

KN11- Navigating the Energy Crisis: Alunorte's Journey Towards Low Carbon Alumina and its Impact on the Global Aluminium Industry

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Abstract

The energy crisis of 2022 created challenges for the bauxite and alumina industry. The corresponding asymmetry of Global energy markets caused costs to spike for many refineries, whilst the alumina indices stayed relatively flat. As a result, even some first quartile assets faced financial stresses in this period. This talk will focus on Alunorte, the world's largest alumina refinery, how it was impacted by the energy crisis and how it is changing its energy matrix to both deliver a less volatile cost position and to deliver the world's lowest carbon smelter grade alumina by 2025. From Alunorte, we will follow the value chain to examine how this low carbon alumina contributes to "Green" aluminium and is driving market changes for smelters and extrusions.

Keywords: Energy crisis, Alunorte alumina refinery, Low carbon alumina, Green aluminium.