non-ferrous metals) **	tonnes	3,975	896	216
Refractory waste	tonnes	12,179	10,035	17,865
Empty ferro-alloy bags	tonnes	6	272	242
Food, wood, and garden waste	tonnes	394	383	441
Uncontaminated sand and soil	tonnes	N/A	10,014	4,999
By-product	tonnes	632,193	627,160	734,354

\* In 2020, total weight of paper, cardboard, and bottles includes only facility waste, whereas, in 2021 and 2022, total weight of paper, cardboard, and bottles includes both facility and operational waste. The paper, cardboard, and bottles collection from the operation area started in 2021, as a potential customer was identified, hence, the paper and cardboard were segregated from the general waste.

\*\* In 2022, there was no production from the shredder plant because we didn't buy from the scrap from local market that previously had quantities of non-ferrous metals.

### Waste in Cement Unit

Description	Unit	2020	2021	2022
Total weight of hazardous waste (radioactive)	tonnes	1.71	0	0
<b>Non-hazardous waste by type</b>				
Construction and Demolition	tonnes	2,628.81	887.21	8.82
Food	tonnes	18.13	56.52	18.83
Wood	tonnes	124.33	0	61.94
Inert	tonnes	95.73	107.89	199.32
Cardboard	tonnes	9.59	0	0
Paper	tonnes	2.40	0	0

### Waste in Blocks Unit

Description	Unit	2020	2021	2022
Total weight of non-hazardous waste generated*	tonnes	4,899	1,328	3,681

\*A significant decrease in the total weight of non-hazardous waste generated is observed depending on the year-by-year operations, especially when we have stopped using the crusher plant.

### Non-hazardous Waste in Anabeeb Businesses

Description	Unit	2020	2021	2022
Recyclables	tonnes	33	52	26
Non-recyclables/ putrescibles	tonnes	1,382	1,081	1,063

### Waste Management

We report our waste quantities that are monitored and documented through the Abu Dhabi Centre of Waste Management (CWM) Tadweer and SAP systems. We also manage our waste through approved CWM Registered Service Providers and reuse activated carbon. Additionally, we recycle our waste categories of wood, plastic, paper, aluminium, and used oil waste at treatment facilities. These categories are under a waste recycling programme where we have engaged service providers registered with the Abu Dhabi CWM.

In our Anabeeb Businesses, we have taken several measures to prevent significant waste related impacts. We crush PVC pipes to reuse again as raw materials for production process and the GRP pipes are cut into small pieces to later be disposed to landfill by a third party service provider.

### Non-hazardous Waste Disposal in Steel Unit

Disposal of non-hazardous waste	Unit	2020	2021	2022
Sold*	tonnes	14,078	11,208	19,010
Landfilled	tonnes	4,408	13,177	7,651
Recycled	tonnes	32.99	65.67	66.49

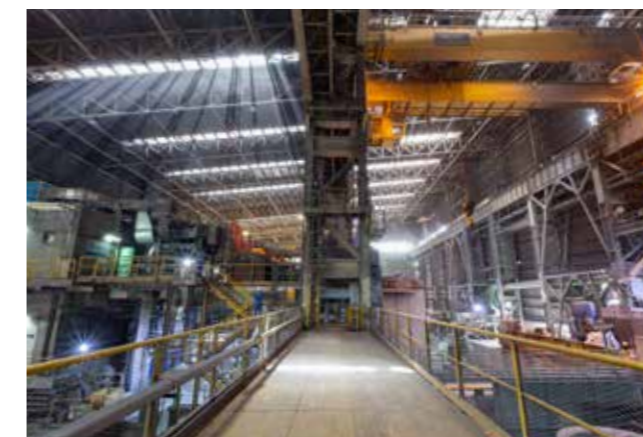
\*Sold waste is the waste that we sell to a third party or interested buyers. This waste can be recycled or reused after repair.

### Hazardous Waste Disposal in Steel Unit

Disposal of hazardous waste	Unit	2020	2021	2022
Sold	tonnes	1,438	1,519	2,234
Reused	tonnes	64	20	40
Incinerated	tonnes	751	395	174
Landfilled	tonnes	58	53	114

### E-waste Disposal in Steel Businesses

Disposal of e-waste	Unit	2020	2021	2022
Sold	tonnes	1	0.02	0.14
Reused	tonnes	2	7	92



## Waste and By-product Management and Reduction continued

### Non-hazardous Waste Disposal in Cement Businesses

Disposal of hazardous waste	Unit	2020	2021	2022
Landfilled	tonnes	2,352.22	363	289.63

### Hazardous Waste (Radioactive) Disposal in Cement Businesses

Disposal of hazardous waste	Unit	2020	2021	2022
Landfilled	tonnes	1.71	-	-

### Non-hazardous Waste Disposal in Blocks Businesses

Disposal of non-hazardous waste	Unit	2020	2021	2022
Landfilled	tonnes	4,899	1,328	3,681

### Non-hazardous Waste Disposal in Anabeeb Businesses

Disposal of non-hazardous waste	Unit	2020	2021	2022
Landfilled	tonnes	1,382	1,081	1,063

### Waste Sorting

We aim to segregate different waste categories and increase our recycling efficiency. Thus, we have recyclable waste stations and bins around the plants and offices of Emirates Steel Arkan. We utilise colour coded waste collection baskets at the generation area to help sort waste at its point of origin. Additionally, we have established designated stock yards to temporarily store by-product and waste materials onsite. We also aim to minimise our packaging waste by supplying some of the raw material needed for our production process by bulk instead of using bags.

Emirates Steel Arkan has a waste management system that clearly defines, segregates and manages waste and by-product categories. Each department, section and contractor working with Emirates Steel Arkan strictly follows a waste management plan that systematically classifies the type of waste generated and tracks annual amounts generated. Our waste management plan includes:

- Waste minimisation measures such as reusing packaging materials and double-sided printing.
- Waste classification and segregation.
- Provision of appropriate waste collection and storage facilities onsite.
- Use of service providers approved by the Centre of Waste Management Abu Dhabi for the collection, transport, treatment, and disposal of waste.
- Disposal of waste at licensed facilities.
- Sell potential waste and by-product.
- Maintenance of waste inventories, records, and documentation including waste manifests, delivery and transfer notes, and certificates of treatment and disposal among others.

### Case Study:

## Waste Management at Blocks Facilities



**First Case:** During our environmental inspections, excess accumulation of damaged/waste electrical cables were noticed near the mortar factory. This unsafe condition may lead to major fire incidents if any source of ignition encounters the accumulated combustible waste. Thus, it was agreed that all waste material shall be disposed periodically to avoid waste accumulation and eliminate any potential fire incidents.



**Second Case:** Mixed scrap material and damaged electrical accessories were found accumulated near the workshop area during our inspection. This unsafe condition poses the risk of fire incidents and contributes to a poor standard of housekeeping in the operational area. Thus, it was agreed that scrap materials shall be disposed of in a timely manner from the operational areas to maintain good housekeeping and avoid any unforeseen incidents.



As part of our awareness initiatives, we promote a culture of environmental awareness among our employees, and we encourage best practice through knowledge sharing sessions and posters. We also participate in environmental events that emphasise environmental preservation as an integral element of our company portfolio. For instance, we marked Earth Day this year by launching an internal paper recycling campaign in collaboration with Abu Dhabi Waste Management Centre, Tadweer. The campaign was launched for a week to encourage employees to reuse paper and reduce waste.

## Waste and By-product Management and Reduction continued

### By-products

We aim to achieve optimal environmental efficiency across our operations and facilities. As such, we adopt innovation across our various activities and plants and continuously seek new synergies to advance our sustainability efforts to ultimately develop new systems and technologies for this purpose.

Through a Metal Recovery Slag Processing plant, one of our major collaborations include recovering metallic content from the industrial by-product “slag” to be used as scrap metal feed and processing “slag” aggregates to sell for different construction and development industries and projects. We also utilise different improvement opportunities to maximise the reuse and recycling of by-products, both internally and externally.

Additionally, we aim to minimise our by-product dust and attempt to recover it, as applicable, by installing a DRP bag (De-Dusting unit) that controls dust generated during steel processing. We also aim to improve the reuse of steel mill by-products as part of the Emirates Steel Arkan’s Green Initiative, allowing us to create briquettes from our dust waste and reuse them in our electric arc furnace.

Emirates Steel Arkan’s recycling project serves the purpose of achieving environmentally friendly operations, adding economic value, and increasing feedstock flexibility. Our 3,000 HP Steel Scrap Shredding facility that feeds Electric Arc Furnaces of Steel Making Plants (SMPs) serves our purpose of reducing operating costs and increasing feedstock flexibility and ultimately playing a major role in recycling steel scrap generated in the UAE.

We have also succeeded in obtaining an efficient by-product recovery as 98% of the raw material used in steel plants is converted to steel products and by-products. The dust from the setting chamber is the only element disposed of to a landfill site. At our cement factory, we also control the by-product generated to 100% reuse it in the process.

### By-product Disposal in Steel Businesses

Disposal of by-products	Unit	2020	2021	2022
Landfilled	tonnes	8,888	7,257	9,463
Recycled	tonnes	18,306	17,737	19,963
Sold	tonnes	604,999	602,167	704,928



# Materials

**We are committed to protect our natural resources and use them responsibly to ultimately reduce our environmental impact caused by our operations and facilities. We are aware that lack of proper management of resources and our raw materials might lead to drastic impacts on these resources.**

In 2022, Cement Businesses made a commitment to use by-product generated from other industries as alternative raw materials in clinker production. For example, the Fume Treatment Plant (FTP) dust generated from our steel industries is being used in the Cement Businesses as an additive.

Additionally, we are committed to increasing the use of cementitious materials in cement production, i.e., blast furnace slag and fine limestone. In the coming year, we aim to introduce more ecological products to the market, and we will work on finding more sustainable raw material resources.

Our Steel Businesses hold BRE BES 6001 Issue 3.1 responsible sourcing certification from CARES. The BRE standard BES 6001 has been published for construction product manufacturers to ensure and then prove that their products have been made with materials that have been responsibly sourced.



## Materials Used in Steel Businesses

Description	Unit	2020	2021	2022
<b>Total weight of materials used to produce and package primary products and services</b>	tonnes	4,625,238	5,660,032	5,427,859
<b>Breakdown by Type</b>				
<b>Non-renewable materials used</b>				
Iron oxide pellets	tonnes	5,136,836	4,142,071	5,165,664
Silicon carbide (Sic)	tonnes	-	-	444
Cement	tonnes	16,346	7,420	16,998
Silicon-manganese	tonnes	27,342	23,319	29,406
Ferro - manganese (low carbon)	tonnes	250	621	400
Ferro - manganese (high carbon)	tonnes	10,382	7,296	3,594
Graphite Electrode	tonnes	6,181	6,630	5,174
Recarburiser (ladle furnace)	tonnes	2,736	2,689	2,110
Calcined lime (EAF)	tonnes	114,525	77,912	94,636
Refractory	tonnes	30,217	22,465	30,200
Dolo lime	tonnes	93,148	38,356	73,158
Carbon injection (EAF)	tonnes	46,415	39,708	39,607
Lump carbon	tonnes	9,364	6,632	5,838
Ferro - chrome	tonnes	-	-	617
Ferro - vanadium	tonnes	250	451	260
Ferro - silicon	tonnes	6,055	4,513	3,200
<b>Recycled materials used</b>				
Scrap	tonnes	245,155	188,726	276,151

## Materials Used in Cement Businesses

Description	Unit	2020	2021	2022
<b>Total weight of non-renewable materials used to produce and package primary products and services</b>	tonnes	4,622,544	4,717,500	5,563,523
<b>Breakdown by Type</b>				
Limestone	tonnes	3,414,369	3,550,423	4,245,960
Red shale	tonnes	736,102	778,438	964,018
Iron ore	tonnes	110,620	103,826	112,807
Gypsum	tonnes	126,217	99,731	91,019
Sand	tonnes	234,422	183,453	148,130
Calcium sulphate (synthetic gypsum)	tonnes	814	1,629	1,589

## Materials continued

### Recycled Input Materials Used in Cement Businesses

Description	Unit	2020	2021	2022
Total weight of recycled input materials used (spilled cement from the process)	tonnes	41,953	114,492	113,216
Percentage of recycled input materials used to manufacture the organisation's primary products and services	%	1.04	2.74	2.23

### Materials Used in Blocks Businesses

Description	Unit	2022
Total weight of non-renewable materials used to produce and package primary products and services	tonnes	1,370,193
<b>Breakdown by materials used</b>		
Cement	tonnes	146,523
Limestone aggregate	tonnes	752,849
Gabro aggregate	tonnes	104,143
Recycled aggregate (concrete)	tonnes	224,220
Steel slag aggregate	tonnes	105,688
White cement	tonnes	894
Dunes sand	tonnes	35,876

### Materials Used in GRP Businesses

Description	Unit	2020	2021	2022
Total weight of non-renewable materials used to produce and package primary products and services	tonnes	11,394	8,775	7,053
<b>Breakdown by materials used</b>				
Chop roving and winding	tonnes	1,441	951	835
Filled resin	tonnes	550	572	392
Liner resin	tonnes	490	263	296
Vinyl Ester resin	tonnes	112	105	36
Body resin	tonnes	2,503	1,606	1,423
Silica sand	tonnes	5,129	4,127	3,317
Calcium carbonate	tonnes	1,002	1,035	646
Catalyst	tonnes	75	50	42
Cobalt	tonnes	44	32	29
Acetone	tonnes	40	30	30
Inhibitor	tonnes	0.36	0.36	0.36
Pigment	tonnes	7	3	6
Desmador	tonnes	0.4	0.25	0.4

### Materials Used in Bags Businesses

Description	Unit	2020	2021	2022
Total weight of materials used to produce and package primary products and services	tonnes	4,696	4,260	4,097
<b>Breakdown by type</b>				
<b>Non-renewable materials used</b>				
Ink	tonnes	36.44	34.6	36.42
Low-density polyethylene	tonnes	101.75	108.38	90.00
Linear low-density polyethylene	tonnes	46.75	52.25	42.63
Starch glue	tonnes	64.5	61.5	51.75
<b>Recycled materials used</b>				
Kraft paper	tonnes	4,447	4,003	3,876

### Materials Used in Anabeeb Businesses

Description	Unit	2020	2021	2022
Total weight of non-renewable materials used to produce and package primary products and services	tonnes	19,612	11,096	12,553
<b>Breakdown by materials used</b>				
PVC resin	tonnes	16,212	8,411	8,962
Calcium carbonate	tonnes	2,745	2,290	3,112
Stabiliser	tonnes	490	294	346
Low-density polyethylene	tonnes	85	48	85
Polypropylene random	tonnes	57	33	4
Additives	tonnes	13	12	36
Pigment	tonnes	3	1	1
Glycol PEG400	tonnes	1	1	2
Domino printing inks	tonnes	6	6	5



# Water and Effluents

**Emirates Steel Arkan operates in a water scarce region which makes it a priority to tackle water sustainability and management in our QEHSS strategy. We also have strict processes in place, and we follow water management methods in line with the EAD requirements to achieve reduction in water consumption across our operations.**

We have invested in our own water treatment infrastructure at Emirates Steel Arkan to ensure that water is recycled back into our value chain. Effluent treated by the RO plants is used in Cooling Systems for the DRP, Steel Melt Plant and Rolling Mill (RM) plants, ancillary building services, demineralised water for steam generation, firefighting and potable water for the complex. Sea water is treated by the RO plants as well prior to its usage in our operations. Water treatment plants (WTPs) are also available onsite for treating coolant water from the contact and non-contact cooling circuits in the DRP's, SMP's and RM's.

Moreover, we continuously assess our water impact and evaluate our social and natural effect on the environment starting from the project conception stage to completion. We use various assessment methodologies including Environmental Permit Application (EPA), EIA, OEMP and Construction Environmental Management Plan (CEMP). External auditors conduct OEMP audits four times annually to ensure that we comply with OEMP requirements and the EAD monitors and reviews on a quarterly basis these OMEP audit reports.

Additionally, the environmental team conducts quarterly monitoring for the water discharge and the utility team conducts monthly and daily monitoring

for this water discharge. A third party is responsible for sampling and analysing the water and these results are later compared to the regulatory limits.

