

Charts that Matter **Uranium**

Uranium prices hit record as thirsty AI data centres add to market squeeze

Industry pressured to build new conversion facilities to cover end of US import waiver and impact of Ukraine war



Uranium pellets being processed in Kazakhstan © Bloomberg

Camilla Hodgson in London JANUARY 11 2025

Get ahead with daily markets updates. **[Join the FT's WhatsApp channel](#)**

The price of fuel for nuclear reactors has surged to a record high as demand from artificial intelligence data centres exacerbates a squeeze on the market following Russia's invasion of Ukraine.

Prices for enriched uranium have hit \$190 per separative work unit — the standard measure of the effort required to separate isotopes of uranium — compared with \$56 three years ago, according to data provider UxC.

A resurgence of interest in nuclear power has come as governments and companies eye carbon-free sources of power large enough to service major industrial facilities and communities.

Big Tech companies such as Microsoft and Amazon have become interested in using the fuel to run the [hugely power-intensive data centres](#) they are racing to build out as they compete for market share in generative AI.

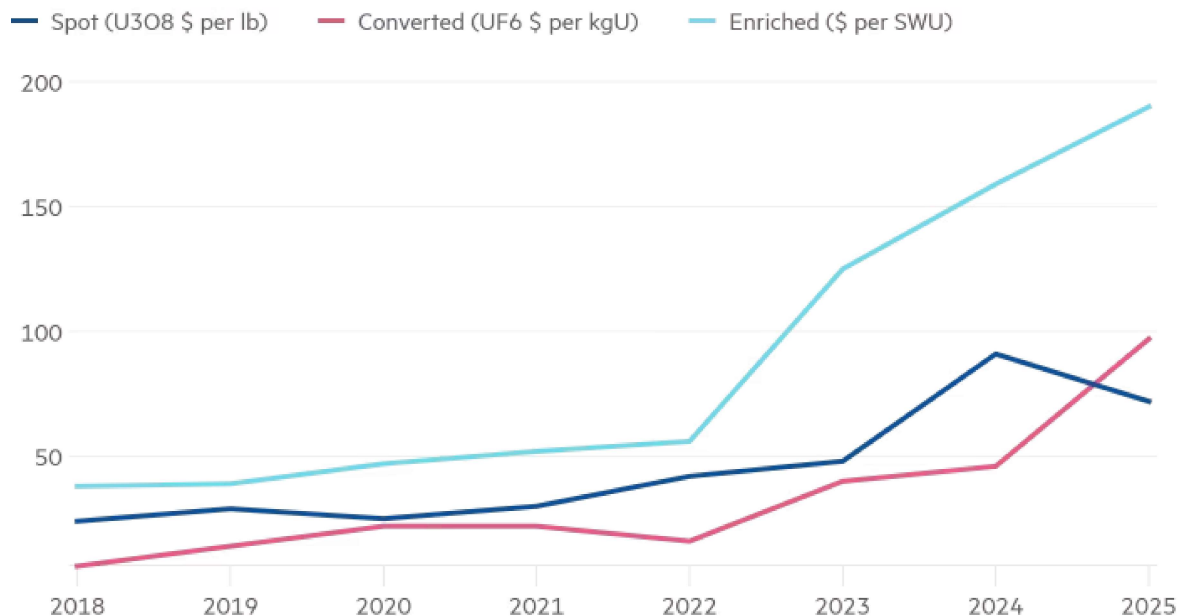
Rising competition for energy has added to the industry's concerns following [Russia's invasion of Ukraine](#) nearly three years ago. Russia is a major player in the process of turning mined uranium into the enriched fuel needed for a nuclear reactor, but US sanctions and a Russian export ban have helped push prices to record highs.

"We just don't have enough conversion and enrichment in the west and that's why the price has had this kind of move, and that price will only go higher," said Nick Lawson, chief executive of investment group Ocean Wall.

Executives and analysts say the issue is likely to be exacerbated by the expiry of a US waiver for importers at the end of 2027. That push has put pressure on the industry to find new facilities that can convert uranium into the pellets that go into nuclear reactors. Outside of Russia, the main western countries that have operational uranium conversion facilities are France, the US and Canada.

Uranium prices soar as global supply tightens

\$ per uranium unit



Source: UxC

"There are lots of very important political decisions to be made" about nuclear and uranium supply chain investments, said Lawson, adding that the building of new facilities would take "years" and cost huge sums of money.

Around 27 per cent of US enriched uranium imports in 2023 came from Russia, according to analysts at Berenberg. While US utilities probably had enough fuel for this year, their cover will fall off substantially in four years' time, the analysts added.

“US utilities will have to commence contracting discussions this year to secure [uranium], particularly with the restriction of Russian uranium imports into the US coming into place at the end of 2027,” they said.

Most uranium is sold under long-term contracts rather than on the open, or spot, market. But prices for immediate delivery could rise as a result of a potential squeeze in the availability of uranium itself, say industry analysts. Kazatomprom, the Kazakhstan state miner and the world’s largest uranium producer, has warned in recent months of lower-than-expected production.

“We see increasingly that Kazakh material will flow to China and Russia and less of it will go west,” which posed an “issue for western utilities”, said Andre Liebenberg, chief executive of London-listed uranium investment vehicle Yellow Cake. “We could easily see a supply crunch in the medium term just because of the lack of new projects that can come on stream quickly.”

[Copyright](#) The Financial Times Limited 2025. All rights reserved.
