Potassium(K)

Base Year 2025

World Production

49 million tonnes of K_2O equivalent

+4.9%

Brazil Production

422.3 thousand tonnes of K_2O (contained)

+6.0%

National Highlight

Sergipe (100% of national KCl production)

Trade Balance

↓ Deficit of USD 4.31 billion

Exports

USD 69.60 million

-11.8%

Mining Royalties (CFEM)

R$ 17.00 million (KCl)

+36.9%

% Change 2025 vs 2024



What is Potassium?

Potassium (K) is a metallic element with atomic number 19, an alkali metal whose symbol derives from the Latin kalium. It is obtained from evaporite deposits, mainly in the form of potassium chloride (KCl), and is traded as K_2O equivalent.

Occurrence

Potassium occurs mainly in association with the following minerals:

- Sylvite (potassium chloride, KCl)
- Sylvinite (natural mixture of sylvite and halite)
- Carnallite (hydrated potassium chloride and magnesium chloride)
- Feldspars and micas (biotite and muscovite)

Main Applications

Potassium is used mainly as a fertilizer, as potassium chloride and potassium nitrate, and is applied in:

- NPK fertilizers for agriculture;
- gunpowder (potassium nitrate);
- fireworks (potassium nitrate and perchlorate);
- the chemical industry in general; and
- rock powder (remineralization), with potassic rocks applied directly to the soil.



Potassium is a critical and strategic mineral, essential for agriculture. The main potassium-producing and exporting countries have shown growing geopolitical risk, affecting producers and exporters of agricultural commodities and compromising food security.

1. World Supply

In 2025, according to the United States Geological Survey (USGS), world potassium production (K_2O content) totaled about 49 million tonnes, an increase of 4.9% over the previous year. Canada and Russia accounted for 51% of world production.



Table 1 – Main potassium-producing countries (K_2O content) - 2025

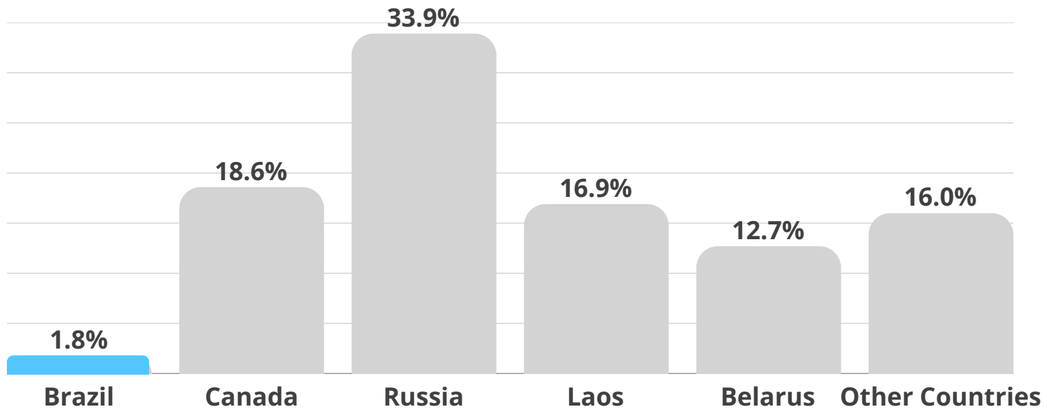
Country	Production (kt)	Share (%)
Brazil	**422**	**0.9**
Canada	15,000	30.6
Russia	10,000	20.4
China	6,300	12.9
Belarus	6,000	12.2
Other Countries	11,278	23.0
Total	**49,000**	**100.0**

Sources: USGS - Mineral Commodity Summaries 2026; ANM (Brazilian production).

2. Reserves

According to the USGS, in 2025, world potassium reserves (K_2O basis) totaled about 5.9 billion tonnes, with strong geographic concentration in Russia, Canada, Laos and Belarus. Israel and Jordan report abundant reserves, not quantified by the USGS, estimated at around 1 billion tonnes.

