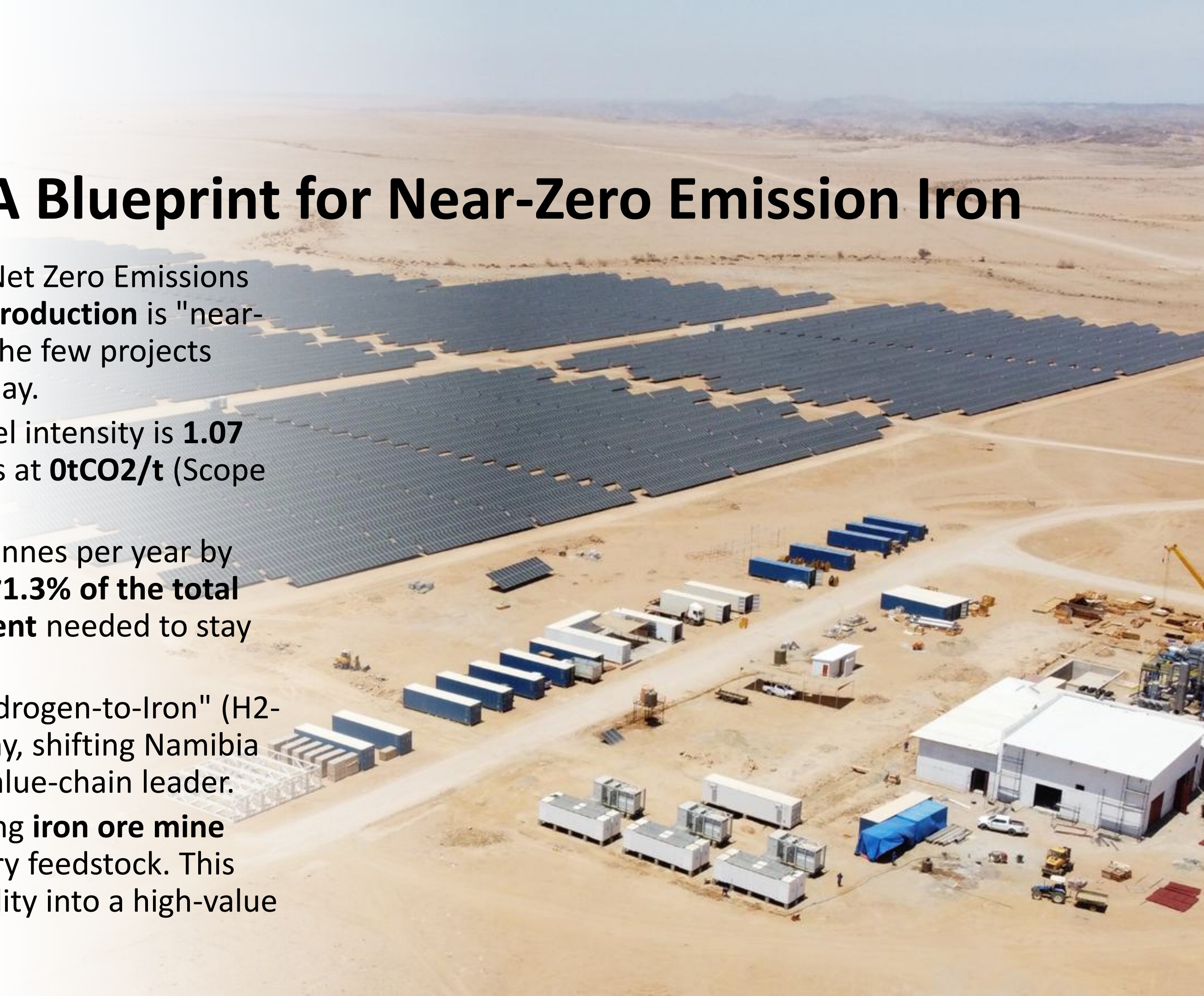


Oshivela: A Blueprint for Near-Zero Emission Iron

- **Net Zero Alignment:** In the IEA Net Zero Emissions (NZE) scenario **8% of global iron production** is "near-zero" by 2030. Oshivela is one of the few projects globally already delivering this today.
- In the NZE Scenario, average steel intensity is **1.07 tCO₂/t** by 2030, Oshivela operates at **0tCO₂/t** (Scope 1 & 2).
- **Impact:** By scaling to 2 million tonnes per year by 2030, this single site will provide **~1.3% of the total global "near-zero iron" requirement** needed to stay on the 1.5°C pathway.
- **Strategic Value:** Proving the "Hydrogen-to-Iron" (H₂-DRI) route in an emerging economy, shifting Namibia from an ore exporter to a green value-chain leader.
- **Circular Resource Model:** Utilizing **iron ore mine tailings** (mining waste) as a primary feedstock. This transforms an environmental liability into a high-value industrial asset.



Operational Milestone: First Industrial Green Iron in Africa

- **Current Stage (Feb 2026):** Phase 1 is fully operational. Following the **March 2025 first hydrogen production**, the facility is currently producing **15,000 tonnes of DRI annually**.
- **The Asset: * 12MW Electrolyzer:** Powered by a 25MW solar/battery smart microgrid (off-grid).
- **Zero-Carbon Kiln:** Successfully demonstrating 100% hydrogen reduction in a rotary kiln environment.
- **Next Step (2026-2027):** Breaking ground on **Phase 2 (200,000 tonnes/year)**.





Beyond Decarbonization: Creating a Circular Iron Economy

- **The "Waste-to-Value" Breakthrough:** * Oshivela successfully demonstrates the use of **iron ore mine tailings** as feedstock.
- **The Result:** We are turning an environmental liability (tailings dams) into a premium green product without the carbon footprint of new mining operations.
- **Environmental Remediation:** * By "mining the waste," the project actively reduces the physical footprint of existing mines and eliminates the long-term risk of dam failures and heavy metal leaching.
- **Technical Lesson:** * Green hydrogen's high reactivity allows for the effective reduction of the fine-grained iron found in tailings, which is often difficult for traditional blast furnaces to process efficiently.
- **The "Frontrunner" Insight:** * The most sustainable mine of the future is the one that cleans up the past. Synergy between hydrogen production and waste remediation is the "secret sauce" for social license in mining regions.

Bridging the "Green Premium" for Early Movers

- **Market De-risking:** Governments can assist by facilitating **Carbon Contracts for Difference (CCfDs)** and Green Public Procurement to bridge the price gap during the FOAK phase.
- **Regulatory Framework:** Call for the finalization of the **Synthetic Fuels Act** as a global template for H₂-derivative regulation.
- **Infrastructure Synergy:** To reach our 2030 target of 2 million tonnes, we need "Common User Infrastructure"—shared logistic infrastructure—to lower the CAPEX burden on individual frontrunner projects.
- **Circular Economy Incentives:** Governments should provide "Restoration Credits" or streamlined permits for projects that utilize industrial waste (tailings), recognizing the dual benefit of carbon reduction and land remediation.



The Road to 2030 –Scaling to 3.6 Million Tonnes of CO2 Avoidance

- **2030 Target:** 2 million tonnes of Green Iron per year.
- **Emissions Impact:** This avoids **3.6 million tonnes of CO2 annually**—roughly equivalent to taking 800,000 gasoline cars off the road.
- **The Global Multiplier:** If our technology is applied to the 300 million tonnes of new global capacity needed by 2030, it could avoid **540 million tonnes of CO2 yearly**.

→ **Oshivela proves that the transition is not just possible—it is already operational.**

