Fact Sheet

Boston Metal is redefining global metals production with its patented Molten Oxide Electrolysis (MOE) technology, an electrified platform that transforms how metals are made. Designed to operate across a wide range of metal oxides, MOE enables production from diverse feedstocks, creating a scalable and cost-effective pathway to unlock new economic opportunities, support industrial onshoring and strengthen the secure supply of critical metals needed for advanced technologies, manufacturing and digital infrastructure. Backed by visionary investors, Boston Metal is headquartered in Woburn, Massachusetts and has a wholly owned subsidiary in Brazil.

Boston Metal facility in Woburn, MA

Our technology

MOE is an electrified platform for producing high-value metals from diverse feedstocks. It uses electricity to process metal oxides and unlock valuable products from materials that conventional methods often cannot treat economically.

Today, Boston Metal is prioritizing MOE for critical metals production, where the electrolysis process selectively recovers strategic metals from low-grade materials like mining and industrial waste. This creates a scalable and cost-effective pathway to unlock new supply, strengthen domestic value chains and turn underutilized resources into economic opportunity.

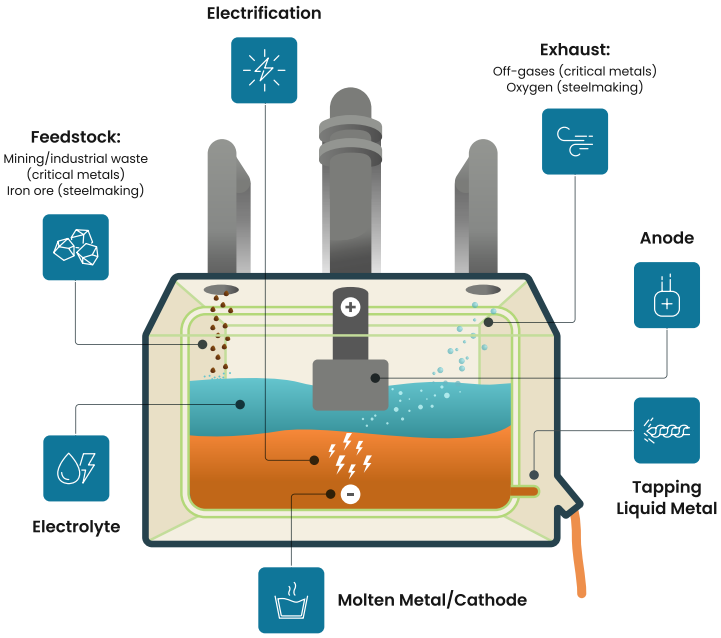
Using MOE cells to recover critical, high-value metals from mining waste and industrial slags is more efficient and cost-effective than incumbent methods of producing these materials. By reducing the need for new extraction and better using existing resources, MOE also supports more sustainable, lower-emission metals production.

MOE supports commercial-scale deployment across different applications, feedstocks and metal outputs, including critical metals such as niobium, tantalum, vanadium and nickel, as well as steel.

In steelmaking, MOE uses electricity to convert all grades of iron ore into steel through an energy-efficient, one-step process, providing a long-term pathway to cleaner steelmaking as the technology advances.

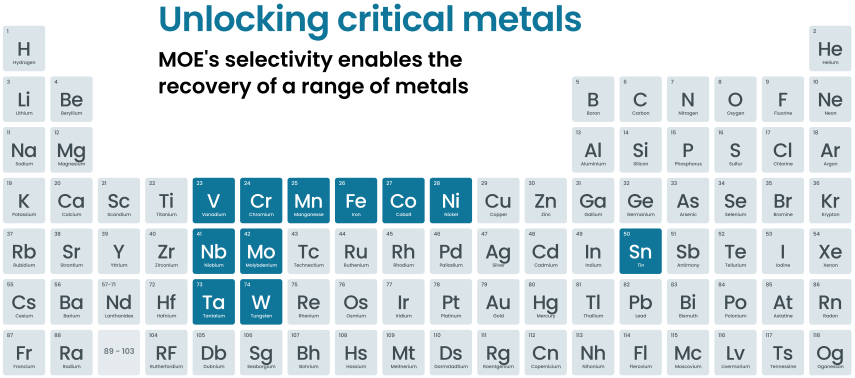
MOE Steel eliminates multiple steps of the traditional steelmaking process, including coke production, iron ore sintering and pelletizing, blast furnace reduction and basic oxygen furnace refinement. Its modular cells can be scaled to reach capacity targets and do not require process water, hazardous chemicals or rare-metal catalysts.