Our Irrigation Water Conservation Initiative in place uses 100% of our recycled water for irrigation purposes. This is achieved through our Water Purification unit, the RO plant. This system controls water consumption from irrigation and utilises water metering to control monthly irrigation water consumption.

## Water Consumption

Emirates Steel Arkan follows specific water consumption as per our policy. We also conduct water consumption awareness, and we have irrigation water conservation initiatives including:

- Operation and maintenance agreement to control irrigation water consumption.
- Dedicated irrigation water meter to understand the monthly consumption.
- Studies on the possibility to recycle and reuse sewage and storm water for irrigation purposes.

We also implemented a new design of the Water Spray System at our cement factory which resulted in the reduction of water consumption from 5.6 m3/h to approximately 2.6 m3/h.

In 2022, our water consumption increased due to the increase in production at our steel facilities. Additionally, our total volume of seawater withdrawn is greater than the seawater discharged by 36% as this seawater is not only used in the process, but it is also used in the dilution for our RO unit brine discharge.

## Case Study:

# Water Consumption at Anabeeb Businesses



At our Anabeeb Businesses, the water used is fresh water withdrawn from a third party (ADDC Municipality Water Supply) and the overall consumption is for domestic use, irrigation, and a little portion is used for the closed loop circulation for the production process.

We conducted an awareness training for our operations team to use water-efficient strategies and avoid running the equipment when not in use for production. We also conducted a routine inspection of the facility to ensure absence of leakages in pipes and hoses which might cause water loss. Moreover, we inspected our water systems to ensure absence of stagnation which causes bacteria growth in addition to using internal record assessments for our annual water consumption to ultimately set a target for water consumption reduction.





## Water and Effluents continued

### Water Withdrawal by Type of Water in Steel Businesses

Description	Unit	2020	2021	2022
Third party water (Municipal water supplies or other public or private water utilities)	m3	623,307	827,040	898,119
Seawater	m3	43,690,699	44,155,238	44,341,836

### Water Discharge by Type of Water in Steel Businesses

Description	Unit	2020	2021	2022
Third party water	m3	32,257	42,680	66,348
Seawater	m3	31,505,989	28,750,911	32,585,718

### Water Use Intensity for Production in Steel Businesses

Description	Unit	2020	2021	2022
Total volume of water consumed including surface water from wetlands, rivers, lakes, sea, and oceans, ground water, rainwater collected, and municipal water supplies*	m3	12,775,760	16,188,687	12,587,889
Water use intensity	m3 per tonne of steel	4.69	5.36	3.92

\*The data in 2019, 2020 and 2021 has been updated in this report because the values were aligned with the utility report/meters. Previously, it was calculated from finance available invoices.

### Water in Cement Businesses

Description	Unit	2020	2021	2022
Total volume of water withdrawn (domestic use: third party water – municipal water supplies or other public or private water utilities)	m3	68,225	84,000	78,383
Total volume of water discharge (third party water)	m3	2,000	3,000	2,400

### Water in Blocks Businesses

Description	Unit	2020	2021	2022
Total volume of water withdrawn (third party water)	m3	68,225	84,000	78,383
Total volume of water discharge	m3	2,000	3,000	2,400
Total water consumption from all areas	m3	66,225	81,000	75,983

### Water in Anabeeb Businesses

Description	Unit	2020	2021	2022
Total volume of water withdrawn (third party water)	m3	46,547	58,020	44,655
Total water consumption from all areas	m3	46,547	58,020	44,655



# Biodiversity and Ecotoxicity

**Emirates Steel Arkan is committed to reduce ecotoxicity which might be caused by its activities and to improve local biodiversity and ecosystems. We assess and evaluate our environmental impact through local biodiversity and ecological assessment as part of the EIA. We also follow our OEMP that includes measures to monitor and mitigate the impacts of our activities on the environment and the surrounding ecology.**

The EIA also includes an assessment of potential biological, chemical or physical stressors from our operations and other activities that could affect the surrounding ecosystems. Although this assessment indicated that our operations do not have any significant impact on the ecotoxicity of the surrounding areas and biodiversity, we still implement mitigation measures and conduct regular monitoring to avoid negative impacts on the ecotoxicity of the surrounding areas.

Additionally, the EIA includes an assessment of the area indicating absence of legally designated sites, sites of special scientific interest or other protected and natural heritage sites close to our operations.

Although Emirates Steel Arkan is located inside an industrial area where there are no known sightings of endangered species in the area, we still aim to protect and reduce our impact on the terrestrial fauna in the surrounding areas by directing the lighting facilities away from surrounding areas.

As part of our efforts to increase our greenery and planting, our Steel Businesses were able to increase their plantation by 10% in 2022 in comparison to 2021. By 2022, we had planted 11,489 trees in comparison to 10,389 trees by 2021. As a result, we were able to achieve 115 tonnes of CO2 offset.



## Case Study:

# Clean-up Campaign



As part of our efforts to continuously lead by example towards maintaining our environmental obligations and ensuring a sustainable future, Emirates Steel Arkan launched an environmental clean-up campaign where more than ten volunteers participated in a clean-up across both Abu Dhabi and Al Ain.



# Commitment to Environmental Compliance

**Emirates Steel Arkan is committed to meeting the highest standards of environmental compliance beginning with our ISO 14001 certification in environmental management systems across all our sites and offices. We continue to improve our environmental management system to enhance our environmental performance.**

Across our Anabeeb Businesses, we conduct an annual environmental monitoring report by an approved EAD third party consultant to measure and monitor indoor air quality, dust and particulate matters, and noise level in compliance with legal requirements. We assess pollutant resources and provide control equipment to control pollution in compliance with legal requirements.

In line with our recently developed sustainability implementation plan, our main objective is to focus on reducing the total number of environmental incidents or complaints by third parties where our target is to maintain the baseline of zero incidents and

complaints. We also aim to close-out all environmental actions within the target date and conduct environmental inspections and compliance assurance according to regulatory requirements.

Our objective in line with the sustainability implementation plan is to conduct environmental trainings for 40% of the targeted audience. We provide environmental training on the topics of Environmental Aspect and Impact Methodology, Environmental Permit Conditions Awareness as well as Environmental Pollution and Waste Management.

Our target was achieved in 2022, where 2,300 employees attended these trainings. We also developed a waste management training during this year in Hindi and Urdu with attendance of 350 employees.



We comply with all national and international laws and regulations that impact environmental management in our Businesses. As part of our environmental assurance journey, we were vetted and evaluated by the EAD before being issued an Environmental Permit for our business operations. Additionally, we monitor and report on our environmental performance on a monthly basis across our facilities and operations.

As approved by EAD, the OEMP monitors specific environmental aspects such as air emissions, wastewater discharge, noise pollutants and waste to ensure compliance with environmental limits and requirements

set under the monitoring procedure. We pride ourselves on our spotless record at Emirates Steel Arkan as we have never been fined nor sanctioned for being non-compliant with environmental laws and regulations. We also had zero incidents of major spills recorded across our operations and facilities.

In the coming year, we aim to develop a computer-based training for pollution prevention and waste management. We also aim to introduce the Environmental Hazard Reporting KPI to all our operational units to enhance the environmental compliance assurance across our Businesses and facilities.



## Case Study:

# Eco-friendly Bags Distribution



In line with Abu Dhabi's integrated Single-Use Plastic Policy that prevents the sale of single-use plastic bags across all retailers, which came into effect on 1 June, 2022, Emirates Steel Arkan began distributing reusable shopping bags to all its employees in support of the Emirate's sustainable initiative.

In 2022, we supplied more than 2,000 reusable bags to all our employees across all Businesses.



# Caring for People



## 05

### In this section:

- Management Approach
- Employment and Fair Compensation
- Learning and Development
- Emiratisation
- Occupational Health and Safety
- Emergency Preparedness
- Local Communities



# Management Approach

**At Emirates Steel Arkan, our workforce is our greatest return on investment. We frame our long-term value through convening our workforces' progressive ideation, diverse experiences and tailored core competencies. Our success is attributed to our rich human capital, and we remain devoted to our workforce's development to tap into their growth.**

Our operations adhere to stringent protocols covered in our Employee Handbook. The handbook provides a summary of policies pertaining to Human Capital and encompasses topics such as: employment, employee administration, attendance and leave, working hours, compensation and benefits policy, engagement, employee career development, reward and recognition, personal appearance and dress code, business conduct, office allocation guidelines, environmental, health and safety (ESH) principles, Covid-19 transmission and protective measures, life saving rules, entitlement of PPE and useful contacts and information. The

handbook is accessible to all employees via Emirates Steel Arkan's intranet and will be updated to include our new unified Human Capital Policy, which will be disseminated across the Group in the first quarter of 2023.

Employee concerns are at the forefront of our culture, and we bring our people together to foster better engagement and interaction. We conduct bi-annual employee engagement surveys and direct their insights into concrete actions. Emirates Steel Arkan motivates all employees to pitch their ideas by creating a supportive space for pitches to happen.

We follow stringent standards and protocols to govern our relationships and daily operations as set out in our Code of Ethics Policy and Employee Handbook. We nurture a workplace with strong business ethics and safeguard employee rights set out by the UAE Labour Law and Ministry of Labour Requirements. All our employees are required to review and comply with our Code of Ethics Policy.

The following chapter highlights our efforts to support our people in 2022 and emphasises our performance on material topics including: employment and fair compensation, learning and development, Emiratisation, diversity and equal opportunity, occupational health and safety, emergency preparedness, and local communities. These topics have been identified as significant for Emirates Steel Arkan and its stakeholders. The material topics

have been aligned with the GRI Standards and have been broadly correlated to the UN SDGs, the Cares SCS scheme and ADX requirements to demonstrate our contribution to sustainable development locally and globally.



Our success story is largely attributed to our rich human capital; the workspace we have created ingrains tailored progression opportunities and collaborative engagement with our employees.”

**Jasem Mohamed Al Khateri**  
Chief Human Capital Officer



Material Topic	GRI Standard	UN SDGs	CARES SCS
Employment and Fair Compensation	GRI 401 (2016)	8 DECENT WORK AND ECONOMIC GROWTH, 10 REDUCED INEQUALITIES	5.1, 5.2, 4.1
Learning and Development	GRI 404 (2016)	4 QUALITY EDUCATION, 8 DECENT WORK AND ECONOMIC GROWTH	4.3, 4.5
Emiratisation (Nationalisation)	GRI 413 (2016)	8 DECENT WORK AND ECONOMIC GROWTH	5.2
Diversity and Equal Opportunity	GRI 405 (2016)	5 GENDER EQUALITY	4.1
Occupational Health and Safety	GRI 403 (2018)	8 DECENT WORK AND ECONOMIC GROWTH	4.2
Emergency Preparedness	-	8 DECENT WORK AND ECONOMIC GROWTH	4.2
Local Communities	GRI 413 (2016)	8 DECENT WORK AND ECONOMIC GROWTH	4.4

# Employment and Fair Compensation

**As a leading steel hub and building materials manufacturer in the market, Emirates Steel Arkan is an employer of choice to its employees. Our Human Capital (HC) initiatives are shaped by five strategic pillars that have guided our path to unlocking improvements: People, Leadership, Emiratisation, Elevate Organisation Performance, and Deliver Operational Excellence.**

The HC function focuses on enhancing core competency through trainings, expanding opportunities, and retaining our workforce. As part of Emirates Steel Arkan's merger, we are in the process of integrating our systems including data cleansing, which has been in progress since 2022 and is set to be complete by the first quarter of 2023. As such, our HC Policy and procedures are being revised and finalised to be shared across Emirates Steel Arkan.

Human Capital data reporting is well established, and related reports are generated as needed. In 2021 we launched the latest module "Talent Acquisition" as part of our HC digital

transformation project "SANAD." SANAD fully automates all HC transactions and procedures including employee transactions, and generates various reports based on user demand.

We are looking to improve on our performance management efficiency and place a probation measurement within the Performance Management System. In addition to the Performance Management System (PMS), which supports the creation and tracking of set objectives, SANAD covers modules including Learning Management System (LMS), Development Plan (DP), Employee Central (EC), Succession Planning (SP), and Talent Acquisition

(TA). Through SANAD, we generate module reports, consolidate monthly results, and HC key performance indicators in management information reports. To track such performance metrics and their resulting data sets, we leverage creative analytics and visualisation techniques to drive actionable insights across our HC analytics functions.

At Emirates Steel Arkan we ensure compassion is ingrained in our values and well-being is at the centre of our work culture. To foster this environment of well-being for our employees, our Happiness and Engagement Committee serves as a focal point to ensure safe spaces for discussing emotional health, work-life balance, financial and stress

management, and health awareness. We formalise this in our Happiness and Well-being Committee Charter procedure. The Happiness and Engagement Committee initiates monthly programmes, engages all the employees and promotes well-being across the Group.

In reference to the MIS report that is generated on monthly basis, it covers several HC KPIs, such as:

- Number of new joiners.
- Training enrolments.
- Emiratisation.
- Employee turnover.
- Early attrition.
- Average length of service.
- Other topics.

## Recruitment

Through our initiatives and programmes, we have attracted new talent that enriches our workforce with diverse skillsets. These initiatives include continuing our Career Aspiration Programme (CAP) that was implemented in 2021 and implementing our new Customised UAE Nationals Development Programme such as Masaar. After revamping operations in 2021 in response to the Covid-19 hiring suspension, we have continued implementing our recruitment initiatives, leading to 197 new hires in 2022.



## Total Number of Employees by Gender for Steel Businesses

Total Number of Employees by Gender	2021	2022
Total number of employees	2,644	2,826
Female	125	124
Male	2,519	2,702

## Total Number of Employees by Age Group for Steel Businesses

Total Number of Employees by Age Group	2021	2022
Under 30 years old	387	352
30-50 years old	1,841	2,020
Over 50 years old	416	454

## Total Number of Employees by Category for Steel Businesses

Total Number of Employees by Category	2021	2022
Senior management	10	12
Middle management	214	236
Staff – employees	1,879	2,578

## Employment and Fair Compensation continued

### New Employee Hires by Gender for Steel Businesses

New Employee Hires by Gender	2021	2022
Female	17	10
Male	229	152

### New Employee Hires by Age Group for Steel Businesses

New Employee Hires by Age Group	2021	2022
Under 30 years old	109	98
30-50 years old	126	57
Over 50 years old	11	7

### Number of Full-time and Outsourced Employees for Steel Businesses

("Full-time" employees at Emirates Steel Arkan includes all permanent employees, "Outsourced" employees includes all part-time or temporary employees)

Employees	2022
<b>Total Number of Full-time Employees</b>	2,115
<b>By gender</b>	
Female	108
Male	2,007
<b>Total Number of Outsourced Employees</b>	711
<b>By gender</b>	
Female	16
Male	696
<b>Total Number of Full-time Employees by Category and Gender</b>	
<b>Full-time employees in senior management</b>	12
Female	-
Male	12
<b>Full-time employees in middle management</b>	630
Female	61
Male	569
<b>Full-time employees in staff (other levels)</b>	1,473
Female	47
Male	1,426

### Total Number of Employees by Gender for Building Materials Businesses

Employees	2022
Total number of employees	853
Female	32
Male	821

### Total Number of Employees by Age Group for Building Materials Businesses

Total Number of Employees by Age Group	2022
Under 30 years old	91
30-50 years old	610
Over 50 years old	152

### Total Number of Employees by Category for Building Materials Businesses

Total Number of Employees by Category	2022
Senior management	11
Middle management	73
Staff – employees	769

### New Employee hires by Gender for Building Materials Businesses

New Employee Hires by Gender	2022
Female	35
Male	-

### New Employee Hires by Age Group for Building Materials Businesses

New Employee Hires by Age Group	2022
Under 30 years old	22
30-50 years old	13
Over 50 years old	-

### Number of Full-time Employees for Building Materials Businesses

("Full-time" employees at Emirates Steel Arkan includes all permanent employees, "Outsourced" employees includes all part-time or temporary employees. There are no outsourced employees within the Building Materials Businesses)

Employees	2022
<b>Total Number of Full-time Employees</b>	853
<b>By gender</b>	
Female	32
Male	821
<b>Full-time employees in senior management</b>	8
Female	-
Male	8
<b>Full-time employees in middle management</b>	73
Female	7
Male	66
<b>Full-time employees in staff (other levels)</b>	772
Female	25
Male	747

## Employment and Fair Compensation continued

### Employee Compensation and Benefits

Our existing Wage Policy and procedure is aligned with National and Cares guidelines. Salary packages are well-benchmarked across industry and optimised based on market trends. Currently, we are collaborating with consultants to conduct a benchmarking exercise for salaries, bonuses, and incentive schemes. Our aim is to finalise and implement compensation and benefits practices across the organisation by the first quarter of 2023, following consultation with the consultants and subject to board approval. In addition to compensating employee's efforts with a return that meets their expectations, Emirates Steel Arkan values familial bonds by providing both maternal and paternal leave. In 2022, 97 female employees

and 2,666 male employees were entitled to parental leave.

