

Element Zero USA

Next-Generation Iron Manufacturing

Technology Leadership for U.S. Industry

Executive Summary

- Element Zero (EZ) USA has built and is scaling up its iron ore and critical mineral processing capability in Australia.
- We stand ready to partner with the United States to deploy and commercialize this technology.
- We are advancing project development in Texas and potentially Louisiana.
- Land secured. Power secured. Development and logistics planning advanced.

Iron Ore and Oxides Conversion to High Purity Iron

- Cutting-edge mineral processing capability.
- Efficient conversion of iron ore and waste oxides to high-purity iron.
- Secured site near Steel Dynamics, Sinton, Texas.
- AEP Texas electricity commitment expanding to 1 GW.
- Access to Port of Corpus Christi and key supply chains.
- Low-cost, scalable plant design.

Element Zero Electrochemistry Enables Scalable U.S. Iron and Critical Mineral Production

- **Efficient Power Electrochemical Refining Platform:**
 - Converts ore and oxides to high-purity metal
 - Lower electricity consumption vs conventional pathways
 - Compatible with nuclear, hydro, gas and renewables
- **Multi-Mineral Platform:**
 - Iron/steel
 - Lithium
 - Nano Silicon



Fe_2O_3
Alkaline Eutectic

High Purity Iron

Product Composition

Iron, Fe	96%-98% Fe Purity
Oxygen, O ₂	1.0%
Carbon, C	0.0%
Silicon, Si	0.2%
Aluminum, Al	0.1%
<u>Phosphorus, P</u>	<u>0.0%</u>

Iron Ore Type	100% of Hematite, Goethite and Magnetite
Product Form	Briquettes or ingots
Transport	Initial 40 ft containers, then transitioning to bulk
Port of Origin	Lumsden Point – Port Hedland



Comparative Performance



	IRON	PIG IRON	SPONGE IRON
Purity	96-98%	90-92%	90-94%
Fuel	US Electricity	Coal	Natural Gas/H ₂
Fuel Cost*	\$140/t	\$135/t	\$145/t