Distribution of the Main World Potassium Reserves – 2025





In 2025, Brazilian potassium reserves (K_2O) totaled about 105 million tonnes, corresponding to 1.8% of the world total.

Sources: USGS - Mineral Commodity Summaries 2026 (Potash) and ANM (Brazilian reserves).

3. Domestic Production

National potassium production (K_2O content) in 2025 was 422.3 thousand tonnes, obtained from sylvinite. This represents an increase of 6.0% over the previous year. Over the last three years, production behaved as shown in the table below:

Year	2023	2024	2025
Potassium K_2O (content, in t)	363,275	398,537	**422,326**



Sergipe accounts for 100% of national potassium chloride production, at the Taquari-Vassouras Mine/Plant Complex. Domestic production is insufficient to meet demand: Brazil imports more than 95% of the K_2O it consumes in agriculture.

Source: ANM.

4. Foreign Trade

In 2025, the potassium sector recorded a trade deficit of USD FOB 4.31 billion.



Mineral Sector Exports

Total: USD FOB 69.60 million
Variation: -11.8%

Principal destinations:
- Paraguay (42.7%)
- Belgium (16.0%)
- Mexico (8.2%)

Mineral Sector Imports

Total: USD FOB 4.38 billion
Variation: +11.1%

Principal origins:
- Russia (42.8%)
- Canada (36.1%)
- Israel (7.5%)

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

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

***USD 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 IEM exports were recorded in 2025
USD FOB	—
EXP Share (%)	—

Main Imported Products

	No IEM imports were recorded in 2025
USD FOB	—
IMP Share (%)	—

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

Main Exported Products

	NCM 31059090 - Other mineral or chemical fertilizers containing nitrogen and potassium	NCM 28276012 - Potassium iodides
USD FOB	22,179,965	15,791,210
EXP Share (%)	31.9	22.7

Main Imported Products

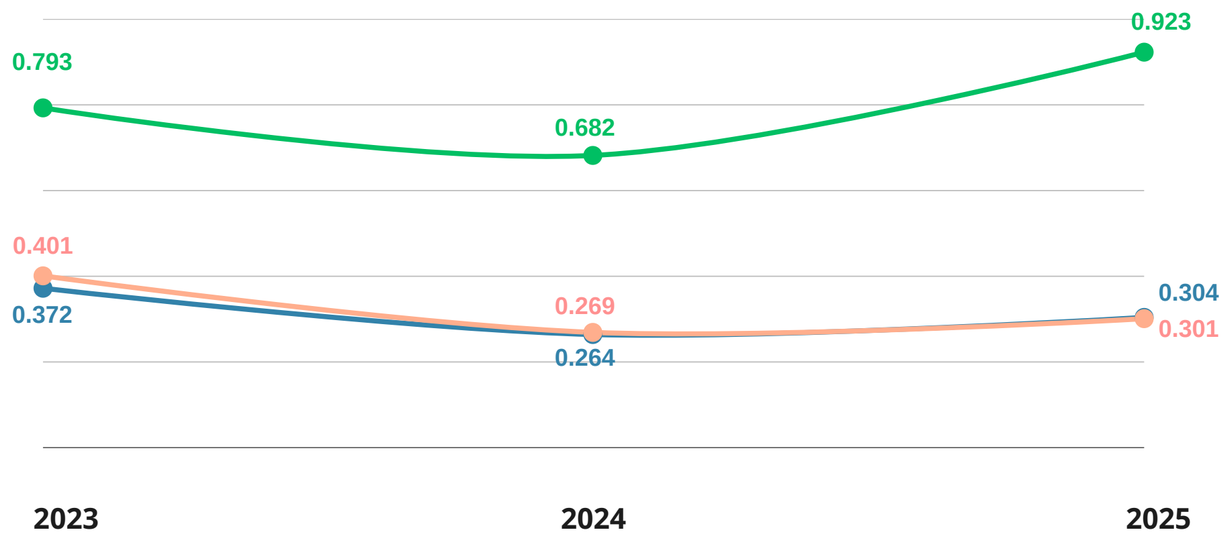
	NCM 31042090 - Other potassium chlorides	NCM 31059090 - Other mineral or chemical fertilizers containing nitrogen and potassium
USD FOB	4,095,610,865	79,740,014
IMP Share (%)	93.4	1.8

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

5. Prices

Prices reflect the dynamics of the international market and are influenced by factors such as global demand, production costs and economic fluctuations.

