



# Net Zero Strategy





# Making a Difference

UIS Milestones and  
Initiatives



# Product Sustainability

At Union Iron & Steel (UIS), we recognise that the sustainability of our products is central to reducing lifecycle impacts across the construction value chain. To support this, UIS has developed and published Environmental Product Declarations (EPDs) in line with ISO 14025 and EN 15804 standards, covering our reinforcing bar products manufactured in Abu Dhabi. These third-party verified EPDs provide transparent, standardised, and comprehensive data on environmental performance, including Global Warming Potential and other key impact categories, from cradle-to-gate.

By leveraging the insights from our EPDs, UIS is working closely with contractors, consultants, and developers to quantify embodied carbon, optimise material efficiency, and support low-carbon building certifications such as LEED and BREEAM. Our participation in the EPD ecosystem exemplifies our commitment to product transparency and accountability, enabling customers to make informed sustainability choices.

Looking ahead, UIS intends to expand the scope of its product sustainability disclosures and continue aligning with international best practices, further strengthening our position as a responsible supplier of sustainable steel rebar in the UAE market.



**Environmental Product Declaration**

**Statement of Verification**

CARES EPD No.: 0005

Issue: 00



This is to verify that the  
**Environmental Product Declaration**  
Provided by:  
Union Iron & Steel Company LLC,  
Is in accordance with the requirements of  
ISO 14025:2010 and EN 15804:2017 + A2:2019/AC:2021  
and BRE Global PCR for Type III EPD of Construction Products  
to EN 15804+A2, PMS14.3.1  
This declaration is for:  
Carbon Steel Reinforcing Bar (Direct Reduced Iron production route)

**Company address:**

Union Iron & Steel Company LLC  
P.O. Box 6599  
ICAD-1, Alkassabah  
Abu Dhabi, U.A.E.

  
مركز الحديد والصلب  
UNION IRON & STEEL  
MADE IN U.A.E.



  
Signed for CARES  
15 October 2024  
First Issue Date

**Ladin Camil**  
Operator  
14 November 2027  
Expiry Date

15 October 2024  
Date of this Issue

14 November 2027  
Expiry Date

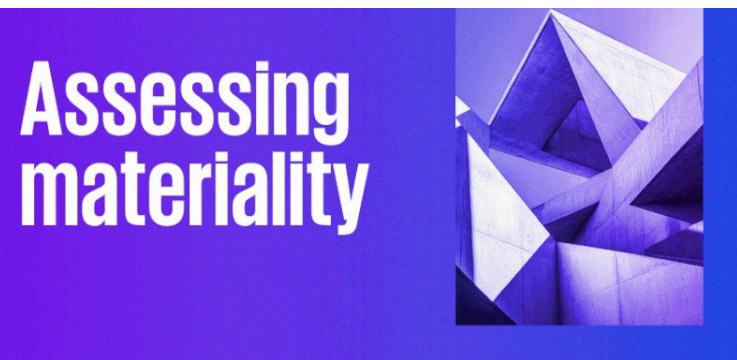
The validity of this Environmental Product Declaration can be verified by contacting CARES on +44 (0)1732 450 000 or  
visiting CARES website <https://www.carescertification.com/certification-schemes/environmental-product-declarations>  
CARES, Pembroke House, 21 Pembroke Road, Sevenoaks, Kent TN13 1XR

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# Materiality Assessment

Union Iron & Steel (UIS) has undertaken a comprehensive ESG materiality assessment to identify the sustainability issues most relevant to our stakeholders and with the greatest potential impact on our business. Guided by international frameworks including GRI, TCFD, SASB and IFRS S1, the process involved engagement the all stakeholders relevant to our business.

The assessment highlighted environmental and operational topics such as energy use, water efficiency, emissions reduction, resource sourcing, and workplace safety as top priorities, reflecting the strong alignment between stakeholder expectations and UIS's strategic objectives. By embedding these findings into our business planning, UIS is enhancing resilience, strengthening stakeholder trust, and ensuring that our long-term growth is underpinned by responsible and sustainable practices.