Employees access diverse benefits in accordance with relevant medical, financial, or logistical responsibilities. Such benefits include medical and life insurance, company accommodation, transportation facilities, education allowances, loans, end of service, annual air ticket, and bonuses subject to management approval.

Emirates Steel Arkan instils a performance-driven culture, rewarding individuals and the Group based on performance and target achievements. We developed an incentive scheme linking individual and corporate performance with the annual bonus payment.

The transformation programme "Namaa" contributed greatly to Emirates Steel Arkan's overall achievements, leading to increased positive impacts through the total bonus payment. As a result, in 2022 the Namaa programme and its incentive scheme extended into Emirates Steel Arkan's Group business to achieve Group goals.

By working collectively as a single unit, focusing on priorities, and putting safety first, Emirates Steel Arkan realises its achievements and in turn celebrates positive results by rewarding eligible employees with performance bonuses. In 2023, we aim to activate more monetary and non-monetary rewards initiatives.

### Parental Leave Data for Steel Business\*

Description	Unit	2020	2021	2022
<b>Total number of employees that were entitled to parental leave*</b>				
Female	Number	58	71	77
Male	Number	1,646	1,963	2,066
<b>Total number of employees that took parental leave</b>				
Female	Number	2	8	4
Male	Number	59	108	110
<b>Number of employees that returned to work in the reporting period after parental leave ended</b>				
Female	Number	2	8	4
Male	Number	59	108	110

\*The parental leave data depends on the total number of employees in the business

### Parental Leave Data for Building Materials Business\*

Description	Unit	2022
<b>Total number of employees that were entitled to parental leave</b>		
Female	Number	20
Male	Number	600
<b>Total number of employees that took parental leave</b>		
Female	Number	3
Male	Number	22
<b>Number of employees that returned to work in the reporting period after parental leave ended</b>		
Female	Number	3
Male	Number	22

\*The parental leave data depends on the total number of employees in the business

### Number of Employees Leaving in the Reporting Period for Steel Businesses

(Employee turnover for Building Materials Businesses is 0 for 2022, and is therefore not reported)

Description	Unit	2020	2021	2022
Total employee turnover	Number	325	168	104
Voluntary turnover rate	%	13	20.9	19.7
Involuntary turnover rate	%	-	19.9	18.7
Workforce turnover rate	%	13	6	4

Description	Unit	2022
<b>Breakdown by Gender</b>		
Female	Number	8
Male	Number	96
<b>Breakdown by Age</b>		
Under 30 years old	Number	22
30-50 years old	Number	42
Over 50 years old	Number	40

### Compensation Ratio for Steel Businesses

Description	Unit	2022
CEO total compensation to median Full-Time Equivalent (FTE) total compensation	Ratio	15.79*

\*These metrics are reported in regulatory filings

### CEO Compensation Ratio for Building Materials Businesses

Description	Unit	2022
CEO total compensation to median Full-Time Equivalent (FTE) total compensation	Ratio	55





## Employment and Fair Compensation continued

### Case Study:

# Employee Compensation – Namaa Incentive Scheme



In 2022, we awarded our first line of the Namaa Incentive Scheme as part of our continuous success in rewarding our hardworking colleagues contributing to the Company's Namaa Project. We awarded several staff members for both completed and ongoing project contributions that play an integral role in providing Emirates Steel Arkan with a tremendous advantage in our cost reduction initiatives.

#### Manufacturing



Enhanced the Production Plant by reducing the carbon content to around 2.2%.

We are increasing HSM Yield improvement by 15% by progressing the roll-pass design within the breakdown mill.

#### Marketing and Sales



Introduced ESZ36 sheet pile to our existing portfolio.

#### Procurement



Developed a new cost model for procuring ferro alloy materials which are essential to the production of our premium billets.

#### S&OP

Reduced alloying cost during the production planning stage.

#### Maintenance

Installed additional flow meters to all water-cooling circuits at SMP2.



# Learning and Development

**We are invested in carving our employee development plans to cater for employee career progression and to increase our staff's technical competency. Through providing access to online learning platforms like Coursera, we have been able to increase training access and convenience. This resulted in 400 employees trained via Coursera in 2022, compared with approximately 300 employees in 2021. Additionally, we plan on activating the LinkedIn eLearning platform in 2023.**

We also hosted micro-learning sessions across the organisation. This is an educational technique designed to deliver the necessary information in a short amount of time with the most effective means possible.

In 2022, we developed a new innovative learning model we call the "Learning Ladder." This learning model caters to all employees at different levels. Learning is offered through various means, including instructor-led, blended, online, and lectures by SMEs. Each category is identified based on the job level. Accordingly, the learning ladders are divided into three categories: leadership, middle

management, and employees, where each category's learning demands are fulfilled through a different set of programmes. The main aim of this Learning Ladder model is to empower employees for career progression, enhance employee performance, allow smarter work solutions, attain professional certificates, and accelerate personal development. The model blends conceptual learning experiences using the Coursera platform with highly ranked selected business schools (Harvard, London, and IMD).

Our "Coaching Programme – The Leaders" enhances coaching skills and team efficiency between managers and

staff. In 2021 the programme targeted 250 delegates comprising of supervisors, section heads, and managers, which we have continued to work with in 2022 in addition to adding an Executive Leadership development programme. We have continued the implementation of our "GROW" Programme launched in 2021, with 120 delegates to date. The programme aims to develop behavioural and technical competencies through tailored individual development plans. GROW monitors and follows up with employees to ensure timely progress and improvement. Additionally, we have expanded our Career Aspiration Programme (CAP), strategically designed to enhance the professional growth of UAE Nationals by upscaling their technical skills to align with their career goals. In 2022, we maintained approximately 140 delegates in the CAP and aim to expand the programme year on year. We also sponsored and encouraged employee participation in the Steel Challenge-17 through our LMS. Lastly, we set forward the Masaar and Future Leaders development programme for UAE Nationals to align their talents with business strategy needs, and to strengthen leadership capabilities.

At Emirates Steel Arkan we developed an On-the-Job Training (OJT) Framework that connects trainees with experienced working team members. Trainees receive on-the-job mentoring and rotation under the supervision of

assigned teams in Operations and Support Services. Our objective is to provide trainees with the tools to achieve their desired level of competency for the functional role set in their job description.

We measure training effectiveness by adopting the Kirkpatrick Evaluation Method (levels 1, 2, and 3). These methods include forms for employee and line manager feedback for each training, which are integrated into the LMS Success Factors.

At the start of every year, managers and their employees discuss their personal objectives that shape their career goals. Employees then upload their objectives onto the PMS and undergo mid-year reviews to ensure adequate tracking and receive a performance rating at the end of the year. We have also ensured full rates for regular performance and career development reviews in both 2021 and 2022. We are proud to announce that 100% of our employees received regular performance and career development reviews over the past four years in our Steel Businesses, as well as 100% for 2022 at our Building Material Businesses.

## Future Plans

Looking forward to our 2023 plans in Learning and Development, we will focus on two main streams; the first stream will focus on continuing projects that started in 2022 and the second

stream will focus on the initiation of new programmes and initiatives to provide maximum benefit across the Group.

We are currently in the process of establishing the "Learning Hub", dedicated areas across ESA providing access to online platforms such as the Coursera platform to better deliver such learning models and self-learning. Additionally, the ESA Learning and Development Centre establishment project started in 2022 with a target for set up and launch in the second quarter of 2023.

Several other Learning and Development programmes are in the pipeline for either design or launch during 2023 such as Women Empowerment programmes, Leadership programmes, a new delegation for the Masaar and Future Leaders programme, Management Excellence development programmes and others. Lastly, we are in collaboration with Abu Dhabi Vocational Education and Training Institute (ADVETI) for the development of an ADVETI-ESA Technical Diploma where delegates would spend two academic years at ADVETI and one year at ESA.



## Learning and Development continued

### Time Spent on Learning

This year each employee spent an average of 30 hours per month in training in 2022, totalling 162,680 hours of training – a 99% increase from 2021. The increased trainings are attributed to resuming training practices post-Covid-19 protocol, in addition to the introduction of new long-term trainings that were launched and target a large portion of our UAE National employees. The below provides a breakdown of employee training by hours, gender, and employee category.

### Total Training Hours Breakdown by Gender for Steel Businesses

Total Hours	2021	2022
Male	80,494	157,759
Female	640	3,655

### Total Training Hours Breakdown by Employee Category for Steel Businesses

Total Hours	2021	2022
Senior management	17	127
Middle management	847	2,377
Staff – employees	80,270	135,467

### Average Training Hours per Employee for Steel Businesses

Average Training Hours	2021	2022
Average training hours per employee	31	61
<b>Breakdown by gender</b>		
Male	32	61
Female	5	42

### Training Highlights for Steel Businesses

**161,414**

hours of training delivered in 2022

**99%**

increase in training hours since 2021

### Total Training Hours Breakdown by Gender for Building Materials Businesses

Total Hours	2022
Males	646
Female	620

### Total Training Hours Breakdown by Employee Category for Building Materials Businesses

Total Hours	2022
Senior management	-
Middle management	16
Staff – employees	1,250

### Average Training Hours per Employee for Building Materials Businesses

Average Training Hours	2022
Average training hours per employee	23
<b>Breakdown by Gender</b>	
Male	15
Female	56

### Training Hours per Employee Contractor for Building Materials Businesses

Total Hours	2022
Total (average) number of employees and permanent contractors (if any) employed at all sites during the data collection/reporting period	54
Number of training hours per employee-contractor	23

### Employee Engagement

Through the HC team, Emirates Steel Arkan implements several initiatives to strengthen employee engagement. To maximise the timespan of our employee relationships, we re-allocate our human resources.

To further tailor our overall HC performance, we consider employee inputs and identify key performance takeaways. This is done through our bi-annual Employee Engagement survey that is accessed via online and mobile applications, both in English and Arabic. For the employee engagement survey conducted in 2022, the overall results were 82% for overall engagement and 92% for participation in the survey, equivalent to 2,661 employees at Group level. The survey results help identify areas of strength

while also increasing visibility on areas of improvement or focus for the HC Department. We address such areas of focus by setting a clear action plan to tackle corrective measures and tracking its progress.

There are various communication channels within ESA such as Online Announcement, LMS, Yammer, ESA Pulse (intranet), emails, teasers, videos, SMS, and WhatsApp (among other media). The Happiness and Engagement Committee falls under the shared responsibility of various stakeholders including Human Capital and Corporate Communication.

In addition to this, we host various scheduled events such as GCEO townhalls and the HC Forum, which all employees engage with. The

communications shared with the employees include learning and development programme updates such as CAP, Coaching programmes like “The Leaders,” GROW, Masaar and Future Leaders, as well as the Learning Ladder.

Furthermore, through these channels we celebrate and recognise our employees for their personal achievements, like the Emirates Steel Arkan Running Team who finished in top positions at the Fun Run in Al Ain City, and ESA's sponsorship and participation in the SteelChallenge-17 which connected University students and ESA employees.



## Learning and Development continued

### Case Study:

# Steel Challenge-17

Emirates Steel Arkan sponsored and participated in the Steel Challenge-17, which was held on 16 November, 2022. This World Championship was held for top students and industry persons across regions including the Americas, Asia, Europe, and Africa. Participants accessed the competition through our ES Learning Management System. The steel challenge used simulators that were a combination of Electric Arc Furnace and Secondary Steelmaking Simulators. Participants were then asked to refine steel to the proper chemistry and temperature to cast it through the simulator.



**worldsteel**  
ASSOCIATION

**steelChallenge-17**

حديد الإمارات أركان  
emirates steel arkan

**What** is The **steelChallenge-17**

The finalists for the **World Championship** will include the top student and industry person in each of the following regions:

- Americas
- Asia - East and Oceania
- Asia - North
- Asia - West
- Europe and Africa

The simulators used for Steel Challenge-17 will be a combination of **Electric Arc Furnace and Secondary Steelmaking Simulators**.

**When**

It will take place **16 November 2022**  
From: **04:00pm**

**How** to participate in the challenge

Participants will access the competition from the **ES Learning Management System**.

Participants will be challenged to record at least one successful run of the combined **Electric Arc Furnace and Secondary Steelmaking simulators**. They will be asked to refine steel to the proper chemistry and temperature, then cast it.

حديد الإمارات أركان  
emirates steel arkan

As a support from **Emirates Steel Arkan**, blended learning sessions (virtual & instructor-led) will be provided to the participants.

**Schedule**

- 12 September 2022  
Registration opens at [www.steeluniversity.org](http://www.steeluniversity.org)
- 16 November 2022  
Regional Championship
- 01 December 2022  
Notice of results
- April 2023  
World Championship
- April 2023  
Award Ceremony

**Gain Knowledge & Win Prizes**

Recognition | Cash | Trophy | Certificate

For more details, Email us:  
[Steel.Challenge@emiratessteel.com](mailto:Steel.Challenge@emiratessteel.com)

Or Contact us on:  
+971 2 507 2946  
+971 2 507 2487  
+971 2 507 2648

Or visit the website:  
[www.steeluniversity.org/steelchallenge-16/](http://www.steeluniversity.org/steelchallenge-16/)

### Case Study:

# Emirates Steel Arkan Youth Council Participation



The Emirates Steel Arkan Youth Council attended the Youth Manufacturing and Technology Forum held at the Emirates Global Aluminium premises in KIZAD.



The event included a total of 17 youth councils from around the country representing governmental entities as well as private firms such as Microsoft. The core objectives of this event focused on a wide variety of topics that included discussions on sustainable development of our various industries, introduction of new technologies, collaborations between all invited entities, sharing of expertise across all fields, and many more topics.

A communication platform was presented to the attendees to enable optimum collaboration and communication between one another. Such initiatives are essential for the development of our youths and will help establish a clear path for their careers.



# Emiratisation

**As a national steel and building material manufacturing company, we are committed to strengthening the local economy in line with the UAE Vision 2030. Additionally, we are keen on providing employment opportunities and equipping future generations of Emiratis with the necessary competencies.**

### Emiratisation Data for Steel Businesses

<b>26%</b> Emiratisation target for 2022 <small>(This is calculated based on full-time employees)</small>	<b>545</b> Emiratis in the Steel Businesses
<b>163</b> Emiratis in middle management	<b>6</b> Emiratis in senior management
	<b>376</b> Emirati staff

### Emiratisation Data for Building Materials Businesses

<b>44</b> Emiratis in the Building Materials Businesses	<b>1</b> Emirati in senior management
<b>9</b> Emiratis in middle management	<b>34</b> Emirati staff

As such, we see investing in national talent as a pillar in our purpose of business and have established this through our Emiratisation Policy as we aim to have a substantive part of our workforce comprise of Emirati human capital. In 2022, we reached an Emiratisation rate of 26%, which is an improvement from the 25% rate achieved in 2021 in the Steel Businesses. In providing a supporting environment, we are confident in our ability to drive the UAE's industrial sector forward to unlock innovation, competitiveness, and high-calibre performance, both locally and globally.

As part of our Emiratisation strategy, we implemented the Career Aspiration Programme (CAP) to carve space for internships and work placements for fresh UAE graduates as well as catch-up plans for existing employees.

