

# **Fast-tracking Decarbonisation In Heavy Industry through NDC Enhancement – MENA**

30<sup>th</sup> Apr 2024

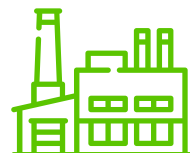
# EMSTEEL at a Glance

# About Us



## Public joint stock company

ADX: EMSTEEL;  
Part of ADQ (88%)



UAE's largest steel & cement producer (3.5 MTPA of long steel products and 4.5 MTPA of Cement and Blocks)



More than **3,500 employees** from over 60 nationalities



Domestic market share of **60% for Steel and 15% for Cement**



**Customers** in more than **72 countries** including Europe, the Americas, Asia, the Middle East and North Africa



**Share of 10%** in Abu Dhabi's manufacturing activity output in 2024



**World class safety performance** with the lowest lost time injuries (LTIs)



**52% Emiratisation** (engineers and technicians about 60%)



**-45% carbon** intensity in the steel division compared to WSA average

# EMSTEEL state-of-the-art facilities uphold sustainability, meeting stringent UAE and global environmental regulations

Tight design principles and granular inspections and quality control



## Sustainability Recognitions 2024



## Obtained most challenging Certifications



## Improved on our ESG Ratings



2023 2024

B- B  
Climate Change

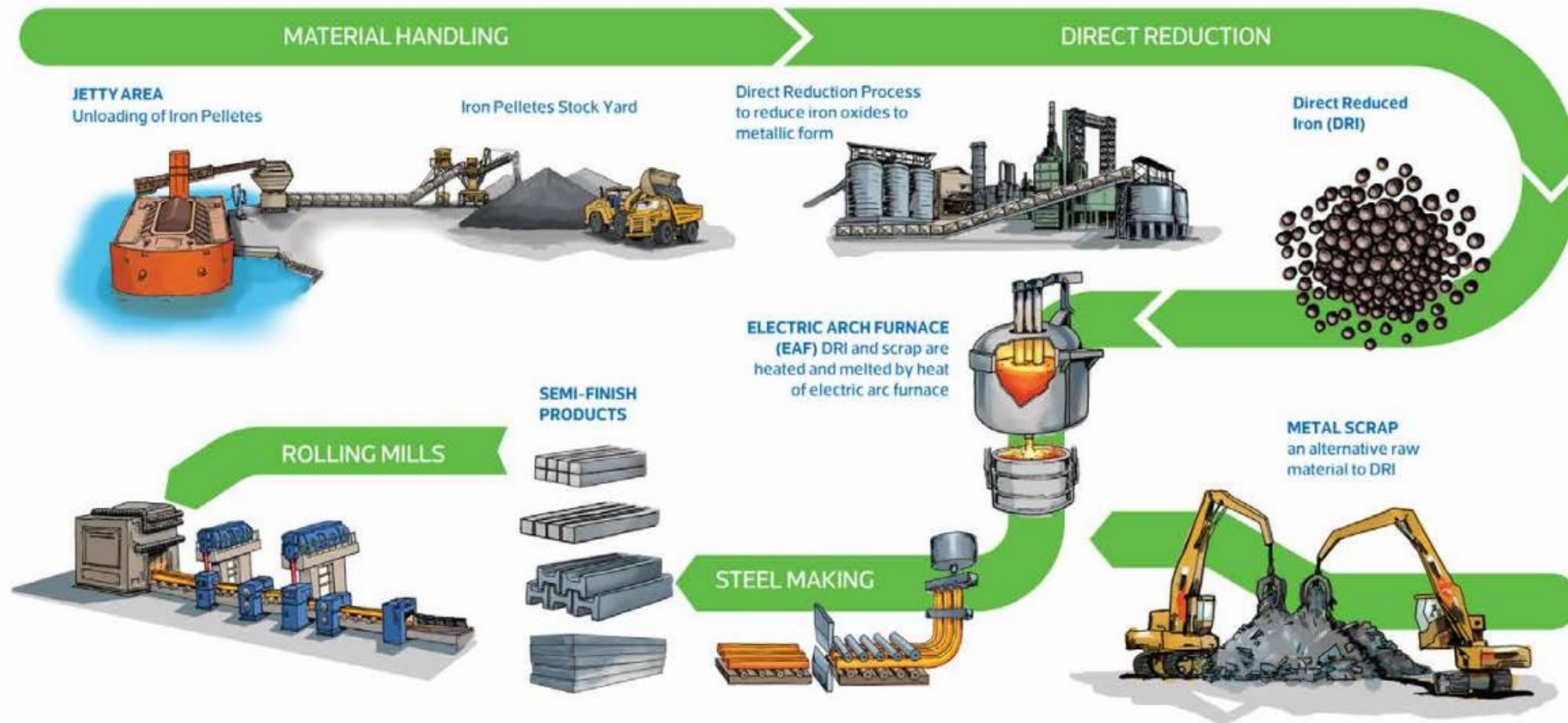
B-  
Water Security



2023 2024

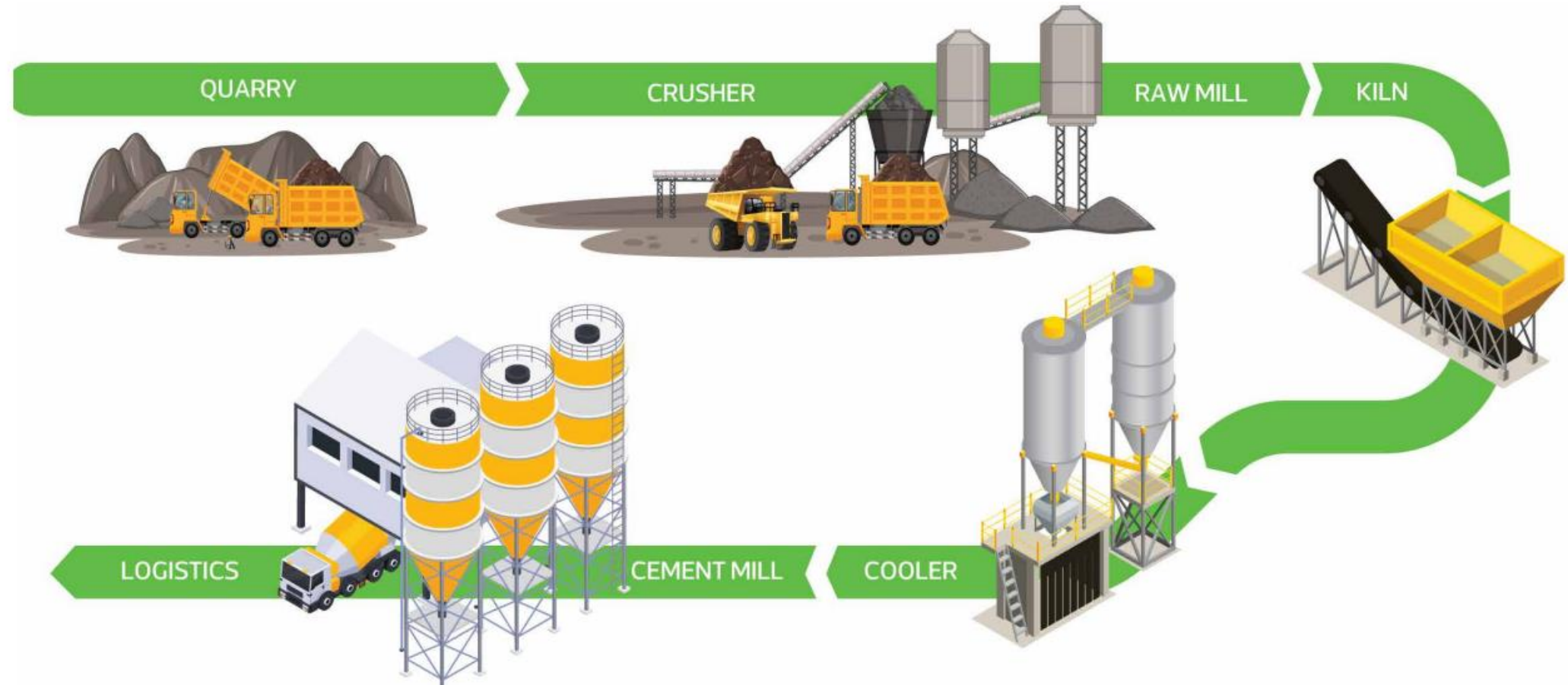
Pass Very Good  
Responsible Sourcing

# Emirates Steel Process Route





# Al Ain Cement Factory Process Route



# Decarbonization Strategy

# EMSTEEL has set a reduction targets, aligned to the UAE's NDC

## Alignment with NDC 3.0



## Key Abatement Levers



Carbon Capture



Alternative Fuel Switching and Green Hydrogen



