Boston Metal is a global metals technology solutions company that is commercializing Molten Oxide Electrolysis (MOE), a patented tonnage metals production platform powered by electricity. MOE is expected to provide the metals industry with an efficient, cost competitive, and green solution for the production of steel and other metals from a wide variety of feedstocks and iron ore grades. Besides providing a direct, scalable approach to decarbonize steelmaking, MOE can also recover high-value metals from mining waste. Boston Metal is headquartered in Woburn, MA with a wholly owned subsidiary in Brazil.

Our technology

When applied to steelmaking, MOE replaces fossil fuels with renewable electricity to convert all iron ore grades into steel through an energy efficient, one-step process that has the potential to cut nearly 10% of the world’s carbon emissions. MOE eliminates multiple steps in traditional steelmaking, like coke production, iron ore sintering and pelletizing, blast furnace reduction, and basic oxygen furnace refinement. The modular MOE cells can be scaled to reach capacity targets and do not require process water, hazardous chemicals, or rare-metal catalysts.

Once this groundbreaking steel decarbonization technology becomes commercially available in 2026, steel producers will be able to cost-effectively achieve net zero scope 1 and 2 emissions to meet the growing global demand for green steel.

MOE also offers a sustainable and profitable solution for the mining industry as it can be used to extract valuable metals from complex, low-concentration materials that are currently considered waste. This enables miners to leverage a natural by-product of metal production to create new revenue streams.

By the numbers

$240 million raised as of May 2023 to support tech development

120+ employees

2013
Company founded

2018
First venture capital round

2022
High-value metals subsidiary opened in Brazil

2023
First revenues from MOE high-value metals business anticipated

2026
Expected commercial deployment of MOE steel
Our team

From a small group of visionary researchers, engineers, and metallurgists, we’ve grown to a team of over 120 professionals – and counting.

LEADERSHIP

Tadeu Carneiro
Chairman & CEO

Itamar Resende
President, Boston Metal do Brasil

Fernanda Fenga
SVP, Corporate

Kleber Sernik
SVP, Operations & Technology

Adam Rauwerdink
SVP, Business Development

Our investors

We’re backed by some of the world’s leading cleantech venture capital funds, mining companies, and steel users committed to decarbonizing heavy industries for a net zero future.

Awards

Recognized by leading industry organizations