### Career Aspiration Programme (CAP)

Our Career Aspiration Programme (CAP) focuses on the fundamentals needed to develop new Emirati recruits at Emirates Steel Arkan to become future leaders of the UAE's industrial sector. In 2022, we increased to 140 delegates on the programme compared to 75 delegates in 2021. Through CAP, we employ a holistic approach exploring key performance facets needed for the work responsibilities. The 36-month programme was initially launched by Emirates Steel and was created in partnership with our educational strategic partners while being aligned to international standards. The CAP has 4 stages, with

the first half as core stages and second half as supplementary stages:

**Stage 1 – Foundation building skills offline.**

**Stage 2 – Intermediate-enhancing capabilities on the Job.**

**Stage 3 – Talent pool fast-track programme.**

**Stage 4 – Management excellence leadership programme.**

To be eligible for CAP, fresh graduates must have completed their high school, technical diplomas, or bachelor's degree in various engineering or theoretical domains. The one-of-a-kind developmental journey sharpens fresh graduates' skills and develops their talents by connecting their formal education to the in-practice experience of our industry. Through CAP we aid fresh graduates in developing the tools and behavioural competencies required to lead future generations, in addition to furthering the technical skills of our existing Emirati employees to support their career growth.

The CAP provides personalised tracks tailored to the educational level of Emirati youth talent. Curriculum topics include technical and industrial fields, health and safety measures, behavioural skills, and English. Other team-building activities, value-added assignments, and projects are also embedded in the programme. Members of a dedicated CAP Committee and other stakeholders

within Emirates Steel Arkan carry out structured programme assessments for participants until candidate graduation. Graduates then receive incentives and assume their responsibilities within the Emirates Steel Arkan workforce.

**140**

CAP delegates enrolled in 2022

**86%**

Increase in CAP delegates compared to 2021

### Masaar and Future Leader Programmes for UAE Nationals

We held a Meyleskom event for all UAE Nationals in the presence of our Group CEO. At this event, we launched the Masaar and Future Leaders programmes in September of 2022. The Masaar development programme aids fresh UAE graduates in understanding their role in business through delivering results. This year we onboarded 114 delegates to the programme. The programme aligns new talent with Emirates Steel Arkan's business strategy and needs. We aim to advance their skills by mentoring them

to build positive relationships and teach them to effectively deal with stress and demands.

Through our Future Leaders programme, we targeted 21 delegates in middle management for the year 2022. The programme's objectives are to strengthen leadership capabilities, align talent with business strategy and needs, provide support and encouragement as role models to delegates, and create an atmosphere for success and an environment for growth through sharing.



## Emiratization continued

### Diversity and Equal Opportunity

At Emirates Steel Arkan, we have a prized work environment distinguished by its diversity and equity and empowered through its female workforce. Inclusivity is central to our culture, and as part of our main strategic objective, we look to empower Emirati female employees by providing career growth plans and ample excellence opportunities.

We nurture a supportive work environment and look to break the conceptions of a male-dominated manufacturing industry. To bring these aspirations to reality, we formed a Women Empowerment Committee under the purview of the Corporate Manager for Happiness and Well-being. The committee ensures that our female employees feel as equally involved in the professional and social spheres as their male counterparts.

As part of the organisation's effort to provide recognition to women in the workforce Emirates Steel Arkan celebrated International Women in Engineering Day on 23 June, 2022.

We honoured our outstanding female engineers who have made significant contributions to our Company and whose work continues to push the boundaries of innovation while inspiring others.

Looking forward to 2023, we are creating a plan to develop dedicated programmes for women in the workforce at Emirates Steel Arkan.



International Women in Engineering Day

### Gender Pay Ratio in Steel Businesses

Description	Unit	2022
Median male compensation to median female compensation	Ratio	0.47

### Gender Pay Ratio in Building Materials Businesses

Description	Unit	2022
Median male compensation to median female compensation	Ratio	0.25



# Occupational Health and Safety

**Protecting the health and safety of our employees is a top priority at Emirates Steel Arkan. We are committed to providing a safe, secure, and healthy work environment, and aim to improve employee well-being by implementing efficient management systems. Our Occupational Health and Safety Management Systems are certified against ISO 45001 standards. We ensure that our environment, health, and safety (EHS) trainings are certified by international standards, and we ensure that employee attendance is mandatory.**

In 2022 we conducted the Dupont Safety Assessment Survey to assess and metabolise improvements in our safety culture. Dupont consultants measured the organisation's safety culture across three elements: Leadership, Process and Actions, and Structure. In doing so the consultants surveyed plant staff and analysed survey results to produce an implementation plan aimed at revitalising the existing safety programme across all levels of the organisation. We believe that by working with Dupont we are taking an important step towards sustainable transformation and business performance improvement and are looking forward to 2023. We hope to follow up and close-out gaps identified by the Dupont Safety Assessment Survey.

We made commitments to improve the health and safety of our operations by conducting daily, weekly, and monthly safety meetings within our SMPs, RMs and maintenance teams. We monitor safety KPIs such as hazards reporting, behavioural interactions, EHS inspections, stationary work instruction patrols, permit-to-work (PTW) inspections, preventing fires, and injuries. This year we fully implemented the PTW System, including positive isolation. In our HSM, we made structured safety goals mandatory for everyone by creating a culture of safety. We established an operating model that maintains EHS standards. We ensure that standard operating procedures are developed for supervisors to maintain individual responsibility and efficiency.



All our employees and workers at Emirates Steel Arkan, across all Businesses, are covered by an OHS management system that has been internally and externally audited.

## Emirates Steel HSE Principles

- 1 Working in a healthy, safe, and environmentally responsible way is a condition for continued employment.
- 2 All injuries, illnesses, and HSE incidents can and must be prevented.
- 3 Line management is responsible and accountable for HSE performance.
- 4 Safety excellence is at the heart of business success.
- 5 Involvement and training of all employees is essential to achieving HSE excellence.
- 6 HSE risks must be reviewed and corrected periodically.
- 7 Off-site health and safety is an important part of the HSE effort.

## Emirates Steel Life Saving Rules

- 1 Conduct GAS TESTS prior to work as required
- 2 Verify all ISOLATIONS required before starting work
- 3 Ensure working with a valid WORK PERMIT as required for the specific job
- 4 Do not walk under a SUSPENDED LOAD
- 5 Obtain required authorisation before BYPASSING OR DISABLING safety systems
- 6 Always follow WORK INSTRUCTIONS and PROCEDURES
- 7 Never enter operations areas without the REQUIRED PPE
- 8 Ensure you are FIT FOR DUTY before performing your job
- 9 Adhere to Emirates Steel TRAFFIC and MOBILE EQUIPMENT RULES
- 10) Never SMOKE outside designated areas

## Occupational Health and Safety continued

### Worker Participation and Training

At Emirates Steel Arkan, we believe that employees can be part of enhancing and improving the workplace. We consult employees in safety improvement processes as they know the workplace and hazards of the role best. In this consultation we ensure employee involvement in developing and reviewing work instructions that will be communicated back to them and harness their experience when risk assessments are conducted. Risks of every job are communicated to the work team via toolbox talks that are conducted prior to any job. Safety awareness is raised and maintained through safety communication campaigns that include posters, videos, screensavers, safety quizzes and competitions, and toolbox talk materials.

In addition, concerned management ensure that the shop floor level employees are consulted and engaged in the EHS discussions during the monthly departmental EHS meetings, giving them a sense of ownership of safety decisions and supporting culture building. Each section head chooses a pool of shopfloor level employees (good attitude to safety, respected by peers, passable English), depending on their availability in the shift and invites

them to attend each EHS monthly meeting and documents the attendance in meeting minutes.




















We also maintain an EHS Committee for our Block, and Cement industry services. The committee was formed to ensure worker participation and consultation in our EHS Management System. Committee members are selected by departmental heads. Meetings represent the EHS concerns and potential areas of improvement. Each EHS Committee member is responsible for communicating the objectives and targets of the EHS System to shop floor employees. All employees can access and participate in these committee meetings, and this is communicated during leadership walkabouts to ensure employee participation and to ensure all EHS procedures are documented in MySHEQ.

It is important to note that all employees may refuse to begin a job if they deem it unsafe. This message is then cascaded from top management through various communication channels including our safety awareness campaigns. Employees who choose to stop unsafe work are also recognised by management on a yearly basis after evaluation.

We conduct regular EHS training programmes and campaigns to promote best practices and raise EHS awareness among staff. We ensure that induction training is conducted for all personnel within our jurisdiction to ensure personnel remain attentive to their legal obligations in taking care of both their, and their peers' health and safety. Induction trainings comprises of directives on administration issues, job requirements, our Quality Management Systems, Emirates Steel Arkan Life Saving Rules, Emirates Steel Arkan EHS Principles, and other relevant procedures. In our Anabeeb Pipes Manufacturing industries we provide behavioural-based safety training to forklift operators that ensures forklifts are not used unnecessarily during idle hours and inform workers to reduce top end speed. In 2022, the EHS Department held a "5S Housekeeping Safety" quiz as part of our aim in encouraging workplace EHS participation. ESA provides voluntary health promotion services and programmes to address major non-work-related health risks such as celebrating "World No Tobacco Day" to give awareness to our employees and advice on quitting smoking and organised a 90-day Health Marathon Programme competition to encourage employees to lose weight and adopt a healthy BMI.



## Awareness Campaigns in 2022

 Safety in Heat Campaign	 Fire Safety Awareness	 Gas Testing Awareness	 Safe Crane Operations
 Mobile Crane Operations for Supervisors	 Job Safety Analysis (JSA)	 Confined Space Entry	 Chemical Handling Awareness
 Radiation Safety and Security Awareness	 Covid-19 Protocol Awareness	 Office Safety Awareness	 Safety Awareness Campaign
 First Aid Campaign	 Electrical Safety - LOTO	 Rigging and Slings	 Lifting Supervisors – Overhead Crane
 Hazard Identification and Risk Assessment (HIRA) Awareness	 Permit-to-work	 Working at Heights	



## Occupational Health and Safety continued

In 2022, 8,776 employees and contractors attended our EHS training programmes, which surpassed our target of 5,000 attendees. The below outlines the total hours of training and number of employees who have received training on EHS.

### Training Hours in Steel Businesses

Description	Unit	2020	2021	2022
Total hours of training on EHS	Hours	14,127	17,016	23,747
Total number of employees who have received training on EHS	Number	3,384	4,061	6,313

### Training Hours in Cement Businesses

Description	Unit	2020	2021	2022
Total hours of training on EHS	Hours	117	120	552
Total number of employees who have received training on EHS	Number	144	32	184

### Training Hours in Block Businesses

Description	Unit	2020	2021	2022
Total hours of training on EHS	Hours	12.25	24.25	38.1
Total number of employees who have received training on EHS	Number	1,198	1,055	732

### Training Hours in Anabeeb Businesses

Description	Unit	2020	2021	2022
Total hours of training on EHS	Hours	1,502	1,355	1,376
Total number of employees who have received training on EHS	Number	1,331	1,249	1,547

Emirates Steel Arkan has been recognised by The World Steel Association as part of its Safety and Health Excellence Recognition Programme for 2022. We were awarded for our efforts to enhance crane operations and rigging safety in our steel factories and our ability to deliver outstanding standards in health and safety. The award was received in person in Brussels, Belgium. We pride ourselves on our unwavering commitment to leading safety protocols and forward-thinking capabilities and appreciate the global recognition for our commitments.

As part of our commitment towards safety in our daily operations and interaction with customers and contractors, safety excellence is always a top priority at Emirates Steel Arkan. The Supply Chain Management (SCM) team holds the annual Contractors Safety Excellence Awards, which includes over 120 contractors operating in or around our facilities. Selection of the winners is decided on by the Safety Manager, Head Contractor Coordinator, SCM, and the overall safety evaluation from end users.

Group CEO, Eng. Saeed Ghurman Al Remeithi, receiving the Safety and Health Excellence Recognition Award in Brussels, Belgium.



## Safety Excellence Performance Award



- Securiguard Middle East**
- Completed **1 million+ man hours** with no injuries
- Conducted **good quality safety awareness** campaigns
- Contributed **high quantity of observations** in MySHEQ



- Genfocus Electromechanical**
- Completed **high risk jobs in a safe manner**
- Contributed to My SHEQ
- Completed many **excellent safety campaigns**

Supply Chain Management Department

Winners of our annual Contractors Safety Excellence Award for 2022

## Occupational Health and Safety continued

### Case Study:

# Steel Safety Day



On 28 April, we celebrated World Steel Safety Day to reaffirm our commitment to developing and implementing best practice in health and safety. As a testament to the work culture we have fostered, Emirates Steel Arkan has recorded 16 million safe man-hours and a Lost Time Injury Frequency Rate (LTIFR) of 0.05 in 2021, which is a 209% increase in safe man-hours and an 80% reduction in LTIFRs compared to 2020.

We continue to develop a culture of safety through several approaches:

- We continuously update procedures related to risk assessments, inspections and observations, health and safety reviews, and incident investigations. Additionally, trainings and coaching sessions are regularly offered to employees and contractors backed by ongoing awareness campaigns throughout the year.
- Emirates Steel Arkan has a dedicated Safety Rewards and Recognition Programme which monitors safety performance across the Company and recognises significant internal contributions to the Company's safety endeavours.
- We adopt an effective EHS governance and performance programme with a dedicated dashboard, capturing KPIs as well as nurturing discussions around performance to drive desired outcomes. It also launched an innovative digital platform, called MySHEQ, to boost safety performance and manage critical EHS processes.



### Medical and Healthcare Services

At Emirates Steel Arkan, we have general clinic facilities operated and managed by a healthcare service provider to comply with the Health Authority of Abu Dhabi's (HAAD) regulations and abiding by the terms and conditions of our regulatory and procedural requirements. A procedure has been developed that considers the level of workplace hazard exposure across all departments, this ensures occupational health surveillance across all departments.

In providing such occupational health and medical emergency services, we remain proactive in offering comprehensive and high-quality health and well-being services. Such services include medical and health assessments, health surveillance, and well-being initiatives. We also provide counselling and advice to Emirates Steel

Arkan managers and staff on a variety of occupational health and pre-employment related issues that meet the needs of Emirates Steel Arkan in support of:

- Promoting and enhancing the health and well-being of staff.
- Managing and minimising sickness and absence.
- Complying with legislative requirements.
- Managing cases of incapability caused by sickness.
- Handling unexpected health pandemic.

We provide the highest quality of preventative and curative healthcare in addition to chronic disease management. Additionally, at Emirates Steel Arkan, we offer the highest quality of emergency medical care, including initial management, stabilisation, and transfer of emerging

emergencies to the appropriate emergency services in public or private hospitals. ESA also appoints an occupational doctor who conducts health risk assessments to identify the employees who require health checks.

### Work-related Injuries or Illness

Our incident investigation and reporting procedure is the bases of reporting all accidents, near misses, and injuries using the root cause analysis technique. The systemic causes are identified, and corrective actions developed to address the incident's root cause. As per the incident reporting and investigation procedure, the investigation team arranges the preventative actions while considering the root cause, all of which is then inputted onto our online EHS platform (MySHEQ) to track the closeouts.

### Recorded Injuries in 2022

31%

Slips, trips, and falls

23%

Struck by falling object

23%

Hit by moving object, crush or vehicle

23%

Other injuries

### Work-related Hazards Causing Injuries

Materials	Sharps	Scalpels	Needles	Fixed Machinery
Fixed plant	Mobile plant	Mobile equipment	Scaffolding	Ladders
Non-powered equipment	Tools	Appliances		



## Occupational Health and Safety continued

In the event of work-related injury or illness, we perform risk assessments in accordance with Hazard Identification and Risk Assessment (HIRA) procedures and requirements and Job Safety Analysis (JSA) is done for all non-routine jobs. Both HIRAs and JSAs are reviewed regularly. Through these assessments, we determine the risks associated with employees returning to work and/or undergoing rehabilitation, and we ensure the implementation of the appropriate control measures to mitigate hazards.

As per the procedure, a hierarchy of controls is used when developing risk control measures. The safety of non-routine jobs is also managed through the PTW process. All personnel involved in PTW - permit issuers and requesters - are trained on a regular basis, and their knowledge is tested. The PTW process is audited by both Health and Safety personnel and line managers via PTW audits that are registered on the online application MySHEQ. All staff can report hazards and unsafe acts or conditions through MySHEQ. Each plant has a KPI on hazard reporting and employees are encouraged to be aware and submit reports. Employees who are most active at hazard reporting are recognised by plant management in EHS monthly meetings with certificates and shopping vouchers. At our Cement operations, we ensure compliance through a third party approved Abu Dhabi Public Health Centre auditor and conduct

OHSMS auditing to verify compliance and discipline.

