

# Insight into AfricaMaVal country case studies **SOUTH AFRICA**

South Africa is a major global producer of critical raw materials (CRMs), with a diverse geology and well-established mining infrastructure. It plays a crucial role in supplying Europe with essential minerals for the green transition. For example, South Africa produces over 80% of the world's manganese, an essential component of battery manufacturing.



Platinum Group Metals (PGMs), manganese, vanadium titanium, and some REE's in addition to fluorspar.



Limpopo, Northern Cape, and North-West Province.

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## COUNTRY OPPORTUNITIES AND GOVERNMENTAL INITIATIVES

### Sustainable mining practices and Just Energy Transition Plan (JETP):

The government is promoting sustainability through initiatives that align mining with environmental goals. The Just Energy Transition Plan (JETP) focuses for instance on decarbonizing the mining sector and increasing renewable energy use.

### Infrastructure development:

The country is investing in rail and port infrastructure to support more efficient mineral exports. Major investments to improve existing port and rail capacity as well as the development of new rail and port infrastructure are underway.

### Focus on minerals for emerging technologies:

The country is fostering investments in minerals vital for green technologies, with for instance the Vanchem plant, expanding vanadium production for renewable energy storage solutions.

### Recycling and the circular economy:

Metals recycling businesses are often dependent on economies of scale to function profitably. There are several businesses in the country that have operated for decades and understand the local recycling market very well.

## CHALLENGES AND BARRIERS

- **Energy shortages affecting production:**

Ongoing power outages sometimes disrupt mining operations, limiting productivity. Aluminium production at the Hillside smelter has been particularly impacted in the past. The country and individual mining operators have invested heavily in alternative energy sources over the past decades to reduce the dependency on grid-supplied power, but coal remains the major source of grid energy.

- **Regulatory delays and complex permitting processes:**

Lengthy and complicated regulations can slow down project development and deter investment. For example, the Elandsfontein phosphate project experienced major delays as a result of regulatory hurdles.

- **Environmental and community concerns:**

Environmental approvals for mining are complex and there is no unified application process. Mining activities have raised concerns about water pollution and environmental degradation. The Makhado coal project, for instance, has faced opposition due to its potential impact on water resources.