**Indicative energy cost assumptions*

Why Texas

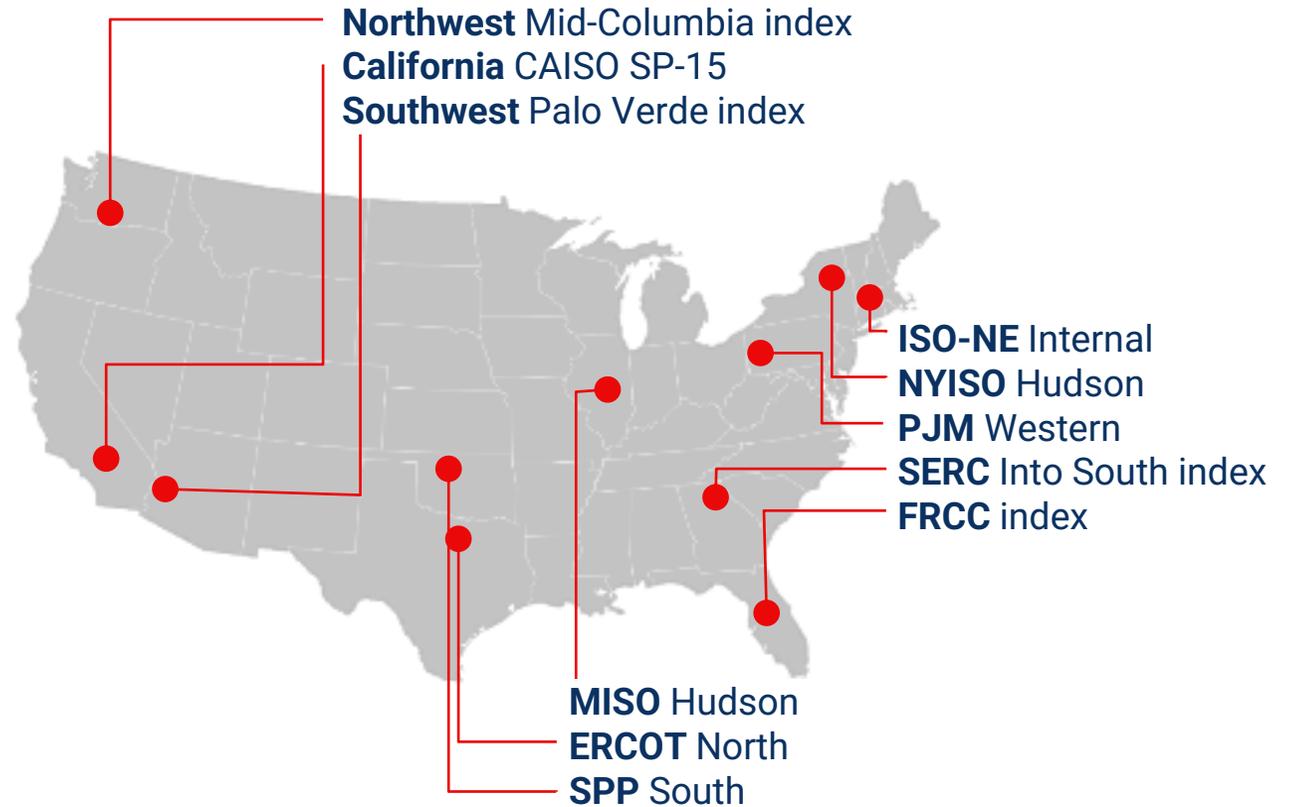
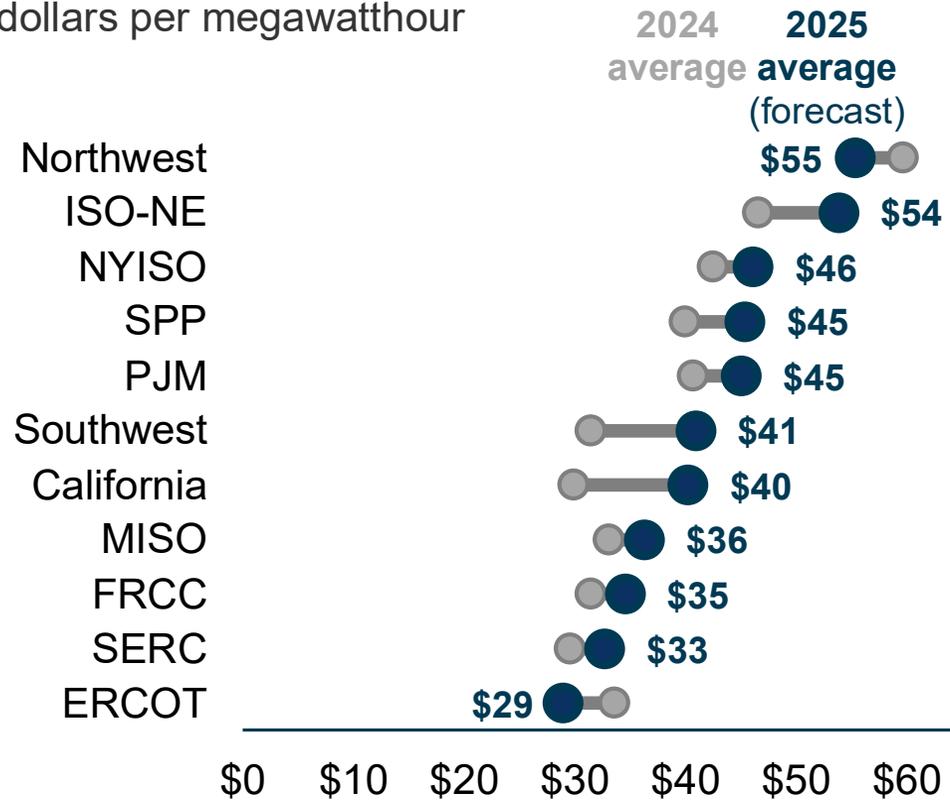
- **Optimal location:** Abundant electricity, deepwater port access and integrated rail logistics.
- **Iron ore strategy:** Gulf Coast processing optimises imported ore economics.
- **Cost advantage:** Low wholesale electricity and operating costs.
- **Development speed:** Streamlined permitting and rapid project delivery.

