NUCLEAR FUEL CYCLE

# World Uranium Mining Production

UPDATED MONDAY, 21 SEPTEMBER 2026

- About three-quarters of the world's production of uranium from mines is from Kazakhstan, Canada and Namibia.
- An increasing amount of uranium, now over 55%, is produced by in situ leaching.
- In 2024 Kazakhstan produced the largest share of uranium from mines (39% of world supply), followed by Canada (24%) and Namibia (12%).

**Production from mines (tonnes U)**

| Country | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| Kazakhstan | 23,607 | 24,689 | 23,321 | 21,705 | 22,808 | 19,477 | 21,819 | 21,227 | 21,109 | 23,270 |
| Canada | 13,325 | 14,039 | 13,116 | 7001 | 6938 | 3885 | 4693 | 7351 | 11,001 | 14,309 |
| Namibia | 2993 | 3654 | 4224 | 5525 | 5476 | 5413 | 5753 | 5611 | 6986 | 7333 |
| Australia | 5654 | 6315 | 5882 | 6517 | 6613 | 6203 | 4192 | 4553 | 4693 | 4598 |
| Uzbekistan (est.) | 2385 | 3325 | 3400 | 3450 | 3500 | 3500 | 3516 | 3561 | 4000 | 4000 |

| Country | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| Russia | 3055 | 3004 | 2917 | 2904 | 2911 | 2846 | 2635 | 2508 | 2710 | 2738 |
| China (est.) | 1616 | 1616 | 1692 | 1885 | 1885 | 1885 | 1600 | 1700 | 1600 | 1600 |
| Niger | 4116 | 3479 | 3449 | 2911 | 2983 | 2991 | 2248 | 2020 | 1130 | 962 |
| India (est.) | 385 | 385 | 421 | 423 | 308 | 400 | 600 | 600 | 485 | 500 |
| South Africa (est.) | 393 | 490 | 308 | 346 | 346 | 250 | 192 | 200 | 200 | 200 |
| Ukraine (est.) | 1200 | 808 | 707 | 790 | 800 | 744 | 455 | 100 | 340 | 288 |
| USA | 1256 | 1125 | 940 | 582 | 58 | 6 | 8 | 75 | 19 | 260 |
| Others | 357 | 277 | 85 | 116 | 116 | 131 | 95 | 108 | 161 | 155 |
| World total tU | 60,342 | 63,207 | 60,462 | 54,154 | 54,742 | 47,731 | 47,805 | 49,614 | 54,433 | 60,213 |
| World total tU3O8 | 71,158 | 74,536 | 71,299 | 63,861 | 64,554 | 56,286 | 46,374 | 58,507 | 64,190 | 71,006 |
| % of world demand | 98% | 96% | 93% | 80% | 81% | 74% | 76% | 76% | 83% | 90% |

Data from World Nuclear Association. NB: the figures in this table are liable to change as new data becomes available. Totals may not sum exactly due to rounding.

Mining methods have been changing. In 1990, 55% of world production came from underground mines, but this shrunk dramatically to 1999, with 33% then. From 2000 the new Canadian mines increased it again. In 2024 in situ leach (ISL, also called in situ recovery, ISR) mining accounted for over 50% of production:

| Method | % |
|---|---|
| In situ leach (ISL) | 55% |
| Underground & open pit (except Olympic Dam | 40% |
| By-product | 5% |

Conventional mines have a mill where the ore is crushed, ground and then leached with sulfuric acid to dissolve the uranium oxides. At the mill of a conventional mine, or the treatment plant of an ISL operation, the uranium then separated by ion exchange before being dried and packed, usually as $U_3O_8$. Some mills and ISL operations (especially in the USA) use carbonate leaching instead of sulfuric acid, depending on the orebody. Where uranium is recovered as a by-product, *e.g.* of copper or phosphate, the treatment process is likely to be more complex.

During the 1990s the uranium production industry was consolidated by takeovers, mergers and closures, but this has diversified again with Kazakhstan's multinational ownership structure. Over half of uranium mine production is from state-owned mining companies, some of which prioritize secure supply over market considerations. In 2022, the top 10 companies by production contributed over 90% of the world's uranium production:

### Uranium production by company 2024

| Company | tonnes U | % of world total |
|---|---|---|
| Kazatomprom | 12,463 | 21 |
| Cameco | 10,193 | 17 |
| Orano | 6815 | 11 |
| Uranium One | 5829 | 10 |
| CGN | 5761 | 10 |
| Navoi Mining | 4000 | 7 |
| CNNC | 3286 | 6 |
| Rosatom | 2738 | 5 |
| BHP | 2693 | 5 |
| General Atomics/Quasar | 1808 | 3 |
| Other | 4627 | 8 |

### The largest-producing uranium mines in 2024

| Mine | Country | Main owner | Type | Production (tonnes U) | % of world |
|---|---|---|---|---|---|
| McCarthur River/Key Lake | Canada | Cameco | underground | 7808 | 13 |
| Cigar Lake | Canada | Cameco/Orano | underground | 6501 | 11 |
| Husab | Namibia | Swakop Uranium (CGN) | open pit | 4437 | 7 |
| Karatau (Budenovskoye 2) | Kazakhstan | Uranium One/Kazatomprom | ISL | 3299 | 6 |
| Inkai, sites 1-3 | Kazakhstan | Kazatomprom/Cameco | ISL | 2992 | 5 |
| Akdala & South Inkai 4 | Kazakhstan | Uranium One/Kazatomprom | ISL | 2803 | 5 |
| Olympic Dam | Australia | BHP Billiton | by-product/underground | 2693 | 5 |
| Moinkum & Tortkuduk | Kazakhstan | Orano/Kazatomprom | ISL | 2388 | 4 |
| Rössing | Namibia | CNNC | open pit | 2205 | 4 |
| Khorassan 1 | Kazakhstan | Kazatomprom/Uranium One | ISL | 2030 | 3 |
| Top 10 total | | | | 37,156 | 62% |

## Uranium resources to $130/kg U by country in 2025 (reasonably assured resources plus inferred resources)

| | tonnes U | percentage of world |
|---|---|---|
| Australia | 2,119,800 | 27% |
| Kazakhstan | 1,219,000 | 16% |
| Russia | 745,600 | 10% |
| Canada | 639,700 | 8% |
| Namibia | 504,500 | 6% |
| China | 492,200 | 6% |
| Niger | 412,500 | 5% |

| | tonnes U | percentage of world |
|---|---|---|
| South Africa | 405,700 | 5% |
| Brazil | 231,000 | 3% |
| Mongolia | 223,000 | 3% |
| Ukraine | 206,800 | 3% |
| Tanzania | 75,000 | 1% |
| Other | 549,700 | 7% |
| World total | 7,824,600 | 100% |

Identified resources recoverable (reasonably assured resources plus inferred resources), to $130/kg U, as of 1 January 2025, from OECD NEA & IAEA, *Uranium 2026: Resources, Production and Demand* ('Red Book'). The total recoverable identified resources to $260/kg U is 7.825 million tonnes U.

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# Notes & references

## General Sources

OECD-NEA & IAEA, *Uranium 2026: Resources, Production and Demand* ('Red Book')
World Nuclear Association, *The Nuclear Fuel Report*

# Related information

World Uranium Mining Production
Australia
Canada: Uranium

Uranium in Africa
Namibia
Niger



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