Use of Recycled Steel Scrap and Alternative Raw Materials in Cement



Clean and Renewable Energy



Electrification



Reducing Clinker to Cement Ratio



Energy Efficiency

## 2030 emissions reduction targets (scope 1 and 2)

- **GHG Emissions** are identified as the highest priority material topic in EMSTEEL's double materiality assessment.
- Decarbonization is the company's top strategic focus, emphasizing Scope 1 and 2 emissions.
- EMSTEEL's 2030 targets (baseline year: 2019):
  - **40%** GHG reduction in the Steel Business
  - **30%** GHG reduction in the Cement Bisness
- **Long-term goal:** Net zero by 2050, aligned with the UAE Net Zero by 2050 Strategic Initiative and the Paris Agreement.
- 22% of Scope 1 emissions captured through carbon capture initiatives at Emirates Steel
- Clean and renewable energy use expanded to:
  - **86%** at Emirates Steel
  - **14%** at Al Ain Cement Factory

## Our 2030 Emission Reduction Targets

40%  
Steel

30%  
Cement



# Decarbonization strategies leading success at EMSTEEL

## Green Hydrogen – Pilot project



EMSTEEL has partnered with Masdar, a UAE-based renewable energy and sustainability company, to develop a ground-breaking green hydrogen to steel demonstration project in the UAE with the potential to significantly reduce CO<sub>2</sub> emissions in the steel-making process when scaled-up.



The project consists of using green hydrogen to extract iron from iron ore, and it has the potential to reduce CO<sub>2</sub> emissions in steel making by up to 95 percent. The renewable hydrogen had been certified by Avance Labshydrogen code manager accredited by the International Tracking Standard Foundation, in accordance with the recently released ISO 19870, and validated by Bureau Veritas.