Texas Pricing Lower Than Other U.S. Regions

2024–2025 U.S. Wholesale Electricity Prices

ERCOT among the lowest-cost major U.S. power markets

dollars per megawatthour



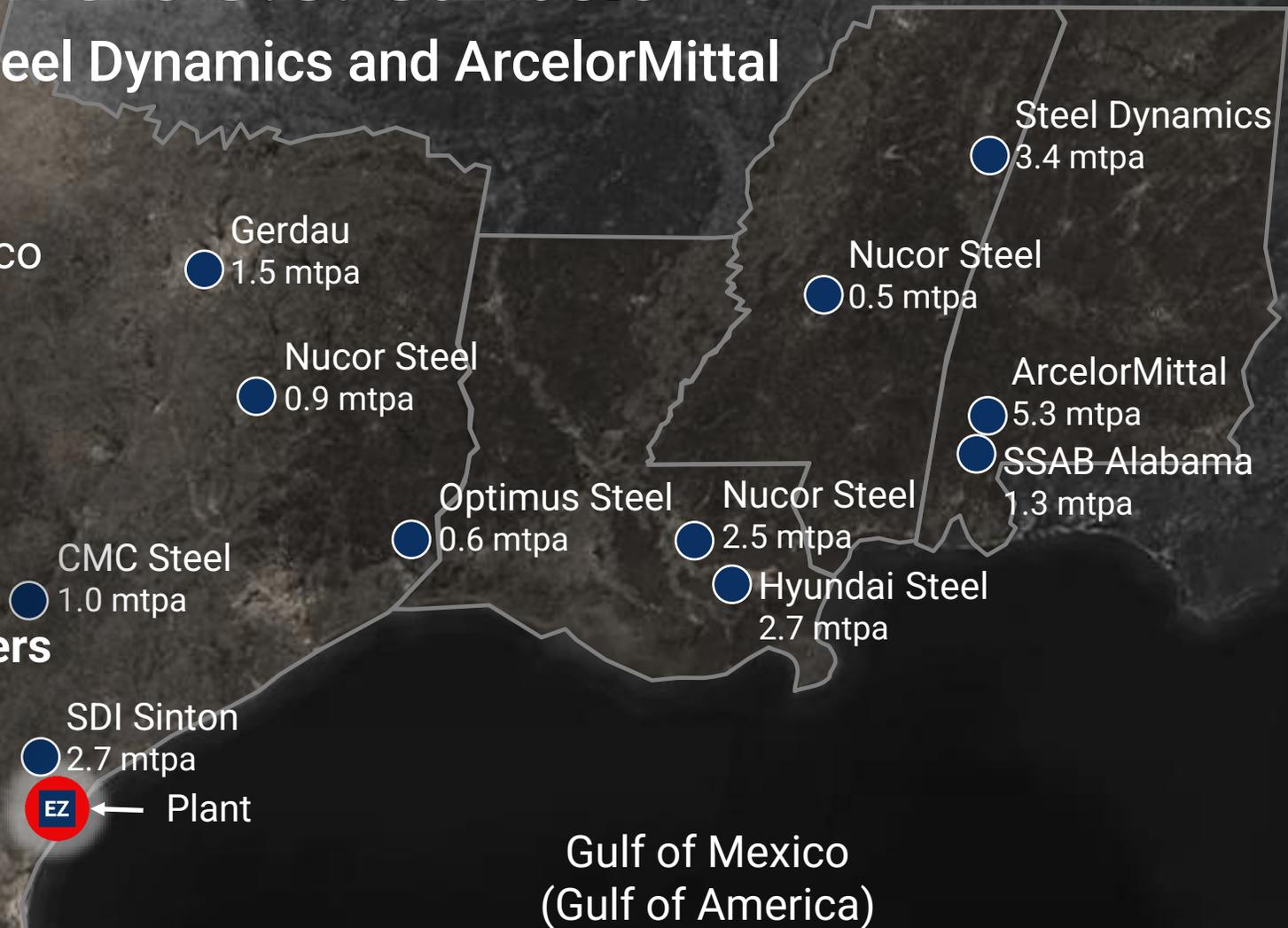
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, January 2025

Note: Comparative prices in ERCOT compared to other US regions

Large EAF Market in the U.S. Sunbelt

Engagement with Nucor, Steel Dynamics and ArcelorMittal

- **5 mtpa iron ore feed**
Sourced from Brazil and Mexico
- **Renewable electricity**
AEP Texas at ~\$46/MWh
- **Strategic location**
Sinton, Texas
- **Sales to regional EAF producers**
Nucor and Steel Dynamics



Potential Development Site: Sinton

Location: Sinton, Texas

- 18.5 miles NW of Corpus Christi
- Adjacent to SDI flat-roll mill

Site size: 572 acres

Potential Offtake: Steel Dynamics

Plant: 2.6 mtpa Iron plant



We Can Process Waste Oxides

Low-Cost, High-Value Iron Units from Waste Streams

- **DRI Oxide Screen Fines**
 - ~97% Fe_2O_3 ($\approx 68\%$ Fe)
 - ~5% of DRI output lost as fines
 - Typically priced at iron ore parity (as sinter feed to blast furnaces in Europe)
- **Millscale (Hot Rolling Oxides)**
 - 60-90% FeO / 10-40% Fe_2O_3 ($\sim 75\%$ Fe)
 - ~1% of steel production lost as millscale
 - Sold at iron ore parity (to steel mills and cement plants in US)

US\$1.2 Billion EBITDA By 2030

Clear Plan To Get There



Techno-commercial evaluation shows clear commercial operations



Strong earnings generation with \$1.2B EBITDA and high returns



Large addressable U.S. iron and iron oxides and critical minerals market

SCRAP SUPPLEMENTS & ALTERNATIVE IRONMAKING 10



THANK YOU