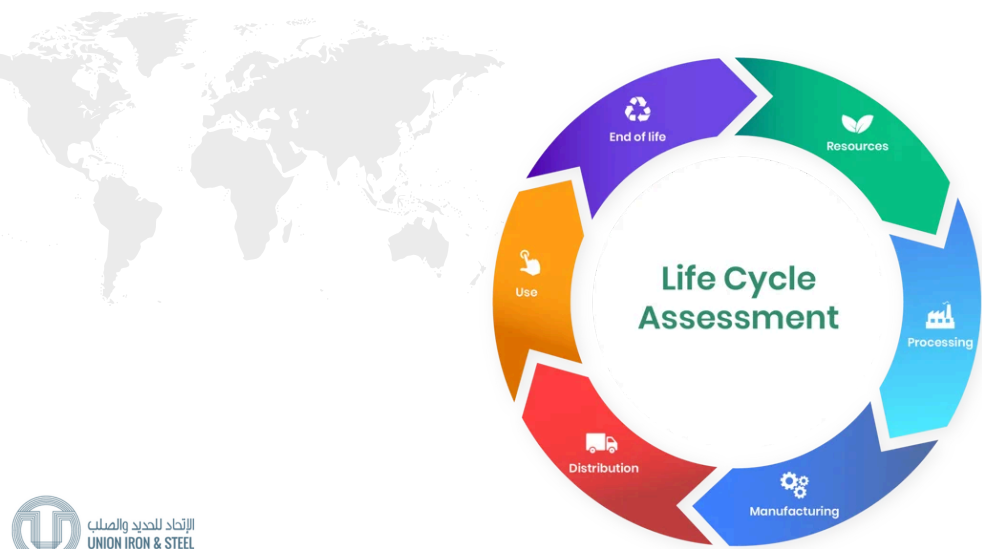
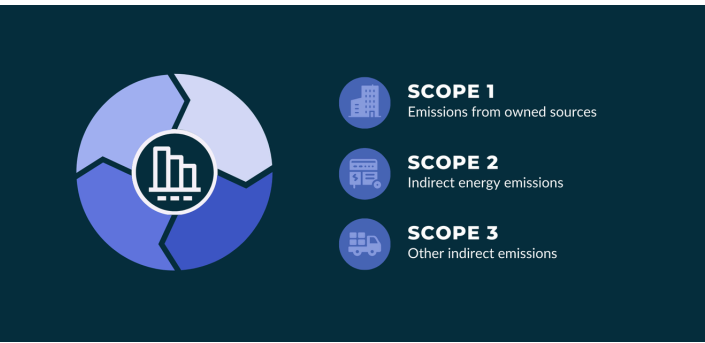




# LCA & GHG Reporting

Union Iron & Steel (UIS) has undertaken extensive efforts to quantify and understand its environmental footprint by completing a Life Cycle Assessment (LCA) and establishing Scope 1, 2, and 3 greenhouse gas inventories. These calculations are built on detailed operational datasets, including energy use, water consumption, logistics, and company-owned fleet activity, ensuring the highest standards of accuracy and transparency. This work provides UIS with a reliable baseline to guide decisions and measure progress.

Looking ahead, UIS is embedding these insights into its business strategy as the foundation for decarbonisation. By continuously refining data quality and applying it to efficiency measures, renewable integration, and process optimisation, UIS is positioning itself to achieve steady reductions year-on-year. These efforts represent an essential stepping stone on our journey towards net zero, reinforcing our long-term commitment to responsible growth and resilience in line with the UAE's Net Zero 2050 vision.



# Decarbonisation Initiative

## Rooftop Solar PV by (2026)

Union Iron & Steel (UIS) is advancing its decarbonisation agenda with a proposed rooftop solar PV system (1,230 kWp) by 2026. Based on an estimated yield of 1,704 kWh/kWp/year, the system will generate approximately 2,095,920 kWh annually (~2.1 GWh in Year 1), directly offsetting a portion of UIS's annual consumption of ~31.6 GWh. This initiative represents a tangible step towards embedding renewable energy within core operations, aligning with both national climate ambitions and international best practices. It also supports the global drive under the Paris Agreement to limit warming to 1.5 °C, ensuring UIS contributes to international climate resilience efforts. By taking early action, UIS is positioning itself as a regional leader aligned with the COP28 outcomes and the global 2040 renewable transition targets.