To mitigate the risk of highly hazardous jobs, employees are also trained in confined space entry, working at heights, gas testing, and electrical safety – Lockout Tagout (LOTO). Crane operators and riggers also receive both classroom and practical training. All incidents are investigated as per the incident investigation and reporting procedure. These records, reports and evidence are managed using the MySHEQ.

Should employees experience injuries, ESA manages their rehabilitation and return to work process through programmes and plans. Employees return to work in accordance with medical advice, and the Emirates Steel Arkan Rehabilitation and Return to Work Programme carried out by their respective department. We work with managers, injured and ill workers, treating doctor(s), the insurer, rehabilitation providers and others as identified in assisting the injured or ill employee to return to work as soon as possible after the injury/illness.

We ensure worker rehabilitation by:

- Assisting in identifying alternative work duties and arrangements for the injured/ill employee.
- Communicating regularly with all parties involved in the rehabilitation and return to work process, programme, and plans.

- Ensuring that there is legislative compliance when managing the rehabilitation, return to work, and claims management of an injured/ill employee.

We have made significant progress to improve our EHS performance. When compared to 2021, we have seen a decrease in fire and vehicle or mobile equipment incidents, recording LTIFR of 0.05 in 2022 against the threshold of 0.21, and recorded 10 injuries in 2022 against the threshold of 12. We also enhanced the MySHEQ platform to be a more efficient and user-friendly reporting process. Additionally, a 24/7 shift has been mobilised for intervention to provide specialised support during the emergencies and developed a contractor EHS handbook that was then circulated to all the ESA contractors.

At our Anabeeb Businesses we have committed to increase management involvement in monthly EHS inspections, targeting 12 inspections for 2023. We aim to facilitate EHS Committee meetings every quarter during 2023 and ensure our record for zero injuries, while decreasing LTFIR and reducing total number of injuries.

The breakdown of work-related injuries and injury rates for staff under jurisdiction of Emirates Steel Arkan are reported as follows:

### Work-related Injuries for All Employees in Steel Businesses

Work-related Injuries for All Employees	Unit	2020	2021	2022
The number of high-consequence work-related injuries (excluding fatalities)	Number	4	1	1
Rate of high-consequence work-related injuries (excluding fatalities) (LTIFR)	-	0.7	0.05	0.05
The number of recordable work-related injuries	Number	5	9	10
The rate of recordable work-related injuries	-	0.9	0.7	0.5
Employee lost-time injuries	Number	4	1	1
The number of hours worked	Number	5,600,010	6,700,013	7,877,848

The rates have been calculated based on 1,000,000 hours worked. It is important to note that no fatalities from work-related injuries were recorded in 2022.

### Work-related Injuries for All Contractors in Steel Businesses

Work-related Injuries for All Contractors whose work and/or workplace is controlled by the organisation	Unit	2020	2021	2022
The number of high-consequence work-related injuries (excluding fatalities)	Number	1	0	0
The rate of high-consequence work-related injuries (excluding fatalities)	-	0.1	0	0
The number of recordable work-related injuries	Number	3	3	0
The rate of recordable work-related injuries	-	0.4	0.4	0
Contractor lost-time injuries	Number	0	0	0
The number of hours worked	Number	7,000,013	8,000,013	11,600,021

The rates have been calculated based on 1,000,000 hours worked. It is important to note that no fatalities from work-related injuries were recorded in 2022.

We are also proud to disclose that we have recorded zero fatalities as a result of work-related ill health in the past four years for both our employees and workers under the jurisdiction of Emirates Steel Arkan. We also recorded zero cases of any work-related injuries for workers who were not employees in both Block and Anabeeb Businesses, in addition to zero cases of injury for employees in our Cement Businesses.

## Zero cases

of fatalities in the past four years for both our employees and contractors in all our Businesses



## Occupational Health and Safety continued

### Work-related Injuries for All Employees in Cement Businesses

Work-related Injuries for All Employees	Unit	2020	2021	2022
The number of high-consequence work-related injuries (excluding fatalities)	Number	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities)	-	0	0	0
The number of recordable work-related injuries	Number	0	0	0
The rate of recordable work-related injuries	-	0	0	0
Employee lost-time injuries	Number	0	0	0
The number of hours worked	Number	465,960	407,068	401,601

The rates have been calculated based on 1,000,000 hours worked. It is important to note that no fatalities from work-related injuries were recorded in 2022.

### Work-related Injuries for All Contractors in Cement Businesses

Work-related Injuries for All Employees	Unit	2020	2021	2022
The number of high-consequence work-related injuries (excluding fatalities)	Number	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities)	-	0	0	0
The number of recordable work-related injuries	Number	1	0	1
The rate of recordable work-related injuries	-	0.67	0	0.90
Employee lost-time injuries	Number	1	0	1
The number of hours worked	Number	1,016,778	975,269	715,252

The rates have been calculated based on 1,000,000 hours worked.

### Work-related Injuries for All Employees in Block Businesses

Work-related Injuries for All Employees	Unit	2020	2021	2022
The number of high-consequence work-related injuries (excluding fatalities)	Number	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities)	-	0	0	0
The number of recordable work-related injuries	Number	6	3	2
The rate of recordable work-related injuries	-	6.34	3.99	2.45
Employee lost-time injuries	Number	0	0	0
The number of hours worked	Number	946,464	751,210	817,182

The rates have been calculated based on 1,000,000 hours worked.

### Work-related Injuries for All Employees in Anabeeb Businesses

Work-related Injuries for All Employees	Unit	2020	2021	2022
The number of high-consequence work-related injuries (excluding fatalities)	Number	1	1	1
Rate of high-consequence work-related injuries (excluding fatalities)	-	1.11	1.11	0.88
The number of recordable work-related injuries	Number	3	4	3
The rate of recordable work-related injuries	-	3.33	4.43	2.65
Employee lost-time injuries	Number	1	1	1
The number of hours worked	Number	811,200	812,232	1,025,664

The rates have been calculated based on 1,000,000 hours worked.

### Future Plans

In the coming year, we plan to improve the management of LSR violations. We also plan to digitise our PTW and training modules and launch e-trainings for the process safety-related modules. Our goal is to extend the 5S implementation to cover 100% of all areas, with a level of implementation of 4 or above. Finally, we aim to implement a Work Instruction (WI) monitoring programme that will identify critical job WIs and conduct relevant audits.

We aim to continue supporting departments in improving the quality of the incident investigations and conduct barrier audits for high-risk scenarios. Lastly, we will continue reducing fire and mobile equipment and vehicle incidents, reporting near-misses and unsafe acts and conditions, as well as look to completing our process safety awareness training.



# Emergency Preparedness

At Emirates Steel Arkan, we maintain an emergency response preparedness mechanism to nurture a safe environment for our staff. Additionally, we have our emergency intervention and rescue team in place to effectively address emergencies across operations and plants. We provide basic and advanced safety trainings to the intervention team, including hazardous materials (HAZMAT), rope rescue, confined space, and first aid training.

As part of our efforts to ensure a swift and accurate mobilisation of our intervention team at Emirates Steel Arkan against any potential emergencies, we successfully conducted 59 fire drills in coordination with Abu Dhabi Civil Defence in 2022. Abu Dhabi Civil Defence has continued its annual inspection of fire alarms across our plants and buildings to ensure the safety of our employees. We plan to maintain our record of zero fire incidents and increase fire equipment inspections as required. In the long-term, we plan to extend our emergency drills to potential risk areas beyond fire risk to reflect our scope of work.



## Emergency Response Drills for Steel Businesses

Emergency Response Drills	Unit	2020	2021	2022
Drills completed	Number	16	16	57
Drills planned	Number	12	12	54

## Emergency Response Drills for Cement Businesses

Emergency Response Drills	Unit	2021	2022
Drills completed	Number	2	3
Drills planned	Number	2	5

## Emergency Response Drills for Blocks Businesses

Emergency Response Drills	Unit	2022
Drills completed	Number	8
Drills planned	Number	4

## Emergency Response Drills for Anabeeb Businesses

Emergency Response Drills	Unit	2020	2021	2022
Drills completed	Number	2	2	2
Drills planned	Number	2	2	2



Two mock fire drills were conducted at Anabeeb Businesses and workers responded as required.

Award honouring Abu Dhabi Civil Defence

# Local Communities

**Our community approach ensures that our surrounding communities are centred in our service and product offerings. Our Corporate Social Responsibility (CSR) campaigns cater to our community partners, and are based on four main pillars: environment, education, health, and society. We define the scope of our local community as the stakeholders we interact with in the UAE that includes people, customers, partners, and local authorities. Under the CSR and Community Engagement Strategic Framework we implement and track the number of activities, beneficiaries, community satisfaction, and media mentions.**

ESA is located in the industrial area of Abu Dhabi, and we remain committed to ensuring the overall risk of our activities is low by implementing the necessary control measures, and assessing our environmental impact on our local community, as approved by the Environment Agency in Abu Dhabi (EAD). We are always working on mitigating and minimising the potential implications which our activities might have on the local and greater community's health and welfare. Our approach comprises of continuous environmental monitoring through laboratories and consultants that are approved by the relevant government agencies.

Regular environmental inspections and audits are carried out in all areas of operation to ensure compliance to environmental laws, and a real-time monitoring system is used for air pollution in our facilities to ensure our emissions are within the permissible limits. Our carbon capture programme, slag processing plant and fume treatments plants are also indicative of our consciousness to our environmental

impact on the local community and the UAE at large.

Emirates Steel Arkan further engages with policymakers to ensure our participation in bolstering the local economy. We are actively involved in discussions with the UAE Government to ensure the continued growth of steel and construction materials in line with the UAE's industrial strategy Operation 300bn. We were delighted to welcome H.E. Dr. Thani Al Zeyouidi, Minister of State for Foreign Trade, and provided him with a tour of our operations, products, and export markets.

To ensure our contribution to addressing community needs, we collaborate with local charity organisations. Some of these collaborations included cooperating with academic institutions to provide scholarships and trainings in engineering and other technical specifications. We ensure a substantial effort is put forward to enabling the careers of local youth and bridging the gap between academia and the practical work environment.

We have a formal local community grievance process as implemented through our Violation Reporting System which is accessible to the public via our Company website. Emirates Steel Arkan is committed to a culture of transparency, honesty, and accountability. In line with that commitment, we are introducing a procedure that provides employees and other stakeholders with a method to report instances of unethical, unlawful, or undesirable conduct without fear of intimidation or retaliation.

Emirates Steel Arkan always seeks to support Emirati women pioneers. We sponsored a team of young Emirati engineers at Abu Dhabi University to test an innovative prototype with the potential of saving lives from drowning. Additionally, we signed an agreement with Abu Dhabi University to establish the first Steel Metallurgy Lab in the UAE.

We are proud to state that we implement local community engagement, impact assessments, and development programmes at 100% of our operations, which has been consistent for the past three years. This includes environmental impact assessments and ongoing monitoring of operational environmental impacts, public disclosure of these assessments, engagement with local community

development programmes, and stakeholder engagement plans, community consultations, and occupational health and safety committees with worker representation.



Minister of Foreign Trade visits Emirates Steel Arkan



In 2022, our total expenditures on the local community increased by 35.2% compared to 2021, reaching a total of AED 741,204. Our CSR aims to address essential issues in areas such as healthcare, environment, and culture. We set a 2022 target of 1,696 employee volunteering hours among 212 volunteers, which we surpassed by reaching 1,760 hours between 212 volunteers.

### Community Expenditure and Volunteering Hours for Emirates Steel Arkan

Description	Unit	2020	2021	2022
Total community initiative expenditure (funding) during the reporting period.	AED	1,233,625	548,238	741,204
Community initiative rate (community investment / tonnes of production)	AED/tonne	0.41	0.18	0.23
Community initiative rate (community investment as a % of Company revenue (AED))	%	0.024	0.007	0.009
Total number of employee volunteers	Number	25	212	220
Total number of employee volunteering hours	Hours	428	1,696	1,760



Emirates Steel Arkan Group collaboration with Abu Dhabi University

## Local Communities continued

### Happiness and Well-being Committee Initiative

#### Emirati Women's Day Workshop

On the occasion of Emirati Women's Day, our in-house Happiness and Well-being Committee organised two special workshops on soap and dukhoon (aromatic woodchips) making to show our appreciation to our hardworking Emirati workforce.



#### Juice Distribution Initiative

Our Happiness and Well-being Committee organised a juice distribution initiative



#### Eid Sweets Distribution

As part of our happiness and well-being mandate towards all of our staff across the Group, and in large part to the never-ending tradition of distributing Eid sweets during this festive time, more than 1,500 staff members were gifted Eid sweets across Emirates Steel Arkan Businesses in Abu Dhabi and Al Ain.



### Case Study:

## MOIAT Ministry Visit to Emirates Steel Arkan



As part of the Ministry of Industry and Advanced Technology's efforts to maintain strong, direct ties with its partners in the industrial sector, H.E. Dr. Sultan Al Jaber, visited Emirates Steel Arkan facilities to discuss the role our organisation plays across the industrial sector within the UAE.

The Ministry focuses on enhancing cooperation, increasing industrial incentives and enablers, and supporting all partners in various industrial sectors, as part of the UAE's national strategy for industry and advanced technology.

During the visit, the Minister was briefed on the efforts of Emirates Steel Arkan and listened to strategies for improving the quality and efficiency of production, enhancing competitiveness, raising the contribution of the industrial sector and advanced technology to the national economy, and enhancing the UAE's position in the global industrial sector.

Additionally, the Chairman of the Abu Dhabi Department of Economic Development, Mohamed Ali Al Shorafa, praised the efforts undertaken by the Government of Abu Dhabi towards further establishing the industrial sector's position, being a cornerstone of the economy and ensuring an appealing industrial landscape and proposition for international investors, guaranteeing a sustainable future.



### Case Study:

## Participation in the "Make it in the Emirates" Forum



Emirates Steel Arkan took part in the "Make it in the Emirates" forum, where we highlighted our contribution to the country's industrial output and showcased new products, including the recently introduced ES600 rebar. Emirates Steel Arkan is making significant contributions to the UAE's industrial sector and accounted for more than 11% of Abu Dhabi's industrial output during 2022.

### Future Plans

ESA aims to continue growing our local community initiatives in 2023. We have planned our initiatives for Ramadan, our donation of winter clothes for those in need, participating in National Environment Day, and continuing our "Drop of Giving" initiative. We also aim to take on new initiatives to aid the elderly in our local community.

In the long-term we plan to set new KPIs for:

- Number of CSR activities and initiatives implemented.
- Number of collaborations with government entities to increase community satisfaction.
- Number of beneficiaries and volunteers.
- The percentage implementation of the CSR and Community Engagement Strategic Framework.
- Percentage of monthly and quarterly progress reports.
- Number of impressions on social media and percentage of media engagement.



