Non-ferrous metal smelting energy storage project

The aim of the project is to provide new data and thermodynamic modelling tools to be used in the development of the next generation of lead metal smelting, refining and recycling processes used to ...

To achieve climate goals, China needs to promote low-carbon development in non-ferrous metal smelting. This study is the first to analyze the trend of CO 2 emissions from major non-ferrous ...

The non-ferrous metal industry accounts for 7-9% of global industrial energy use, with smelting operations representing 40-60% of total plant consumption. As energy prices fluctuate and ...

For most non-ferrous metals, primary smelting is the most energy-intensive step, but significant levels of emissions of fluorinated GHGs have been reported from the refining and casting steps.

Utilizing the vast quantities of slag waste generated by the metallurgical industry as thermal storage materials presents a promising avenue for addressing these requirements. This approach ...

It delves into the application potential of non-ferrous metal smelting waste slag, such as copper slag, nickel slag, and lead slag, in both sensible and latent heat storage.

Through a thorough analysis of the literature published in the last years, the latest research progress on the characteristics, resource utilization pathways, and safety utilization evaluation of non-ferrous ...

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Mountains of this material--rich in residual metals--lie abandoned across old mining regions in the United States and abroad. While conventional processes struggled to recover trace ...

By reducing the GHG emissions in our operations and supply chain, we can offer our customers lower-carbon metals. We are also investing in solutions to increase the portion of recycled metals within ...

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