Pyrochar: Low Emission Charcoal (Carbon) | Green Charcoal - Australia

Canonical: https://pyrochar.com.au/

Details:

Get in Touch

We Are Pyrochar - A Carbon Zero Fuel Source

Fuelling the Metals Industry to Better Our Environment

Pyrochar, in conjunction with research partner CSIRO, is scaling a proven commercial technology that has been researched & developed over 13+ years to produce net zero emission metallurgical char (MetChar) that will replace coal/coke in the primary metals industry.

Pyrochar is ready for commercial manufacture of the ‘first-of-its-kind’ MetChar to fulfil the currently unmet demand for a net zero emission replacement to coal in primary metals manufacture.

Learn More

Challenges in Metal Production

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ESG: Total metal production contributes to around 10% of the world’s greenhouse gas emissions, largely due to the industry’s dependence on coal and coke (carbon) in its intense production processes.

On average, 1.9 tonnes of CO2 are emitted for every tonne of steel produced. According to the International Energy Agency, the iron and steel industry alone accounts for approximately 6.7% of total world CO2 emissions.

COST: Metal production is increasing by 6% per annum in line with increased construction & manufacturing demand globally.

The cost of metallurgic coal has doubled in the past 4 years, due to ESG pressures and the increasing demand. This makes it more difficult for producers to meet the growing demand for metals and highlights the need for the industry to invest in ESG-focused and costs effective coal/coal alternatives.

An Urgent Need: Net Zero Carbon Emissions in the Metal Industry

The metal industry has long been known for its carbon-intensive manufacturing processes, which contribute significantly to global greenhouse gas emissions.

With pressure mounting from governments, investors, and consumers, metal manufacturers are facing a critical challenge: how to reduce their carbon footprint without compromising on quality or profitability.

This is where PyroChar’s Metallurgic Char comes in – as an inexpensive, sustainable, and environmentally friendly alternative to traditional coal-based metallurgical processes. By embracing this technology, metal manufacturers can reduce their carbon emissions and pave the way towards a more sustainable future.

Learn More

PyroChar's uses are;

The carbon reductant in metal production & refining

As a coal replacement in Blast Furnaces

As a coal/coke replacement in EAF

Producing aluminium, boron, pure silicon, glass, crystal, black powder, etc.

Raw material in activated carbon production

& more!

PyroChar Products

Difference Between Metallurgic Coal and PyroChar

Metallurgic Coal

Fossil Fuel created from plant and animal decay

Non-renewable energy source

The primary cause of CO2 emissions

Costly due to mining & increasing due to ESG pressures

PyroChar

Renewable energy from BioEnergy

Produced from organic biowaste

Lower cost to produce and supply that coal

Made to match the required specs in metallurgic applications

The Technology: Patented Self-Sustaining Pyrolysis Technology, Proven by CSIRO

It’s the world’s first patented technology to produce high-grade custom biochar through self-sustaining pyrolysis for metallurgical use.

The exothermic pyrolysis technology offers several benefits, including energy efficiency, reduced emissions, faster processing, consistent product quality and versatility.

It is the only technology of its kind focused solely on delivering the steel manufacturing industry with a net-zero emission alternative to coal.

Globally, the technology is the most commercially advanced, already proven by CSIRO, at technology readiness level 7 (TRL7).

Our Technology

Pyrochar acknowledges Aboriginal and Torres Strait Islander peoples

Pyrochar acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of the land on which we work and meet each day, throughout Australia. We recognise Aboriginal and Torres Strait Islander peoples' continuing connection to land, waters and culture. We pay our respect to past, present and future Elders and to all Aboriginal and Torres Strait Islander peoples.

https://pyrochar.com.au

Fuelling the Metals Industry to Better Our Environment

Pyrochar can deliver an environmentally friendly sustainable carbon source significantly lowering emissions.

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