## Local Communities continued



Pink Walking Marathon



Drop of Giving Initiative



Ramadan Tent



Emirati Children Day



White Cane

### CSR Initiatives for 2022 with Corresponding Beneficiaries and Spending Data

Sr. #	CSR Initiative	Details	No. of Beneficiaries	Cost, AED
1	We Give You Smile	Packing and distributing food boxes to families in need in Abu Dhabi, Al Ain, Dubai.	440	84,864
2	Earth Hour	Distributed solar chargeable LED flashlights to workers to increase awareness about energy saving to protect the planet.	136	5,000
3	Earth Day	Contributing sponsor to Zayed International Foundation for Environment.	20	10,000
4	UAE Environment Day	Clean up drive in Mussafah.	15	290
5	Kaswat El Eid	Make the Eid occasion full of joy and happiness for orphaned children. We took them to a shopping mall and purchased Eid clothes for them.	28	12,000
6	Zayed Humanitarian Day	Kaswat El Eid for the elderly community.	10	10,000
		One of the main sponsors for a dinner for children of determination in an event organised by SAAD Association.	15	50,000
7	World Environment Day	Contributing sponsor to Zayed International Foundation for Environment.	20	10,000
8	Emirati Children's Day	Hosted "Our Journey to the Steel Plant." This event was an opportunity for children to learn about steel manufacturing and to enjoy several activities	150	60,212
9	Labour Day	We celebrated Labour Day by fulfilling the wish of our staff members, to visit the UAE National Aquarium.	6	730
10	World Humanitarian Day	We celebrated our hardworking in-house medical team at Emirates Steel Arkan, and showed our appreciation for all their incredible effort by taking them out for lunch and spending the day doing outdoor activities	6	5,933
11	Drop of Giving (campaign)	In collaboration with SEHA, we organised blood donation campaigns for several consecutive years under the name "Drop of Giving" to encourage employees to donate and support the society.	75	N/A
12	No Single Use Plastic	Conducted a "No Single Use Plastic" campaign, as it was announced by the Environment Agency Abu Dhabi (EAD) that starting from June 2022, we need to increase environmental awareness for employees, thus we distributed cloth grocery bags to encourage environmentally conscious behaviour.	1,500	54,000
13	Clean up Campaign	A clean up initiative that took place in Abu Dhabi and Al Ain to raise environmental awareness.	10	N/A
14	Emirati Women's Day	Sponsored an Emirati student from Abu Dhabi University to support her graduation project.	1	20,000
15	Back To School	Distributed Tablets to students at Ewaa Centre.	16	25,525
16	Emirates Association for Visually Impaired /White Cane Day	Sponsored a walk for the visually impaired.	15	15,000

Sr. #	CSR Initiative	Details	No. of Beneficiaries	Cost, AED
17	Let's Read	Distributed 150 books to orphans with Emirates Charitable Association	150	N/A
18	Pink Walking Marathon	Members of staff from our Steel and Cement unit took part in a "Walking Pink Marathon" event. We partnered with Towam Hospital to sponsor a walk within a mall as part of our breast cancer awareness campaign. We encouraged participating women to do free tests at the pink medical bus.	400	26,742
19	International Day of Charity	Donated and supported the Emirates Society for Parents, Care and Relief in arranging food boxes for families in need	5	8,250
20	Support Them	Supported the Emirates Society for Parents, Care and Relief by purchasing hearing aids for the elderly.	10	10,000
21	Al Rashid Centre	Sponsored a student.	1	41,000
22	Recycled Water Bottles	For ESA employees.	4,000	92,000
23	Winter Clothes	For workers.	150	25,000
24	UAE National Day - Kuwait Embassy	Sponsored the UAE Embassy National Day celebrations in Kuwait.	1	12,000
25	International Day for Persons of Determination	Sponsored people of determination.	25	50,000
26	Ramadan Tent - Red Crescent	As part of our never-ending commitment towards our community, especially during the Holy Month of Ramadan, we sponsored a Ramadan tent during the Holy Month in collaboration with the Red Crescent. Many volunteers from across the Businesses contributed towards iftar boxes for many individuals over the 30-day period to meet our goal of 3,000 iftar boxes by the end of Ramadan.	3,000	75,000
27	International Day of Tolerance	Distribute fabric bags and items of necessity to Building Materials workers.	475	9,608
28	Wheelchairs	Purchased 6 wheelchairs.	6	22,050
29	Bee Café	Supported Zayed Higher Organisation for People of Determination with their Coffee Business by hosting them on our premises for three days.	1,000	
30	International Day for Sign Language	We partnered with Hand Speakers AE to host a workshop for 30 children to teach them the UAE national anthem in sign language, and distributed vouchers for people with hearing disabilities.	30	6,000
<b>Total</b>			<b>11,716</b>	<b>741,204</b>



# Appendices



## 06

**In this section:**

- Appendix A: Table of Abbreviations
- Appendix B: Stakeholder Engagement Map
- Appendix C: Maturity Matrix
- Appendix D: GRI Content Index
- Appendix E: ADX Content Index



# Table of Abbreviations

Abbreviation	Definition
<b>4IR</b>	Fourth Industrial Revolution
<b>ACF</b>	Abu Dhabi Cement Factory
<b>ADAA</b>	Abu Dhabi Accountability Authority
<b>ADDED</b>	Abu Dhabi Department of Economic Development
<b>ADNOC</b>	Abu Dhabi National Oil Company
<b>ADQ</b>	Abu Dhabi Development Holding Company
<b>ADSW</b>	Abu Dhabi Sustainability Week
<b>ADU</b>	Abu Dhabi University
<b>ADVETI</b>	Abu Dhabi Vocational Education and Training Institute
<b>ADX</b>	Abu Dhabi Securities Exchange
<b>APO</b>	Automated Process Optimisation
<b>ASME</b>	American Society of Mechanical Engineers
<b>BCM</b>	Business Continuity Management
<b>BCP</b>	Business Continuity Plan
<b>BIA</b>	Business Impact Assessments
<b>BoD</b>	Board of Directors
<b>CAP</b>	Career Aspiration Programme
<b>CARES</b>	Certification Authority for Reinforcing Steel
<b>CC</b>	Centrifugally Cast
<b>CCUS</b>	Carbon Capture, Utilisation and Storage
<b>CDP</b>	Carbon Disclosure Project
<b>CEMP</b>	Construction Environmental Management Plan
<b>CEMS</b>	Continuous Emission Monitoring System
<b>CEO</b>	Chief Executive Officer
<b>CISR</b>	Centre for Iron and Steelmaking Research
<b>CM</b>	Cement Mill
<b>CMT</b>	Crisis Management Team
<b>CO2</b>	Carbon Dioxide
<b>COC</b>	Code of Conduct
<b>COP</b>	Conference for the Parties
<b>CSR</b>	Corporate Social Responsibility
<b>CWM</b>	Centre of Waste Management
<b>DEWA</b>	Dubai Electricity and Water Authority
<b>DoA</b>	Delegation of Authority

Abbreviation	Definition
<b>DP</b>	Development Plan
<b>DRI</b>	Direct Reduction Iron
<b>DRP</b>	Direct Reduction Plant
<b>EAD</b>	Environmental Agency - Abu Dhabi
<b>EAF</b>	Electric Arc Furnace
<b>EBF</b>	Emirates Block Factories
<b>EBITDA</b>	Earnings Before Interest, Taxes, Depreciation and Amortisation
<b>EC</b>	Employee Central
<b>ECI</b>	Etihad Credit Insurance
<b>EHS</b>	Environment, Health and Safety
<b>EHSMS</b>	Environment, Health and Safety Management System
<b>EIA</b>	Environmental Impact Assessment
<b>EISF</b>	Emirates Iron and Steel Factory
<b>eMOCs</b>	Electronic Management of Changes
<b>ENEC</b>	Emirates Nuclear Energy Corporation
<b>EPA</b>	Environmental Permit Application
<b>EPD</b>	Environmental Product Declaration
<b>ERM</b>	Enterprise-Wide Risk Management
<b>ESA</b>	Emirates Steel Arkan
<b>ESG</b>	Environmental, Social and Governance
<b>ESMA</b>	Emirates Authority for Standardisation and Metrology
<b>ESP</b>	Environment Service Provider
<b>ETIP</b>	Electrical Tariff Incentive Programme
<b>EXCO</b>	Executive Committee
<b>FTE</b>	Full Time Equivalent
<b>FTP</b>	Frequent Testing Plan
<b>GBFS</b>	Granulated Blast Furnace Slag
<b>GBN</b>	Green Business Network
<b>GCC</b>	Gulf Cooperation Council
<b>GDP</b>	Gross Domestic Product
<b>GHG</b>	Greenhouse Gas
<b>GJ</b>	Gigajoules
<b>GRP</b>	Glass Fibre Reinforced Polyester
<b>HAAD</b>	Health Authority of Abu Dhabi

## Table of Abbreviations continued

Abbreviation	Definition
<b>HAZMAT</b>	Hazardous Materials
<b>HAZOP</b>	Hazard and Operability Study
<b>HBI</b>	Hot Briquetted Iron
<b>HC</b>	Human Capital
<b>HIRA</b>	Hazard Identification and Risk Assessment
<b>HPD</b>	Health Product Declaration
<b>HS</b>	Health and Safety
<b>HSE</b>	Health, Safety and Environment
<b>HSM</b>	Heavy Section Mill
<b>HSRC</b>	High Sulphate Resistant Cement
<b>HSS</b>	Heat Stable Salts
<b>HVAC</b>	Heat, Ventilation and Air Conditioning
<b>ICV</b>	In-Country Value
<b>IDB</b>	Industrial Development Bureau
<b>IFRS</b>	International Financial Reporting Standards
<b>IMS</b>	Integrated Management System
<b>ISO</b>	International Organisation for Standardisation
<b>JSA</b>	Job Safety Analysis
<b>KEZAD</b>	Khalifa Economic Zones Abu Dhabi
<b>kWh</b>	Kilowatt-hour
<b>LEED</b>	Leadership in Energy and Environmental Design
<b>LMS</b>	Learning Management System
<b>LOTO</b>	Lockout Tagout
<b>LTIFR</b>	Lost Time Injury Frequency Rate
<b>m<sup>3</sup></b>	Cubic Meter
<b>MAO</b>	Maximum Acceptable Outage
<b>MCI</b>	Maintenance Cost Index
<b>MEED</b>	Middle East Economic Digest
<b>MOC</b>	Management of Changes
<b>MOCCA</b>	Ministry of Climate Change and Environment
<b>MOIAT</b>	Ministry of Industry and Advanced Technology
<b>MoU</b>	Memorandum of Understanding
<b>MSRC</b>	Moderate Sulphate Resistant Cement
<b>MTPA</b>	Million Tonnes per Annum
<b>MWh</b>	Megawatt-hour
<b>OEMP</b>	Operation Environment Management Plan
<b>OJT</b>	On-the-Job Training
<b>OPC</b>	Ordinary Portland Cement
<b>ORC</b>	Organic Rankine Cycle
<b>P&amp;ID</b>	Piping and Instrumentation Diagram
<b>PLC</b>	Portland Limestone Cement
<b>PMS</b>	Performance Management System

Abbreviation	Definition
<b>PO</b>	Purchase Order
<b>PTW</b>	Permit to Work
<b>PVC</b>	Polyvinyl Chloride
<b>QA&amp;E</b>	Quality Assurance and Environment
<b>QEHSS</b>	Quality, Environment, Health, Safety and Sustainability
<b>R&amp;D</b>	Research and Development
<b>RCC</b>	Recycled Content Certification
<b>Rebar</b>	Reinforcing Bar
<b>RFQ</b>	Request for Quote
<b>RM</b>	Rolling Mill
<b>RMC</b>	Risk Management Committee
<b>RMS</b>	Risk Management Section
<b>RO</b>	Reverse Osmosis
<b>RPO</b>	Recovery Point Objective
<b>RTO</b>	Recovery Time Objective
<b>SASO</b>	Saudi Arabian Standards Organisation
<b>SCA</b>	Securities and Commodities Authority
<b>SCM</b>	Supply Chain Management
<b>SCS</b>	Sustainable Constructional Steel
<b>SHC</b>	Specific Heat Consumption
<b>SIC</b>	Silicon Carbide
<b>SMP</b>	Steel Making Plant
<b>SOC</b>	Security Operations Centre
<b>SOPs</b>	Standard Operating Procedures
<b>SP</b>	Succession Planning
<b>SPC</b>	Specific Power Consumption
<b>SRC</b>	Sulphate Resistant Cement
<b>SVC</b>	Static VAR Compensator
<b>TA</b>	Talent Acquisition
<b>UN SDGs</b>	United Nations Sustainable Development Goals
<b>VAG</b>	Value-Added Grade
<b>VAR</b>	Volt-Ampere Reactive
<b>VEDC</b>	Vocational Education Development Centre
<b>WETEX</b>	Water, Energy, Technology and Environment Exhibition
<b>WI</b>	Work Instruction
<b>WSA</b>	World Steel Association
<b>WTP</b>	Water Treatment Plant
<b>WWF</b>	World Wildlife Fund
<b>ZonesCorp</b>	Corporation for Specialised Economic Zones

# Stakeholder Engagement Map

Ensuing from our understanding of the importance of effective stakeholder engagement, we have developed a stakeholder engagement map, identifying our key stakeholder groups, their priority issues and expectations, methods and frequency of engagement with them, along with the actions and outcomes of our engagements with them.

Stakeholders (Interested Parties)	Key Issues	Expectations	Engagement Method (Frequency)	Actions/Outcomes
<b>Category – Internal</b>				
<b>Shareholders, Board of Directors</b>	<ul style="list-style-type: none"> <li>Corporate governance</li> <li>Sustainable business and growth</li> <li>Quality, environmental, health and safety, social, financial performance</li> <li>Improved operational efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable growth and shareholder return</li> <li>Contribution to local economy</li> <li>Leading steel manufacturer</li> </ul>	<ul style="list-style-type: none"> <li>Board Information Pack (quarterly, annual)</li> <li>Board/Committee meetings (quarterly, as required)</li> <li>Site visits and correspondence</li> <li>Media releases and publications</li> </ul>	<ul style="list-style-type: none"> <li>Developed and integrated corporate governance policies to core business activities</li> <li>Identified key business risks</li> <li>Defined management plans</li> <li>Developed long-term and short-term strategic goals and objectives</li> <li>Corporate Social Responsibility programmes</li> <li>Namaa' project</li> </ul>
<b>Senior Management</b>	<ul style="list-style-type: none"> <li>Company's vision, mission and core values</li> <li>Company's culture and ethics</li> <li>Business strategy and planning</li> <li>Company BSC/ KPIs</li> <li>Customer satisfaction</li> <li>Risk and opportunities</li> <li>Quality, environmental, health and safety, social, financial performance</li> <li>Improved operational efficiency</li> <li>Management of change</li> <li>Internal and external communications</li> <li>Employees' safety culture</li> <li>Employees happiness</li> </ul>	<ul style="list-style-type: none"> <li>Understanding the Company's vision, mission and core values across the organisation</li> <li>Strictly adhere to Company's ethics and culture</li> <li>Strong safety culture and safety excellence</li> <li>Achievement of Company BSC/ KPIs</li> <li>High customer satisfaction</li> <li>Improved business performance</li> <li>Mitigation of risks and taking advantage of opportunities</li> <li>Mitigate any adverse effects arising from unplanned changes</li> <li>Improved performance of IMS and desired outputs</li> </ul>	<ul style="list-style-type: none"> <li>EXCO/senior management meeting</li> <li>Regular progress reporting of strategy implementation, monitoring and review of BSC/ KPIs</li> <li>Management review meeting (monthly/ quarterly)</li> <li>Operation meetings (weekly/monthly)</li> <li>HSE EXCO meeting (monthly)</li> <li>Operations function HSE meetings (monthly)</li> <li>Non-operation function HSE meeting (monthly)</li> </ul>	<ul style="list-style-type: none"> <li>Established Vision, Mission, Core Values and Company Policy</li> <li>Code of Ethics Policy</li> <li>HSE Principles and Life Saving Rules</li> <li>Safety Excellence Transformation Programme (AMAN)</li> <li>Established BSC/ KPIs</li> <li>Customer feedback process, Perception Survey</li> <li>Risk Management Framework</li> <li>Corporate Social Responsibility programmes</li> <li>Defined management action plans</li> <li>Change management plans</li> <li>Improvement in IMS</li> <li>Plant efficiency and capacity enhancement</li> <li>Product quality improvements and conformity</li> <li>Company website and intranet (Steel Hub)</li> <li>Namaa' project</li> <li>Happiness Committee</li> </ul>