Molten Oxide Electrolysis (MOE)

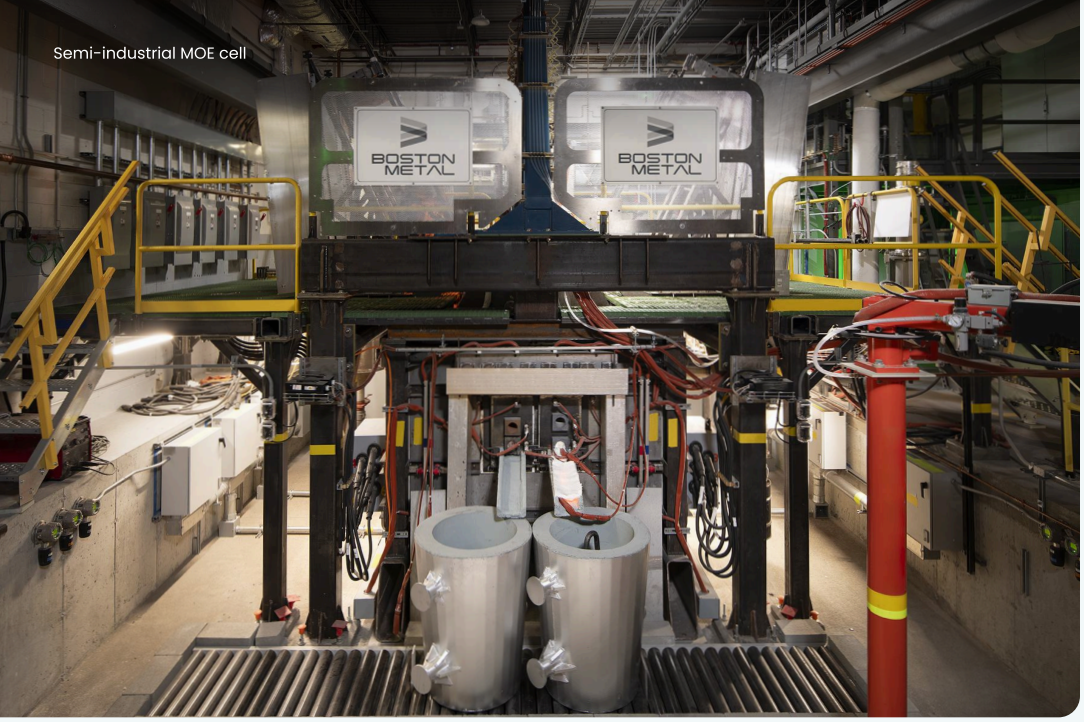


Unlocking critical metals

MOE's selectivity enables the recovery of a range of metals



The highlighted elements represent the metals that Boston Metal is focusing on for efficient, cost effective production using MOE.



Semi-industrial MOE cell

Our team

Boston Metal has grown to more than 200 employees across its U.S. and Brazil operations, bringing together engineers, metallurgists and industry experts working to deploy MOE at scale.

LEADERSHIP

Tadeu Carneiro
Chairman & CEO

Fernanda Fenga
Chief Corporate Officer

Antonio Carlos Cirone
President, Boston Metal do Brasil

By the numbers

Over $500 million raised as of April 2026

200+ employees

2013
Company founded

2018
First venture capital round

2022
Critical Metals subsidiary opened in Brazil

2025
MOE Critical Metals plant completed; successful MOE Steel commissioning run

2026
New funding secured to scale the Critical Metals business

Investors

aramco ventures · ArcelorMittal · BHP Ventures · BMW · Breakthrough Energy Ventures · Climate Investment Founded by OGCI · Energy Impact Partners · The Engine Ventures · Fine Structure Ventures · Goehring & Rozencwajg Natural Resource Investors · IFC International Finance Corporation World Bank Group · M&G Investments · Marunouchi Innovation Partners · Microsoft · PIVA · Prelude Ventures · SiteGround · Vale