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MEDIA RELEASE

When was the last time steel got cheaper and cleaner?

Metal Logic started in Victoria, now scaling in the Pilbara, Western Australia

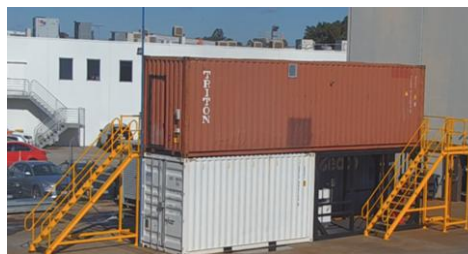
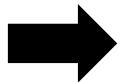
Low-emission steel platform Metal Logic has secured a strategic location in Western Australia's iron ore-rich Pilbara region to deploy its 'smelting as a service' model.

The company will utilize its Australian-invented, modular and scalable array smelting technology at industrial scale with an initial array deployment of 1Mtpa then ramping up mass production from Melbourne.

The technology, invented and developed for commercialisation in Australia, enables the processing of lower-grade ores, extends mine life, and offers a cost advantage to local manufacturers—ushering in a new era of jobs and regional resilience.



The 55% Fe from a WA site used in the Modular smelter array



An early version of the first modular smelter array (later versions not shown for IP protection)



Image taken Feb 2023 - the first pig iron reduction test

Chief Executive Joel Nicholls confirmed that Metal Logic has secured land from a private entity within 20 kilometres of the key rail lines that transport more than half of the Pilbara's iron ore to the coast for export.

"Metal Logic intends to deploy its modular, scalable array smelter at this location, delivering our 'clean steel' solution to the market," Mr. Nicholls stated.

"Our platform allows treatment of lower-grade iron ore, enabling operations to continue below previous cut-off grades and unlocking previously stranded or care-and-maintenance deposits," he explained.

“We are expanding our team and seeking people with the skills needed for our next deployment phase. Metal Logic is already evaluating stranded and care-and-maintenance iron ore resources to determine their suitability for our process. We need experts, from resource assessors to engineers, to help us scale our solution.”

Focusing on thermodynamic efficiency to minimize costs and lower emissions, Metal Logic’s technology is economically viable without requiring government subsidies.

“We aim to unlock previously stranded mineral resources and deliver value-added processing to regions, allowing taxpayer funds to be directed to other priorities such as education, health, and manufacturing,” said Mr Nicholls.

Mr. Nicholls added that Metal Logic has received strong backing from global steel and iron ore industry leaders, further validating the strategic importance of its new Pilbara site, located close to major rail and Port Hedland.

Unlocking a New Era in Steel and Resource Value Chains

For more than a century, steel production has relied on furnaces that waste up to half their input energy. Even modern blast furnaces and their “green” alternatives operate at only 25–65% of the thermodynamic ceiling of approximately 7.5 gigajoules per tonne of iron¹. As a result, entrenched reliance on coal, coke, and outdated furnaces generates over 2.8 billion tonnes of CO₂ emissions annually², while keeping steel prices high and locked into inefficient chemistry.

¹ IEA (2012), CO₂ abatement in the iron and steel industry, CCC/193 ISBN 978-92-9029-513-6, IEA Clean Coal Centre

² IEA (2023), Emissions Measurement and Data Collection for a Net Zero Steel Industry, IEA, Paris
<https://www.iea.org/reports/emissions-measurement-and-data-collection-for-a-net-zero-steel-industry>,
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Metal Logic’s approach aims to reset the steel value chain by supporting two types of customers:

Resource owners with stranded assets:

The technology makes lower-grade ores economically feasible, extends mine life, and reduces environmental impact by processing deposits that would otherwise remain untapped. Locating smelters near these resources also minimizes shipping inefficiencies and keeps value creation local, potentially adding up to \$400 USD in value per tonne of ore retained in Australia—creating jobs and new industries.

Steel buyers seeking traceability:

Metal Logic offers steel with traceability and verifiable CO2 footprints. Advanced electrochemical, photonic, and molecular-scale separation methods allow efficiency beyond traditional methods, reducing the need for bulk shipping of ore and waste.

The Purpose:

Australia has long exported raw ore and repurchased high-value manufactured goods. Metal Logic’s platform aims to “industrialize” resource-rich regions, extend mine life, reduce environmental footprints, and supply downstream industries with lower-cost, traceable steel. For miners, it unlocks marginal resources; for manufacturers and nations, it delivers affordable, cleaner steel at scale. For communities, it means jobs and resilience—not the loss seen with past industry closures.

By bringing miners and steel buyers together on a single platform, the company hopes to deliver environmental and economic benefits for all stakeholders.

About Metal Logic

Metal Logic operates research, development, laboratory, smelter development, and production facilities in Victoria, with offices in Perth and Melbourne. With its newly secured site near Port Hedland in the Pilbara, the company is advancing the commercialization of modular, scalable clean steel smelting technology that aims to provide steel at a lower cost than traditional black carbon methods.

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