Niobium (Nb_2O_5)

Base Year 2025

World Production

127,419 t of contained Nb_2O_5

-0.3%

Brazil Production

119,789 t of contained Nb_2O_5

+9.1%

National Highlight

Production concentrated in Minas Gerais (70%) and Goiás (30%), led by Araxá, Catalão and Ouvidor.

Trade Balance

↑ Surplus of USD 2.64 billion

Exports

USD 2.66 billion

+11.7%

Mining Royalties (CFEM)

R$ 36.3 million

+4.65%

% Change 2025 vs 2024



What is Niobium?

Niobium is a metallic chemical element, symbol Nb, atomic number 41, silvery-gray in color, corrosion-resistant and with a high melting point. In nature, it occurs combined with other elements in minerals such as pyrochlore and columbite-tantalite, from which it can be extracted.

Occurrence

The most notable deposits are the pyrochlore deposits of Araxá (MG) and Catalão/Ouvidor (GO), associated with rocks of magmatic origin and with the materials resulting from their weathering by water and climate. Niobium also occurs in columbite-tantalite, as in the Pitinga deposit (AM).

Main Applications

Used in steelmaking: small additions increase strength, allowing lighter structures in vehicles, buildings and pipelines. It is also a component of high-temperature alloys used in aircraft turbines, and of superconducting materials used in magnetic resonance imaging equipment and particle accelerators.

Niobium is a critical and strategic mineral, playing a relevant role in steelmaking, special alloys and advanced technologies. Brazil holds a leading position in world production and concentrates a large share of known reserves.

1. World Supply

In 2025, world niobium production, measured as contained Nb_2O_5, was approximately 127.4 thousand tonnes, practically stable compared with 2024 (-0.3%). Brazil accounted for about 94.0% of the world total.



Table - Main niobium producing countries (contained Nb_2O_5) - 2025

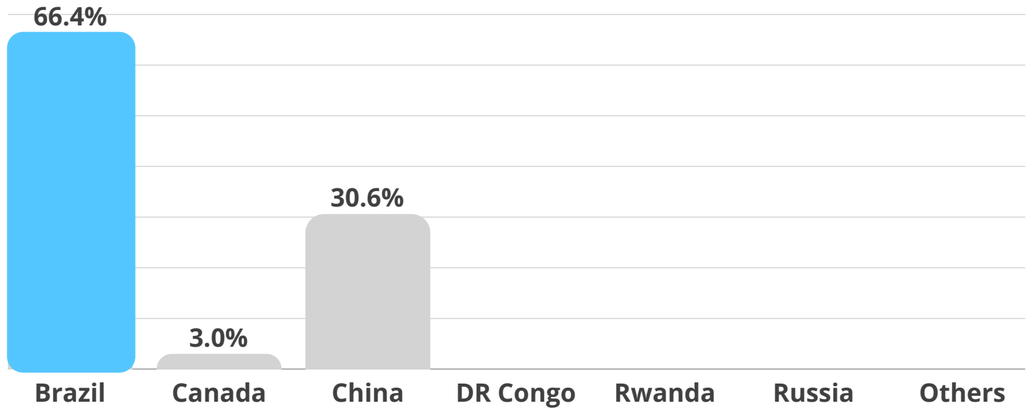
Country	Production (t)	Share (%)
Brazil	**119,789**	**94.0**
Canada	6,000	4.7
Congo, D.R.	970	0.8
Russia	300	0.2
Rwanda	200	0.2
Other Countries	160	0.1
Total	**127,419**	**100.0**

Sources: ANM; USGS – Mineral Commodity Summaries 2026. Brazilian production corrected relative to the USGS figure.

2. Reserves

In 2025, world niobium reserves totaled approximately 21.25 million tonnes of contained Nb_2O_5. Brazil held 14.11 million tonnes, equivalent to about 66.4% of the world total, followed by China and Canada.

Distribution of the main world niobium reserves (contained Nb_2O_5) – 2025





Brazil's share of global reserves is approximately 66.4%, with about 14.11 million tonnes of contained Nb_2O_5. The main Brazilian deposits are associated with pyrochlore, notably Araxá (MG) and Catalão/Ouvidor (GO).

Sources: USGS – Mineral Commodity Summaries 2026; ANM (Brazilian reserves).

Note: Niobium 2025 synthesis. Brazil: contained amount expressed in tonnes of Nb_2O_5; to obtain contained Nb, multiply by 0.6990.

3. Domestic Production

In 2025, Brazilian niobium production totaled 119.8 thousand tonnes of contained Nb_2O_5, an increase of approximately 9.1% compared with 2024. Production was concentrated in Minas Gerais (70%) and Goiás (30%), led by Araxá, Catalão and Ouvidor.

Year	2023	2024	2025
Contained Nb_2O_5 (kt)	105.8	109.7	119.8



Brazilian niobium production in 2025 was 119.8 thousand tonnes of contained Nb_2O_5, distributed between Minas Gerais and Goiás. The municipalities of Araxá, Catalão and Ouvidor are the main production centers.

Source: ANM

4. Foreign Trade

In 2025, the niobium sector recorded a trade surplus of USD FOB* 2.64 billion.



Mineral Sector Exports

Total: USD FOB 2.66 billion
Change: +11.7%

Main destinations:
China (49.8%)
Netherlands (17.3%)
United States (8.1%)

Mineral Sector Imports

Total: USD FOB 16.8 million
Change: +26.1%

Main origins:
Canada (100.0%)

Source: Open Data/Ministry of Development, Industry, Trade and Services (MDIC).

- Data include the Mineral Extractive Industry (IEM) and the Mineral Transformation Industry (ITM)

***FOB =** The seller fulfills its obligations and responsibilities when the goods, cleared for export, are delivered, stowed on board the vessel at the port of shipment, both indicated by the buyer, on the date or within the agreed period.