Stakeholders (Interested Parties)	Key Issues	Expectations	Engagement Method (Frequency)	Actions/Outcomes
<b>Category – Internal</b>				
<b>Employees</b>	<ul style="list-style-type: none"> <li>Employee health, safety and work environment</li> <li>Remuneration and benefits</li> <li>Effective leadership and supervision</li> <li>Employee trainings and competency development</li> <li>Developing high potential employees</li> <li>Recognition and rewards</li> <li>Effective career development programme</li> <li>Employee performance</li> <li>Employees' engagement, empowerment and accountability</li> <li>Organisational knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Opportunities for personal and professional development and success</li> <li>Provide a safe, healthy and environmentally friendly workplace, and welfare and well-being</li> <li>Job security</li> <li>Reward and recognition; competitive compensation</li> </ul>	<ul style="list-style-type: none"> <li>Face to face communication</li> <li>Emails and other correspondence</li> <li>Online employee services system and correspondences</li> <li>Safety tours and site visits (monthly, quarterly)</li> <li>Internal training and toolbox talks (as per plan, as required)</li> <li>Participation in external training programmes, seminars, conferences, etc.</li> <li>Performance review (semi-annual, annual)</li> <li>Employee Engagement Survey</li> <li>Internal communication email blasts</li> <li>Behavioural observations (monthly)</li> <li>Middle management meeting (quarterly)</li> <li>Town Hall meeting</li> <li>Accelerated Young Leaders Programme</li> <li>Company programmes and events (as scheduled)</li> <li>Operations Department HSE meeting (monthly)</li> <li>H&amp;S Department HSE Meeting (monthly)</li> <li>Events and Recreation Programme Survey (annual)</li> <li>Suggestion schemes and grievance procedure</li> <li>Company website, press releases, social media posts</li> <li>Violation reporting</li> <li>HC Forum (quarterly)</li> </ul>	<ul style="list-style-type: none"> <li>Safety Champions recognition</li> <li>Behavioural safety tours</li> <li>Increased involvement of senior management in EHS programmes and initiatives – Aman Safety Excellence</li> <li>Review and updating of HC policies and procedures, including compensation and benefits, training and career development plans, performance management system, awards and recognitions, etc.</li> <li>Communication of Company policies, objectives and performance</li> <li>Development of talents through Bedayati Programme</li> <li>Future Leaders Programme, Talent Acquisition module</li> <li>Think Smart (online suggestion scheme)</li> <li>Tamkeen – Emirati Women's Committee</li> <li>SANAAD HC Digital Platform</li> <li>Internal promotions and organisational changes</li> <li>Enhanced competence and improved performance of employees</li> <li>Career Aspiration Programme</li> <li>Learning Management System (LMS)</li> <li>mySHEQ application</li> <li>Knowledge Management Hub</li> <li>Risk and BCM community</li> <li>Youth Council</li> <li>Yammer platform</li> </ul>

## Stakeholder Engagement Map continued

Stakeholders (Interested Parties)	Key Issues	Expectations	Engagement Method (Frequency)	Actions/Outcomes
<b>Category – External</b>				
<b>Lenders and financial institutions</b>	<ul style="list-style-type: none"> <li>Ability for repayments</li> <li>Company reputation for ethical business practices</li> <li>Potential liabilities due to environmental and social issues</li> </ul>	<ul style="list-style-type: none"> <li>Business performance</li> <li>Transparency and corporate governance</li> <li>Environmental and social risks</li> </ul>	<ul style="list-style-type: none"> <li>Financial reports (annual)</li> <li>Meetings and correspondences</li> </ul>	<ul style="list-style-type: none"> <li>Corporate governance policies and procedures</li> <li>Financial controls, management and investments</li> <li>Third party audits</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>Products and management system certifications</li> <li>Competitive price</li> <li>Customer complaints</li> <li>Green building schemes</li> <li>Ethical business practices</li> </ul>	<ul style="list-style-type: none"> <li>Product quality and availability</li> <li>Product innovation and solutions</li> <li>Product cost and value creation</li> <li>Reliable and efficient customer service</li> <li>On time delivery</li> </ul>	<ul style="list-style-type: none"> <li>Customer meeting/visits (monthly or as required)</li> <li>Perception (Customer Satisfaction) Survey</li> <li>Customer complaint meeting (monthly or as required)</li> <li>Events, conferences and exhibitions (as scheduled)</li> <li>Project qualification and tendering (as scheduled)</li> <li>Brochures, product catalogues</li> <li>Company website, press releases and social media posts</li> <li>Violation reporting</li> </ul>	<ul style="list-style-type: none"> <li>Effective implementation of Integrated Management System (IMS)</li> <li>Market Research and Pricing Committee</li> <li>Customer complaint management</li> <li>Product research and development</li> <li>Communication with authorities on product regulations and important duties</li> <li>Environmental product declaration reports</li> <li>Product and management system certifications</li> <li>Sustainable Constructional Steel Certification</li> <li>Corporate governance policies</li> </ul>
<b>Suppliers, service providers and contractors</b>	<ul style="list-style-type: none"> <li>Quality, environment, health and safety issues</li> <li>Cost reduction and value creation</li> <li>Long-term business relations</li> <li>Compliance and corporate governance policies</li> </ul>	<ul style="list-style-type: none"> <li>Quality products and services</li> <li>Responsible sourcing principles</li> <li>Sustainable supply chain practices</li> <li>Ethical business practice</li> <li>Long-term contracts to ensure sustainable demand</li> </ul>	<ul style="list-style-type: none"> <li>Direct communications through meetings, phone calls and emails</li> <li>Enquiries, coordination and clarification meetings</li> <li>Site visits and supplier audits (annual or as required)</li> <li>Supplier Feedback's Survey (annual)</li> <li>Training and awareness sessions (as scheduled)</li> <li>Contractors HSE meeting (monthly)</li> <li>Awards/recognition events (as scheduled)</li> <li>Company website, press releases and social media</li> <li>Violation reporting</li> </ul>	<ul style="list-style-type: none"> <li>Supply chain policies, manual and procedures</li> <li>Supplier qualification and registration</li> <li>Supplier audit and performance evaluation</li> <li>Partnership and long-term contract programme</li> <li>ARIBA digital procurement</li> <li>Improvement of supply chain functions</li> <li>Contract administration</li> <li>Code of Ethics and Whistleblowing policies</li> <li>Contractor management and safety programmes</li> </ul>
<b>Regulatory authorities</b>	<ul style="list-style-type: none"> <li>Emissions and discharges</li> <li>EHS Management System implementation</li> <li>Incidents and emergencies</li> <li>Environmental complaints</li> <li>Statutory and regulatory compliance</li> </ul>	<ul style="list-style-type: none"> <li>Regulatory compliance</li> <li>Environment, health and safety performance</li> <li>Contribution to local economy</li> <li>Climate change</li> <li>Self-regulation</li> </ul>	<ul style="list-style-type: none"> <li>Direct communication through meetings, phone calls and emails</li> <li>Conferences, forums and workshops</li> <li>Site visits, inspections and audits</li> <li>Company website and publications</li> </ul>	<ul style="list-style-type: none"> <li>Audit, inspections, monitoring and reporting</li> <li>Incident notification, investigation and reporting</li> <li>Implementation of environmental projects</li> <li>Carbon capture and storage project</li> <li>Business continuity and emergency procedures</li> <li>Regular performance and compliance reporting</li> <li>Environmental projects and initiatives</li> </ul>

Stakeholders (Interested Parties)	Key Issues	Expectations	Engagement Method (Frequency)	Actions/Outcomes
<b>Category – External</b>				
<b>Certification bodies</b>	<ul style="list-style-type: none"> <li>Effective implementation of management systems</li> </ul>	<ul style="list-style-type: none"> <li>Conformity to certification and technical standards</li> </ul>	<ul style="list-style-type: none"> <li>Direct communication through meetings, phone calls and emails</li> <li>Audits, inspections and site visits (semi-annual, annual)</li> <li>Conferences, forums and workshops (as scheduled)</li> <li>Company website and publications</li> <li>Participation in working group meetings</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of Integrated Management System</li> <li>Internal audits and inspections</li> <li>Regulations, standards and scheme reviews</li> <li>Training and awareness</li> </ul>
<b>Peer, industrial sector, and business community</b>	<ul style="list-style-type: none"> <li>Government regulations and initiatives</li> <li>Industrial and economic challenges</li> </ul>	<ul style="list-style-type: none"> <li>Responsible and ethical business practice</li> <li>Industry best practice and benchmarking</li> <li>Innovation and value creation</li> </ul>	<ul style="list-style-type: none"> <li>Meetings, presentations and site visits</li> <li>Project collaboration and studies</li> <li>Technical conferences, workshops and forums</li> <li>Exhibitions, sponsorships and industry events</li> <li>Websites and social media posts</li> <li>Publications and press releases, brochures and catalogues</li> </ul>	<ul style="list-style-type: none"> <li>Active involvement in industry and business community initiatives</li> <li>Endorsement of policies to industrial sectors and authorities</li> <li>Sharing of best practice and benchmarking</li> <li>Recycling, reuse of by-products and wastes</li> <li>Active participation in World Steel Association (WSA) programmes</li> <li>Active member of WSA Climate Action and Sustainability Programmes</li> <li>Benchmarking activities</li> </ul>
<b>Local society and community</b>	<ul style="list-style-type: none"> <li>Occupational health and safety issues</li> <li>Emissions and environmental complaints</li> <li>Employment and Emiratisation</li> <li>Promoting local products and business initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Supporting community development and local economy</li> <li>Environmental protection and cultural heritage preservation</li> </ul>	<ul style="list-style-type: none"> <li>Community and medical outreach programmes</li> <li>Cultural events</li> <li>Training and awareness sessions</li> <li>Site visits, plant tours</li> <li>Scholarships and internship programme</li> <li>Charity projects and volunteering in community services</li> <li>Conferences and seminars</li> <li>Brochures, press release and social media posts</li> <li>Violation reporting</li> <li>Company website and social media platforms</li> </ul>	<ul style="list-style-type: none"> <li>Promoting health and safety programme and improving EHS performance</li> <li>Emiratization and career development programme for UAE Nationals</li> <li>Scholarships and work placement programmes</li> <li>Cultural, community and charity programmes and sponsorships</li> <li>Corporate Social Responsibility programmes</li> <li>Communication through social media</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>Availability of information for market research and campaigns</li> <li>Promotion of new products and innovations</li> <li>Reliable and timely information</li> </ul>	<ul style="list-style-type: none"> <li>Information of latest news, trends, events and industry practices to public or interested parties</li> <li>Journalism ethics and transparency</li> </ul>	<ul style="list-style-type: none"> <li>Public and POSM advertisements</li> <li>Events</li> <li>Face to face meetings</li> <li>Case studies</li> <li>Annual reports</li> <li>Press releases and social media posts</li> <li>Brochures, catalogues and flyers</li> <li>Company website and social media platforms</li> </ul>	<ul style="list-style-type: none"> <li>Publishing, posting or press release of news, events and awards</li> <li>Interviews, site visits and use of reliable platforms</li> <li>Follow-up and verification of information</li> <li>Use of different social media platforms for internal and external communications</li> </ul>

# Maturity Matrix

Sustainability Principles	Practices	Maturity	Programmes and Plans
<b>Inclusivity</b>	Stakeholder identification and mapping	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Emirates Steel Arkan considers its existing stakeholders to be from within the company, community, industry, national, regional, and international environment. The Company is also identifying new and potential stakeholders from new markets, new customers, suppliers, impending regulations, government policies etc. which might be relevant to the Company's long-term and short-term goals and activities.</li> </ul>
	Open engagement in various formats for various stakeholders	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Different methods and platforms are used in engaging different stakeholders to ensure the effectiveness, efficiency, and timeliness of the engagement activity. Emirates Steel Arkan is always seeking opportunities and the most appropriate means to reach and engage with stakeholders whether using traditional means or new technology such as personal visits, interviews, research, surveys, press releases, the internet, social media, publications, forums, conferences, meetings, events, emails, etc.</li> </ul>
	Stakeholder issue identification	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>From each engagement activity, legitimate issues relevant to Company activities and objectives are identified and reviewed by responsible persons in the organisation and discussed during management meetings. Action plans and programmes are defined and implemented to address material issues.</li> </ul>
	Communication of organisation's response to issues raised	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Emirates Steel Arkan has developed and implemented policies and procedures to respond to legitimate and relevant issues raised by stakeholders such as customer complaints, community complaints, supplier's concerns, employee complaints, etc.</li> </ul>
<b>Integrity</b>	Leadership shown - clear accountabilities documented	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>As a government-owned entity, the Company follows strict corporate governance policies to ensure ethical business practice and compliance with legislation.</li> <li>Emirates Steel Arkan is also implementing an integrated management system certified against ISO9001, ISO14001, ISO45001, OSHAD, sustainability management system and other local and international standards. The IMS policies and procedures defines its commitments, responsibilities, authorities, and accountabilities across the organisation.</li> <li>Emirates Steel Arkan has been awarded several recognitions such as the Sheikh Khalifa Excellence Diamond Award based on the EFQM excellence model and has obtained certifications and approval from different certification bodies.</li> <li>Emirates Steel is also an active member of World Steel and regularly participates in safety and CO2 data collection programmes.</li> </ul>
	Code of Conduct adopted	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Emirates Steel Arkan strictly complies with laws and regulations. It is also implementing Code of Ethics (Conduct), Fraud Control and Whistleblowing policies which are communicated to all employees (and the public through the Company website) and also following corporate governance policies and procedures to ensure each employee conducts his activities and dealings with co-employees, customers, suppliers, authorities and the community according to laws and regulations and highest ethical business practices.</li> <li>Suppliers acknowledge to abide and follow the ES Code of Conduct when they register.</li> </ul>
	Integrity risks identified and managed	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Risk assessment and management is implemented at different levels across the organisation. Risk assessments on the different aspects and activities of the Company are carried out by internal teams and/or external consultants. The risk register identifies the monitoring and control measures to mitigate and reduce the risk to an acceptable level.</li> <li>The Risk Management and Business Continuity Management (BCM) team is identifying and monitoring the overall business risks of the Company.</li> <li>The Company is also implementing near-miss and incident reporting and investigation, emergency preparedness and drills.</li> </ul>

Sustainability Principles	Practices	Maturity	Programmes and Plans
<b>Stewardship</b>	Sustainable development culture	<b>Engaged</b>	<ul style="list-style-type: none"> <li>Emirates Steel Arkan employs people and contractors from different backgrounds, cultures, and nationalities.</li> <li>Emirates Steel Arkan has integrated and implemented the sustainability principles in its business, management system, policies, and procedures. It is also implementing programmes to develop its employees to adopt the culture of sustainability through regular engagement, training, behavioural and safety tours.</li> </ul>
	Responsible/sustainable supply chain approach adopted	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Emirates Steel Arkan is managing its supply chain to ensure the flow of materials and information and provide the highest degree of satisfaction and value to its stakeholders.</li> <li>Strategic partnerships and relationships are developed with suppliers with the most impact to the Company's business and activities.</li> <li>Emirates Steel Arkan is collaborating with preferred suppliers and/or service providers in developing capabilities which would address existing and future needs of the Company in a cost-effective manner such as by-product and waste management processes, logistics, service outsourcing, etc.</li> <li>Purchasing policies and procedures are reviewed and updated to optimise the process and ensure alignment with corporate governance policies and procedures.</li> <li>Suppliers acknowledge to abide and follow the ES Code of Conduct when they register.</li> </ul>
	Systematic environmental management	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Emirates Steel Arkan is implementing an Integrated Management System certified against ISO 14001 and the Abu Dhabi Environment, Health and Safety Management System and complying with legal regulations and other requirements.</li> <li>The Environmental Impact Assessment and Operation Environmental Management Plan are also implemented across the organisation.</li> <li>Aspects registered for each department's activities have been developed to assess the environmental impacts and identify the monitoring and mitigating controls to reduce the impacts.</li> </ul>
	Systematic social management	<b>Proactive and learning</b>	<ul style="list-style-type: none"> <li>Emirates Steel Arkan is implementing an Integrated Management System certified against ISO14001, ISO45001, OSHAD Standard Framework, local regulations, and other requirements.</li> <li>Risk assessments are carried out by internal and external teams to identify the hazards/risks and the required control measures to reduce the risk to an acceptable level.</li> <li>Health and Safety programmes are communicated and implemented across the organisation to prevent injuries, illness and incidents.</li> <li>Emirates Steel Arkan 's approach towards community development has evolved considerably over the years and increasingly become integral to Company business practice in order to build trust and make a positive contribution to the social and economic development of the communities around its operating sites.</li> <li>Emirates Steel Arkan's strategy for shaping and contributing to communities focuses on 3 key areas: education, health, and community development. Corporate Social Responsibility (CSR) programmes and initiatives are regularly carried out to address issues in the community. Emirates Steel Arkan is helping to empower the community by providing education to young, talented Emiratis and providing them opportunities to improve their skills and competency to be valuable members of the society. The work placement programme also provides the scholars the opportunity to join Emirates Steel Arkan's workforce where they can develop and have successful careers.</li> <li>Emirates Steel Arkan cooperates with government and non-government organisations to share best practices and provide support to community programmes.</li> <li>Emirates Steel Arkan is employing more than 2,500 employees and hiring more than 700 contractors under service providers. The Company is also actively driving its Emiratisation programme aiming to increase its UAE Nationals to 23% of its workforce through sponsorship and participation in job fairs.</li> <li>Emirates Steel Arkan is also regularly donating funds and resources to charitable institutions and health care facilities.</li> </ul>

