



Element Zero recognised by the World Economic Forum – First Movers Coalition

Element Zero is proud to be recognised as a First Mover for our electrowinning technology to support decarbonisation of the steel industry by 2030.

Decarbonising the steel industry is essential for achieving global climate goals. Steel production accounts for approximately 11% of global carbon dioxide emissions, making it a major contributor to pollution and a key area of focus for the First Movers Coalition.

Element Zero has identified a pathway to chemically convert and dissolve hematite and magnetite in a unique alkaline electrolyte at low temperatures. Dissolution time is fast for major iron ores. Upon dissolution, iron oxide is selectively electro reduced resulting in fine iron particles with purity averaging 98% Fe. Produced powder can be used directly or briquetted for export.

Superior selectivity and efficiency of the process allows for economic production of zero carbon iron, while low operating temperature and electrolyte's ability to retain heat over long periods of time allows the process to be coupled with intermittent renewable energy supply.

Further information can be found here: <https://initiatives.weforum.org/first-movers-coalition/near-zero-steel-challenge>



ELEMENT ZERO