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## [Understanding Russia's Appetite for Uranium](#)



Russia is [the third-largest consumer of uranium in the world](#), and the country aims to be a key driver of growth in uranium markets over the next few years. The evidence of Russia's intent can be seen domestically through its own [nuclear power expansion efforts](#). In Central Asia, Russia draws on close ties from the Soviet period to facilitate uranium extraction, particularly in Kazakhstan. Further afield, Russia's state backed Rosatom has been working on overdrive to secure various nuclear power plant construction deals in Africa and the Middle East.

Such agreements were reached with [Nigeria in October](#), and with [Sudan](#) and [Egypt](#) in December. Closer to home, [Rosatom signed a new agreement with Uzbekistan](#) in December. Meanwhile, construction proceeds on the Rosatom-built Astravets nuclear power plant in Belarus, with the first of two reactors [scheduled to come on line in 2018](#). Testing also [began](#) at the end of 2017 at Rosatom's Tianwan project in China. Furthermore, construction of Rosatom's Akkuyu plant in Turkey is also [due to begin in 2018](#), while works [were launched](#) at its Rooppur project in Bangladesh at the end of 2017, as they [were at its Bushehr-2 power plant site in Iran](#).

Of course, that is not to say that all of those projects will ultimately come online. The Hanhikivi nuclear power plant project in Finland [has faced repeated delays](#), as [has the Paks-2 plant in Hungary](#), both in large part due to Rosatom's involvement. A number of other recent projects have faced challenges. It was [only in 2015](#) that

Rosatom and Nigeria envisaged as many as four nuclear power plants being built there. Plans to build new reactors at Ukraine's Khmelnytsky site [were scrapped](#) after Russia's invasion of Ukraine and a deal with South Africa was [ruled unlawful](#) by a South African court in April 2017. In addition to the pure political risks facing Russian nuclear projects, Moscow has also repeatedly offered to provide the financing for them, which presents its own credit risks. [Doubts over its financing already threaten to kill off](#) Rosatom's planned nuclear plant in Jordan and likely also played a role in Vietnam's [November 2016 decision](#) to cancel its project with Rosatom.

Nevertheless, adding in Russia's aforementioned [domestic nuclear power projects](#), Rosatom and China are forecast to be the two major drivers of international demand for uranium supplies over the coming decade. Although the balance could tip heavily in China's favor if financing and political risks stop many of Rosatom's plans in their tracks, the [crisis](#) in France's nuclear construction sector, the lack of new US-driven projects, and Germany and Japan's plans to phase out nuclear energy, mean that new major demand-side factors are unlikely to emerge in the short-to-medium term.

### **Kazakhstan and uranium supply**

The supply side of uranium production is little more diversified than the demand-side. [According to the World Nuclear Association](#), 39% of global supplies are mined in Kazakhstan, while another 4.8% is mined in Russia. Canada and Australia are also notable producers, responsible for 22% and 10%, respectively. Production by company is only slightly more balanced with Kazakhstan's state-owned production company Kazatomprom controlling an estimated 21% of global production in 2016 and its next-largest competitor, Canadian-based Cameco, responsible for 17%. Rosatom's ARMZ and Uranium One subsidiaries control a significant portion of the remaining 18% of Kazakhstan's share of global production, including [through a number of joint ventures](#) with Kazatomprom.

Astana is well aware of its dominant supply-side position, and has over the past year taken steps to begin exercising this in a bid to boost uranium prices. On 10 January 2017 Kazatomprom [announced](#) it would scale back production by 10%, [driving a 10% increase](#) in the price of spot uranium to around US\$24.25 per pound (US\$53.46 per kg). However, prices retreated again throughout 2017 - despite numerous predictions otherwise and the [wider bull market for most commodities](#) in the second half of the year. Prices subsequently fell again, however, spending most of 2017 around US\$20 per pound (US\$44.09 per kg), flirting with even lower prices.

By 4 December, Kazatomprom decided to [announce further cuts](#) - decreasing production by 20% over the next three years. The move, which represent a 7.5 per cent cut in forecast global uranium production for 2018 according to Kazatomprom, [prompted](#) another boost in uranium prices spot prices to above US\$24 per pound. Nevertheless, Japan's continued nuclear shut-down, Germany's phasing out of nuclear energy, continue to weigh negatively on the demand side, despite the fact that China's demand for the world's heaviest natural element [is expected to double by 2025](#) and despite the aforementioned slate of Rosatom projects at home and across the world.