Looking ahead, the rooftop solar installation, proposed by 2026, will not only reduce grid dependency but also enhance long-term operational resilience. By coupling renewable generation with ongoing efficiency upgrades, UIS is laying a robust foundation for sustained emissions reductions. This forward-looking investment underscores our commitment to innovation, responsible growth, and alignment with the UAE Net Zero 2050 vision. It further reflects UIS's role in accelerating the global shift to clean energy systems, reinforcing accountability to stakeholders and regulators alike. As nations strengthen climate ambition beyond 2030, UIS's proactive initiatives create a clear pathway toward achieving deeper decarbonisation by 2040 and beyond.

### Union Iron And Steel

**Solar Modules:**  
Jinko 545Wp

**Inverters:**  
SunGrow 125kW

**Mounting System :**  
Rooftop

**Estimated Yield :**  
1,704 kWh/kWp/year



**1,230 kWp**  
Total capacity

**> 2.1 GWh**  
electricity produced  
(year 1)



**>31.6 GWh**  
Client's Consumption



HelioScope



الإتحاد للحديد والصلب  
UNION IRON & STEEL



# ROADMAP

## TOWARDS NET-ZERO



### 2006 UIS was founded

Established in 2006, Union Iron and Steel is a private sector manufacturer of steel bars for concrete reinforcement, also known as rebars.

### 2006 Water Efficiency

UIS implemented closed-loop cooling water systems, achieving a zero liquid discharge facility and reducing freshwater withdrawals by, establishing an early foundation for long-term resource efficiency.

### 2015 Circular Economy

UIS supplies mill scale generated during production to billet manufacturers and allied industries, thereby minimizing landfill disposal and contributing to the circular economy.

### 2018 Product Stewardship

UIS published a CARES UK EPD, enabling transparent lifecycle data for sustainable steel.

### 2021 ISO 50001 Certified

UIS is ISO 50001 certified, ensuring a structured energy management system that drives continuous efficiency improvements and supports Scope 1 and 2 emission reductions toward Net Zero.

### 2022 Net Zero Planning

An ETIP-related energy survey was conducted in 2022, providing baseline insights to guide efficiency improvements and Net Zero planning.

### 2025 Step towards Energy Consumption

Facility-wide LED lighting upgrades improved electricity efficiency, delivering ~5% emissions reduction.

### 2026 Onsite Renewables & Efficiency Upgrades

UIS will install a 1,230 kWp rooftop solar PV system (~2.1 GWh/year) and implement efficiency upgrades including photo-sensors, motion detectors, and energy-efficient AC units. Renew ETIP energy survey to track progress and set updated Net Zero targets. Also replacement of existing recuperator with new high efficiency recuperator.

### 2027 Clean Mobility Transition

By 2027, UIS will replace one diesel forklift with LNG/Electric models.

### 2030 Efficiency & Renewable Integration

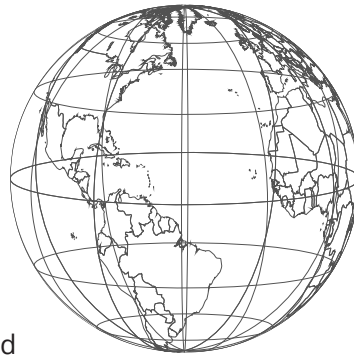
By 2030, UIS will install VFDs, implement renewable PPAs, and adopt telematics for fleet, together delivering significant efficiency gains and emissions reductions. 20–22% total reduction from the 2025 baseline.

### 2040 Advanced Decarbonization Technologies

By 2040, UIS will adopt hydrogen furnaces, full fleet electrification, carbon capture, and AI-driven efficiency, achieving ~60% emissions reduction.

# Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach

## 2025 Update



In 2025, Union Iron & Steel (UIS) initiated its Net Zero Roadmap, establishing a clear framework for addressing Scope 1, 2 and 3 emissions across its operations and supply chain. This marked the company's first structured effort to align with the UAE's Net Zero 2050 vision and global climate commitments.

Since that time, the steel industry has faced multiple disruptions, including volatility in raw material prices, regional energy market shifts, and evolving compliance requirements. At the same time, demand for low-carbon construction materials has accelerated, creating both challenges and opportunities. Encouragingly, UIS has made tangible progress in mapping its emissions baseline, introducing resource efficiency measures in electricity and water use, and piloting waste minimisation initiatives.

This updated Net Zero Strategy reflects the rapidly changing operating environment and sets out a practical pathway for UIS to reduce its carbon footprint, strengthen resilience, and contribute meaningfully to regional and global decarbonisation efforts.

