

Zircon Market Outlook for 2024 and Beyond: Robust Zircon Price Environment Expected in Next 24 Months Amid Production Guide Cuts and Strong Demand from China and New Applications

Executive Summary

Zircon, a natural and rare heavy metal with distinctive characteristics found in mineral sands deposits, plays a vital role in our daily life, as it is used in a wide variety of applications. Major applications of zircon and its derivatives (zirconium and zirconium chemicals) include ceramics manufacturing (wall and floor tiles, sanitary wares and table wares), refractories (construction materials for furnaces and kilns) and casting (sand and investment) in the foundry industry, catalysis, pigments in paints, and many others. Moreover, zircon is an integral part of some high-tech industries such as aerospace/aviation, military and medical device.

Australia is the largest producer of zirconium ores and zircon concentrates, commanding more than 30% of global market share in both 2020 and 2021 based on data from U.S. Geological Survey (“USGS”). In terms of zirconium reserves, Australia also topped the list, accounting for above 70% of the world’s total in 2021 followed by South Africa’s 8.5% share, the distant second. On the other hand, **China is undisputedly the leading consumer of zircon and its derivative, consuming roughly 50% of the global supply**, due to its sizable population of 1.4 billion and manufacturing supremacy. We believe Indonesia has the potential to be a bigger player although its market share regarding zirconium ores and zircon concentrates output was only about 5% in 2020 and 2021. It is because of its close proximity to and strong political and economic ties with China. Indonesia has the advantages of being a Belt and Road country and its geographical location is strategically crucial – along major sea lanes connecting East Asia, South Asia and Oceania.

We believe global demand for zircon to be strong from 2024 onwards on expectations that the momentum of global economic growth will kick into high gear. It has been observed that zircon demand has a direct relationship with GDP growth because the mineral is used in diverse applications covering many fields. As inflation has been moderating in many parts of the world, central banks are likely to consider interest rate cuts starting in 2024 in a bid to stimulate growth. In the U.S. the June 2023 Personal Consumption Expenditures (“PCE”) Price Index was up 3% Y/Y, down from the 6.8% Y/Y increase recorded in June 2022. For China, its economic activities are expected to reinvigorate next year after a package of fiscal and monetary supportive policies already put in force or to be formulated comes into fruition. Besides cutting reserve requirement ratio and benchmark lending rates, as well as providing tax relief measures to help small businesses and rural households, the Chinese cabinet plans to renovate underdeveloped areas in mega-cities and build affording housing in a bid to bolster domestic demand. All these steps taken should be beneficial to overall zircon demand going forward.

In recent years, **enormous efforts have been made to explore new end markets with higher value added for zircon and its derivatives** in an array of areas such as nanomaterials, 3-D printing, advanced coating, and biomedical implants. New applications should not only expand the total addressable market but also make zircon demand resilient during tough economic times.

Our positive outlook for the zirconium market is shared by the IMARC Group, a market research company, which **projects the global market for that mineral to hit US\$2.9 billion by 2028**, rising from US\$1.8 billion in 2022, representing a **compound annual growth rate (“CAGR”) of 7.8%** spanning from 2023 to 2028.

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