Eng. Saeed Ghumran Al Remeithi, Group Chief Executive Officer of EMSTEEL, commented:

“ We are committed to propelling decarbonization efforts in the sector, in support of the UAE’s Net Zero by 2050 Strategic Initiative. Our efforts to date have been fruitful, with our current utilization of clean energy sources rising above 80% in 2023. EMSTEEL is also the first steelmaker in the world to capture part of its CO<sub>2</sub> emissions, enabling us to operate with 45% less carbon intensity than the global average. Our partnership with Masdar will play a key role in continuing to build on our efforts to decarbonize this hard-to-abate sector and the downstream supply chain. ”

# Decarbonization strategies leading success at EMSTEEL

## Largest Industrial Solar PV Rooftop Project

- Strategic partnership with Yellow Door Energy to build the largest industrial solar PV rooftop project in the UAE (31.5 MWp).
- Covers 40 roofs at EMSTEEL's ICAD 1 site; includes rooftop and bifacial carport solar panels.
- Expected to generate 50 million kWh/year, offsetting 16,000 tCO<sub>2</sub>/year (Scope 2) over 25 years.
- Fully self-consumed clean energy – reducing both carbon footprint and energy costs.
- Aligned with EMSTEEL's decarbonization strategy and the UAE Net Zero by 2050 initiative.
- Project delivery by Yellow Door Energy under a solar lease model – no upfront cost for EMSTEEL.

### Announcement:

A strategic partnership with Yellow Door Energy, the largest sustainable energy partner for businesses in the Middle East and Africa, to develop the largest industrial solar PV rooftop project in the UAE. 25<sup>th</sup> March 2025



Construction is set to commence in 2025, with commissioning targeted for 2026