Although Kazakhstan has such significant influence over uranium supply, and Russia is a major player on the demand side, the uranium market is in many ways driven by political rather than market forces. There are only a limited number of buyers and the security of uranium supplies is seen as a national security issue by leading consumers such as the United States and China, not to mention Russia itself. As a result, China has sought to significantly increase its uranium purchases from Astana while scouring the world for new supplies, most notably the [Husab mine project in Namibia](#) that began production last year but which is expected to have a production cost well above recent spot prices. It is worth noting that spot prices for uranium are not wholly comparable with those of other markets as such a significant share of uranium sales are agreed in long-term contracts.

### **Kazakh Uranium and Chinese-Russian relations**

Russia is keenly aware that uranium's geopolitical significance outweighs its potential economic impact, even in the event of another uranium price spike like that the market witnessed [in 2007](#). China and Russia's competition in Central Asia has received fairly little market attention, despite, or perhaps because of, the spike

of coverage of the region resulting from its centrality in China's 'One Belt One Road' project.

In the uranium market, however, it is clearly visible. Russia has sought to push heavily into Kazakhstan's uranium market, with which it already had significant ties from the Soviet-era but developed at a far slower pace in comparison to that seen over the past decade. Although most coverage of the sale is sophomoric at best given its political overtones in the United States, Rosatom's [2010 investment into Uranium One](#) and subsequent [buy-out of the remainder of the company in 2013](#) are strong examples of this. However, the deals are far more geopolitically significant for Russian relations with Kazakhstan and its competition with China in Central Asia than they are to the United States, rhetoric aside.

In August 2014 Russia and Kazakhstan [signed an agreement](#) to construct the first-ever nuclear plant in Kazakhstan and announced plans to deepen cooperation. However, these plans never came to fruition, although Russia remains keenly interested and Rosatom is expected to participate in the tender for a nuclear power plant that [Kazakhstan announced in January 2018](#). China has been following these developments keenly and signed [a new cooperation agreement](#) with Kazatomprom in December 2014. At the time, Kazatomprom was already [exporting 55% of its production](#) to China according to the firm, although notably China was responsible for a significantly [lower share](#) of Kazatomprom's revenues.

Moscow and Beijing continue to engage in fierce competition lobbying for influence over Kazakhstan's uranium assets. Kazakhstan still lacks its own enrichment capabilities, and has shown no sign of pursuing them, despite Beijing's investment in a joint venture to [produce ready-to-use fuel assemblies](#) in Kazakhstan that will require the re-import of enriched fuel. Rosatom's interest in building a power plant in Kazakhstan would likely use Russian re-exported enriched fuel, as a Chinese-built plant would likely use Chinese re-exported fuel.

### **Kazatomprom privatization to spur Russian-Chinese competition?**

Kazatomprom's December 2017 production cut set off significant speculation that a sale of a minority stake in the company could finally be forthcoming. The privatization program has [repeatedly been delayed](#) and none of the major businesses teased have reached the market, with the exception of a sale of a 51% stake in KazMunaiGas' overseas subsidiary KMG International to CEFC China Energy. Just a week before the production cut announcement, it was [reported](#) Kazatomprom hired JP Morgan as the lead advisor for a London public offering, which could be as much as 25 per cent of the company.

China and Russia will both be keenly interested in the Kazatomprom privatization. Not only would it enable either Beijing or Moscow to further consolidate their role in global uranium markets but also to boost their respective energy security while furthering their influence in Kazakhstan. China so far has shown no indications that it desires a confrontation with Moscow over influence in Central Asia. However, the small number of players in uranium production, its limited market, and Beijing and Moscow's status as the key drivers of demand growth, mean that competition for market share may well be contentious. Kazakhstan has so far proven [adept at balancing the two powers](#), and not just when it comes to their uranium interests. The coming Kazatomprom privatization may well prove a most significant bellwether for Central Asian geopolitics, Kazakhstan's balancing attempts, and the future of uranium markets.

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