## Maturity Matrix continued

Sustainability Principles	Practices	Maturity	Programmes and Plans
Stewardship	Systematic economic management	Proactive and learning	<ul style="list-style-type: none"> <li>Through Senaat, Emirates Steel Arkan is majority owned by ADQ, one of the region's largest holding companies with a broad portfolio of major enterprises spanning key sectors of Abu Dhabi's diversified economy.</li> <li>Emirates Steel Arkan is the largest integrated steel plant in the UAE, producing 3.5 million tonnes of steel products per annum. It continues to demonstrate resilient cash flows and strong growth opportunities.</li> <li>Emirates Steel Arkan is spending more than AED 2 billion on local purchases, employs more than 3,400 employees and contractors which contributes to Abu Dhabi's economy.</li> <li>Emirates Steel Arkan has captured a large portion of the local market and had a positive growth in the export market through exporting steel products to more than 50 countries globally.</li> <li>Emirates Steel Arkan is also supporting the development of medium and small scale down stream industries by providing innovative products, technical assistance and services.</li> </ul>
	Skills and training	Proactive and learning	<ul style="list-style-type: none"> <li>Emirates Steel Arkan strives to develop a culture of progressive learning by regularly assessing the learning and development needs of employees and providing opportunities to enhance their skills and competencies.</li> <li>Emirates Steel Arkan is investing in its people to improve competencies and maintain its competitive edge.</li> <li>Training requirements of employees are identified by Line Managers during performance reviews, new assignments/tasks, new responsibilities, new requirements from regulations or standards, new business or organisational requirements.</li> </ul>
	Career development	Proactive and learning	<ul style="list-style-type: none"> <li>Emirates Steel Arkan is providing its employees opportunity for growth and a successful career in the Company. Career development planning is a joint responsibility of the employee and the management to provide linkage of employee's performance and career growth.</li> <li>Emirates Steel Arkan recognises the need to develop employees from within the work force to acquire higher roles and responsibilities to meet future business objectives and the employee's career aspirations through succession planning.</li> <li>Specific attentions are provided to UAE Nationals at all stages of their career in the Company through internship, management training schemes, and continuing development schemes.</li> </ul>
Transparency	Identify appropriate metrics/KPIs	Engaged	<ul style="list-style-type: none"> <li>Emirates Steel Arkan is majority owned by ADQ; a government owned entity mandated by the Abu Dhabi Government to develop capital intensive investments to contribute to Abu Dhabi's Economic Vision 2030. As a government owned company, Emirates Steel Arkan is reporting its performance to the owners, authorities and providing information to other interested parties upon request.</li> <li>Information on Company performance, programmes and practices are periodically published on the Company website, in company brochures, newsletters, and press releases.</li> </ul>
	Monitor performance	Proactive and learning	<ul style="list-style-type: none"> <li>Emirates Steel Arkan has developed BSC and KPIs to measure its performance, considering global benchmark.</li> </ul>
	Publicly report management practices and performance	Proactive and learning	<ul style="list-style-type: none"> <li>Our management practices and performance are regularly being reported to different stakeholders such as EAD, OSHAD, SCAD, IDB. ES has published its 2022 sustainability report.</li> </ul>
	Review performance	Proactive and learning	<ul style="list-style-type: none"> <li>Emirates Steel Arkan has reviewed BSC and KPIs to measure its performance, considering global benchmark.</li> </ul>



# GRI Content Index

Emirates Steel Arkan has reported in accordance with the GRI Standards for the period from 1 January 2022 to 31 December 2022. The table below provides a reference for GRI content in the report.

GRI Standard	Disclosure	Page Number(s) and/ or Direct Answer	Omission
<b>GRI 1: Foundation 2021</b>	<b>GRI 1 does not include any disclosures</b>		
<b>General Disclosures</b>			
<b>GRI 2: General Disclosures 2021</b>	2-1 Organisational details	10, 11	
	2-2 Entities included in the organisation's sustainability reporting	0, 11	
	2-3 Reporting period, frequency and contact point	0	
	2-4 Restatements of information	No restatement of information in the report	
	2-5 External assurance	This report has not been externally assured.	
	2-6 Activities, value chain and other business relationships	14, 15, 16, 17, 18, 19	
	2-7 Employees	121, 122, 123	
	2-8 Workers who are not employees	122	
	2-9 Governance structure and composition	24, 25, 26	
	2-10 Nomination and selection of the highest governance body	24, 26	
	2-11 Chair of the highest governance body	25	
	2-12 Role of the highest governance body in overseeing the management impacts	24, 26, 29	
	2-13 Delegation of responsibility for managing impacts	24, 26, 29	
	2-14 Role of the highest governance body in sustainability reporting	33	
	2-15 Conflicts of interest	24, 46, 47, 48	
	2-16 Communication of critical concerns	32, 50	
	2-17 Collective knowledge of the highest governance body	25, 26	
	2-19 Remuneration policies	118, 124	
	2-21 Annual total compensation ratio	125	
	2-22 Statement on sustainable development strategy	2, 3	

GRI Standard	Disclosure	Page Number(s) and/ or Direct Answer	Omission
<b>General Disclosures</b>			
<b>GRI 2: General Disclosures 2021</b>	2-23 Policy commitments	24, 48	
	2-24 Embedding policy commitments	46, 47, 48	
	2-25 Processes to remediate negative impacts	47, 48, 152	
	2-26 Mechanisms for seeking advice and raising concerns	75, 76	
	2-27 Compliance with laws and regulations	26, 46, 47, 48, 114, 115	
	2-28 Membership associations	11	
	2-29 Approach to stakeholder engagement	164, 165, 166, 167	
<b>Material Topics</b>			
<b>GRI 3: Material Topics 2021</b>	3-1 Process to determine material topics	32, 33	
	3-2 List of material topics	34, 35	
<b>Economic Performance</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	38, 39	
<b>GRI 201: Economic Performance 2016</b>	201-1 Direct economic value generated and distributed	40, 41, 42, 43	
	201-2 Financial implications and other risks and opportunities due to climate change	38, 39	
<b>Market Presence</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	38, 39, 49	
<b>GRI 202: Market Presence 2016</b>	202-2 Proportion of senior management hired from the local community	122, 123	
<b>Procurement Practices</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	38, 39, 50, 51	
<b>GRI 204: Procurement Practices 2016</b>	204-1 Proportion of spending on local suppliers	52, 53	



## GRI Content Index continued

GRI Standard	Disclosure	Page Number(s) and/or Direct Answer	Omission
<b>Material Topics</b>			
<b>Anti-corruption</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	46, 47	
<b>GRI 205: Anti-corruption 2016</b>	205-1 Operations assessed for risks related to corruption	46	
	205-2 Communication and training about anti-corruption policies and procedures	48	
	205-3 Confirmed incidents of corruption and actions taken	46	
<b>Materials</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	104	
<b>GRI 301: Materials 2016</b>	301-1 Materials used by weight or volume	105, 106, 107	
	301-2 Recycled input materials used	105, 107	
<b>Energy</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	80, 81, 84, 87, 88	
<b>GRI 302: Energy 2016</b>	302-1 Energy consumption within the organisation	89, 90	
	302-2 Energy consumption outside of the organisation	89, 90	
	302-3 Energy intensity	89, 90	
	302-4 Reduction of energy consumption	94	
	302-5 Reductions in energy requirements of products and services	88, 89	
<b>Water and Effluents</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	80, 81, 108, 109	
<b>GRI 303: Water and Effluents 2018</b>	303-1 Interactions with water as a shared resource	108, 109	
	303-2 Management of water discharge-related impacts	108, 109, 110	
	303-3 Water withdrawal	110	
	303-4 Water discharge	110	
	303-5 Water consumption	110	

GRI Standard	Disclosure	Page Number(s) and/or Direct Answer	Omission
<b>Material Topics</b>			
<b>Biodiversity</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	80, 81, 112	
<b>GRI 304: Biodiversity 2016</b>	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	112	
	304-2 Significant impacts of activities, products, and services on biodiversity	112	
	304-3 Habitats protected or restored	112	
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	112	
<b>Emissions</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	80, 81, 84, 90, 91	
<b>GRI 305: Emissions 2016</b>	305-1 Direct (Scope 1) GHG emissions	92	
	305-2 Energy indirect (Scope 2) GHG emissions	92	
	305-3 Other indirect (Scope 3) GHG emissions	92	
	305-4 GHG emissions intensity	92	
	305-5 Reduction of GHG emissions	91, 92, 94	
	305-7 Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant air emissions	93	
<b>Waste</b>			
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	80, 81, 96, 97, 99, 100, 101, 102	
<b>GRI 306: Waste 2020</b>	306-1 Waste generation and significant waste-related impacts	97, 98	
	306-2 Management of significant waste-related impacts	99, 100, 101, 102	
	306-3 Waste generated	97, 98	
	306-4 Waste diverted from disposal	99, 102	
	306-5 Waste directed to disposal	99, 102	

## GRI Content Index continued

GRI Standard	Disclosure	Page Number(s) and/or Direct Answer	Omission
<b>Material Topics</b>			
<b>Supplier Environmental Assessment</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	50, 51	
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	53	
	308-2 Negative environmental impacts in the supply chain and actions taken	50, 51	
<b>Employment</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	118, 120, 121, 124	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	122, 123	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	120, 121, 124	
	401-3 Parental leave	124, 125	
<b>Occupational Health and Safety</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	118, 139	
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	139, 140	
	403-2 Hazard identification, risk assessment and incident investigation	145, 146	
	403-3 Occupational health services	145	
	403-4 Worker participation, consultation and communication on occupational health and safety	140, 141	
	403-5 Worker training on occupational health and safety	142, 143, 144	
	403-6 Promotion of worker health	145	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	145, 146	
	403-8 Workers covered by an occupational health and safety management system	138	
	403-9 Work-related injuries	147, 148, 149	
	403-10 Work-related ill health	147	

GRI Standard	Disclosure	Page Number(s) and/or Direct Answer	Omission
<b>Material Topics</b>			
<b>Training and Education</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	118, 128, 129	
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	130, 131	
	404-2 Programmes for upgrading employee skills and transition assistance programmes	128, 129, 131, 132, 133, 134, 135	
	404-3 Percentage of employees receiving regular performance and career development reviews	129	
<b>Diversity and Equal Opportunity</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	118, 136	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	25, 121, 122, 123, 134	
	405-2 Ratio of basic salary and remuneration of women to men	136	
<b>Non-discrimination</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	24, 47, 48	
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	48	
<b>Child Labour</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	48	
GRI 408: Child Labour 2016	408-1 Operations and suppliers at significant risks for incidents of child labour	48, 53	
<b>Forced or Compulsory Labour</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	48	
GRI 409: Forced or Compulsory Labour 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour	48, 53	
<b>Local Communities</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	118, 152, 153, 155	
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments and development programmes	152, 153, 154, 155, 156, 157	
	413-2 Operations with significant and potential negative impacts on local communities	152, 153, 154, 155, 156, 157	
<b>Supplier Social Assessment</b>			
GRI 3: Material Topics 2021	3-3 Management of material topics	50, 51	
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	53	
	414-2 Negative social impacts in the supply chain and actions taken	50, 51	

# ADX Content Index

Category	Metric	Calculation	Page Number (s) and/or Direct Answer
Environment	E1. GHG Emissions	E1.1 Total amount, in CO2 equivalents, for Scope 1	92
		E1.2 Total amount, in CO2 equivalents, for Scope 2	92
		E1.3 Total amount, in CO2 equivalents, for Scope 3	92
	E2. Emissions Intensity	E2.1 Total GHG emissions for output scaling factor	92
		E2.2 Total non-GHG emissions per output scaling factor	93
	E3. Energy Usage	E3.1 Total amount of energy directly consumed	90, 91
		E3.2 Total amount of energy indirectly consumed	90, 91
	E4. Energy Intensity	Total direct energy usage per output scaling factor	90, 91
	E5. Energy Mix	Percentage: Energy usage by generation type	89, 90, 91
	E6. Water Usage	E6.1 Total amount of water consumed	110
		E6.2 Total amount of water reclaimed	110
	E7. Environmental Operations	E7.1 Does your company follow a formal Environmental Policy?	Yes
		E7.2 Does your company follow specific waste, water, energy and/or recycling policies?	Yes
		E7.3 Does your company use a recognised energy management system?	Yes
	E8. Environmental Oversight	Does your Management Team oversee and/or manage sustainability issues?	Yes
	E9. Environmental Oversight	Does your Board oversee and/or manage sustainability issues?	Yes
E10. Climate Risk Mitigation	Total amount invested, annually, in climate-related infrastructure, resilience and product development	AED 3,608,010	

Category	Metric	Calculation	Page Number (s) and/or Direct Answer
Social	S1. CEO Pay Ratio	S1.1 Ratio: CEO total compensation to median Full Time Equivalent (FTE) total compensation	125
		S1.2 Does your company report this metric in regulatory filings?	No
	S2. Gender Pay Ratio	Ratio: Median male compensation to median female compensation	136
	S3. Employee Turnover	S3.1 Percentage: Year-over-year change for full-time employees	121, 122, 123
		S3.2 Percentage: Year-over-year change for part-time employees	122, 123
		S3.3 Percentage: Year-over-year change for contractors/consultants	122, 123
	S4. Gender Diversity	S4.1 Percentage: Total enterprise headcount held by men and women	121, 122, 123
		S4.2 Percentage: Entry- and mid-level positions held by men and women	121, 122, 123
		S4.3 Percentage: Senior- and executive-level positions held by men and women	121, 122, 123
	S5. Temporary Worker Ratio	S5.1 Percentage: Total enterprise headcount held by part-time employees	122, 123
		S5.2 Percentage: Total enterprise headcount held by contractors and/or consultants	122, 123
	S6. Non-discrimination	Does your company follow a non-discrimination policy?	Yes
	S7. Injury Rate	Percentage: Frequency of injury events relative to total workforce time	147, 148, 149
	S8. Global Health and Safety	Does your company follow an occupational health and/or global health and safety policy?	Yes
	S9. Child and Forced Labour	S9.1 Does your company follow a child and/or forced labour policy?	Yes
		S9.2 If yes, does your child and/or forced labour policy also cover suppliers and vendors?	Yes
S10. Human Rights	S10.1 Does your company follow a human rights policy?	Yes	
	S10.2 If yes, does your human rights policy also cover suppliers and vendors?	Yes	
S11. Nationalisation	Percentage of national employees	134	
S12. Community Investment	Amount invested in the community as a percentage of company revenues	153	

## ADX Content Index continued

Category	Metric	Calculation	Page Number (s) and/or Direct Answer
Governance	G1. Board Diversity	G1.1 Percentage: Total board seats occupied by men and women	25
		G1.2 Percentage: Committee chairs occupied by men and women	Men: 100%
	G2. Board Independence	G2.1 Does your company prohibit CEO from serving as board chair? Yes/No	Yes
		G2.2 Percentage: Total board seats occupied by independent board members	25
	G3. Incentivised Pay	Are executives formally incentivised to perform on sustainability?	No
	G4. Supplier Code of Conduct	G4.1 Are your vendors or suppliers required to follow a Code of Conduct?	Yes, it is part of the registration process.
		G4.2 If yes, what percentage of your suppliers have formally certified their compliance with the code?	100%
	G5. Ethics and Prevention of Corruption	G5.1 Does your company follow an Ethics and/or Prevention of Corruption policy?	Yes
		G5.2 If yes, what percentage of your workforce has formally certified its compliance with the policy?	100%
	G6. Data Privacy	G6.1 Does your company follow a Data Privacy policy?	Yes
		G6.2 Has your company taken steps to comply with GDPR rules?	No, we are not required to comply with GDPR rules in the UAE.
	G7. Sustainability Reporting	Does your company publish a sustainability report?	Yes
	G8. Disclosure Practices	G8.1 Does your company provide sustainability data to sustainability reporting frameworks?	Yes
		G8.2 Does your company focus on specific UN SDGs?	Yes
		G8.3 Does your company set targets and report progress on the UN SDGs?	Yes
G9. External Assurance	Are your sustainability disclosures assured or verified by a third-party audit firm?	Partially	

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