Foreign trade: main products of the mineral extractive industry (IEM) in 2025

Main Exported Products

No exports recorded in IEM in 2025

USD FOB	—
EXP Share (%)	—

Main Imported Products

No imports recorded in IEM in 2025

USD FOB	—
IMP Share (%)	—

Foreign trade: main products of the mineral transformation industry (ITM) in 2025

Main Exported Products

NCM 72029300 - Ferroniobium

USD FOB	2,658,383,932
EXP Share (%)	100.0

Main Imported Products

NCM 72029300 - Ferroniobium

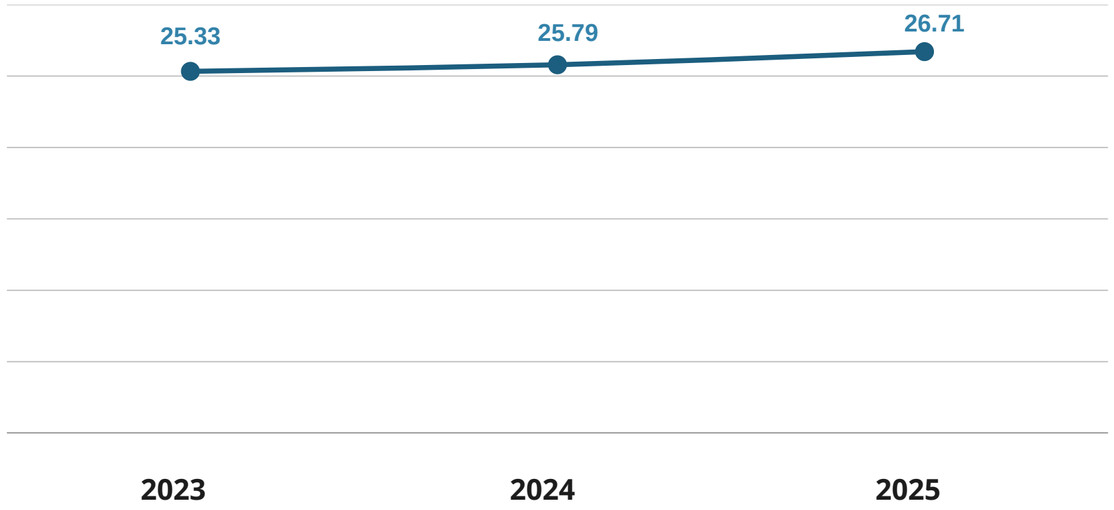
USD FOB	16,773,262
IMP Share (%)	100.0

Source: Open Data/Ministry of Development, Industry, Trade and Services (MDIC)

5. Prices

The price of ferroniobium followed supply and demand conditions in international markets. In 2025, the average price recorded was USD FOB 26.71/kg, compared with USD FOB 25.79/kg in 2024 and USD FOB 25.33/kg in 2023.

Chart – Average FOB prices - USD/kg net weight - Last 3 years



Ferroniobium (exports)
NCM: 72029300

Source: Open Data/Ministry of Development, Industry, Trade and Services (MDIC)
***USD FOB/kg net weight** = The seller fulfills its obligations and responsibilities when the goods, cleared for export, are delivered, stowed on board the vessel at the port of shipment, both indicated by the buyer, on the date or within the agreed period.

6. Financial Compensation for the Exploitation of Mineral Resources (CFEM)

In 2025, collections of CFEM, Brazil's mining royalty, from niobium totaled R$ 36.3 million, an increase of approximately 4.7% compared with 2024. Minas Gerais accounted for R$ 14.1 million, Goiás for R$ 21.8 million and Rondônia for R$ 0.5 million.

Year	Amount Paid (R$)
2024	34,690,136.80
2025	36,303,957.85

Holder	CFEM Share (%)
CMOC Brasil Mineração, Indústria e Participações Ltda.	50.42
Companhia Brasileira de Metalurgia e Mineração	32.58
Mineração Taboca S.A.	13.33

Source: ANM.

7. Investments and Mining Rights

In 2025, the main indicators of niobium mining activity were 102 new exploration permits, 4 approved final exploration reports (RFPs), 53 new mining applications, 1 mining concession ordinance and 5 artisanal mining permits (PLGs) published.

Investments in Mining

Value omitted due to re-identification risk.

Main States

- Omitted due to re-identification risk.

Investment Breakdown

Values omitted due to re-identification risk.

Mining Rights 2025

Main States

- MG (25 permits)
- PB (15 permits)
- RR (13 permits)

Mineral Exploration

- 102 new exploration permits published

Final Exploration Report

- 4 approved final exploration reports (RFPs) published

Mining Application/PLG

- 1 mining concession ordinance published
- 5 PLGs granted

Source: ANM.

8. Relevant Factors

Brazil has adopted a strategy of diversifying the niobium value chain, aiming to add value to the mineral through the development of intellectual property. With private-sector investment, such as funding from the mining company CBMM, in cooperation with universities and research institutes, Brazilian scientific efforts focus on the niche of batteries with niobium oxide anodes, which seek to enable ultra-fast charging and a longer service life. In addition, local research is exploring the technical feasibility of combining the metal with compounds such as graphene and nanocellulose for industrial applications in the aerospace, optical and electric transport sectors.

In January 2025, a new beneficiation technology was announced in China for the Miaoya deposit, in Hubei, making it economically viable. In February, provincial authorities disclosed resources of 2.54 million tonnes of niobium oxide in the Zhushan–Zhuxi region. These announcements point to an expansion of potential supply, but do not mean that commercial production will enter the market immediately.