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



- Other mineral or chemical fertilizers containing nitrogen and potassium
  NCM: 31059090
- Other potassium chlorides
  NCM: 31042090
- Potassium chloride ($K_2O \leq 60\%$)
  NCM: 31042010

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

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

In 2025, collections of CFEM, Brazil's mining royalty, on K_2O (R$ 17.00 million) rose by about 36.85% (also considering the 6.0% increase in production). Sergipe was the only national producer of K_2O.

Potassic rocks were produced in MG and GO to supply the rock powder (remineralizer) market, generating R$ 90.64 thousand in CFEM collections. It should be noted that CFEM is levied on the sale or transformation of the mineral product, which may cause differences between the financial data and the actual production volume for the period due to inventory movements.

State	Amount (R$)
SE	16,997,367.40
MG	70,673.44
GO	19,964.00
Total	**17,088,004.84**

Source: ANM.

7. Investments and Mining Rights

Potassium investments are concentrated in Sergipe, which accounted for 94.4% of the total invested in Brazil in 2025.

Investments in Mining

In 2025, according to the Mineral Exploration Investment Statement (DIPEM) and the Annual Mining Report (RAL), investments in potassium mining totaled R$ 130.64 million: mines (R$ 95.85 million), plants (R$ 28.56 million) and mineral exploration (R$ 6.23 million).

Main States

- SE (94.4%)
- AM (4.2%)
- MG (1.1%)

Investment Breakdown

Exploration	**4.7%**
Mines	**73.4%**
Plants	**21.9%**

Mining Rights Granted in 2025

Main States

- SE (21 permits)
- AM (8 permits)
- PI (5 permits)

Mineral Exploration

- 39 new exploration permits
- -76.1% compared to 2024 (163)
- 7 approved final exploration reports

Mining Application

- 1 mining application

Mining Concession/ PLG

- No mining concessions published
- Small-scale mining permits (PLG): none published



Source: ANM.

8. Relevant Factors

Taquari-Vassouras (SE), Brazil's only potash fertilizer production unit, is now operated by STRATOS (VL Holding), which acquired it from Mosaic for about US$ 27 million in 2025, also assuming decommissioning liabilities estimated at US$ 22 million. The mine's life has been extended to 2042. Also in Sergipe, the Carnalita Project is expected to be implemented; its mineral rights belong to PETROBRAS, with estimated potential for exploiting carnallite ore by solution mining, planned annual production of 1.2 Mt of KCl (resources of 2.5 billion tonnes of KCl “in situ”) and an expected life of mine (LOM) of 40 years. (Sources: Minera Brasil, 2025; Cadastro Mineiro/ANM)

Potássio do Brasil is developing the Autazes Project (AM), with planned production of around 2.4 million tonnes of potassium chloride – KCl (about 1.6 million tonnes of K_2O equivalent) and expected start-up in 2030. South Atlantic Potash is conducting pre-feasibility studies on the Sergipe continental shelf, using solution mining in an offshore environment, with a planned scale of 2 million tonnes per year. (Sources: SUFRAMA, 2022; Brazil Potash; Brasil Mineral)

Several potassic rock producers are beginning to supply the Brazilian market, mainly in Minas Gerais and Goiás. It is important to develop research (RD&I) that maximizes the benefits of applying this mineral input to soils and improves agricultural crops. (Source: RAL/ANM)