

Fueling conflict: The impact of wars on oil and uranium prices

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0. Introduction

Wars throughout history have often been fueled by the pursuit and control of essential resources, revealing a profound interconnection between conflicts and commodities. From ancient times to the present day, this relationship has shaped geopolitics and influenced the course of nations. This article will present how two recent conflicts have impacted and increased the volatility of key commodities: oil and uranium.

1. Oil

In times of high uncertainty, the price of commodities has always become volatile, sometimes to the point where their price can cause crises. We can see this mainly with commodities that are essential to human life, such as crude oil. The three times crude oil peaked were three times when the world and its economy experienced a crisis. This can be seen in the following diagram:

Figure 1. Real oil price since 1970¹



In July of 1979, Iran (a major exporter of crude oil) was in turmoil trying to overthrow the current dynasty; this caused oil operations and exports to halt. In 2008, the most severe economic crisis occurred since the Great Depression of 1929, as the housing market in the USA crashed, bringing down major markets with it too. And, right now with wars ongoing both in Europe and the Middle East, and geopolitical tensions rising between global hegemonies, we can see a peak is starting to form again.

¹ [How to mitigate the impact of the war in Ukraine on commodity markets | Brookings](#)

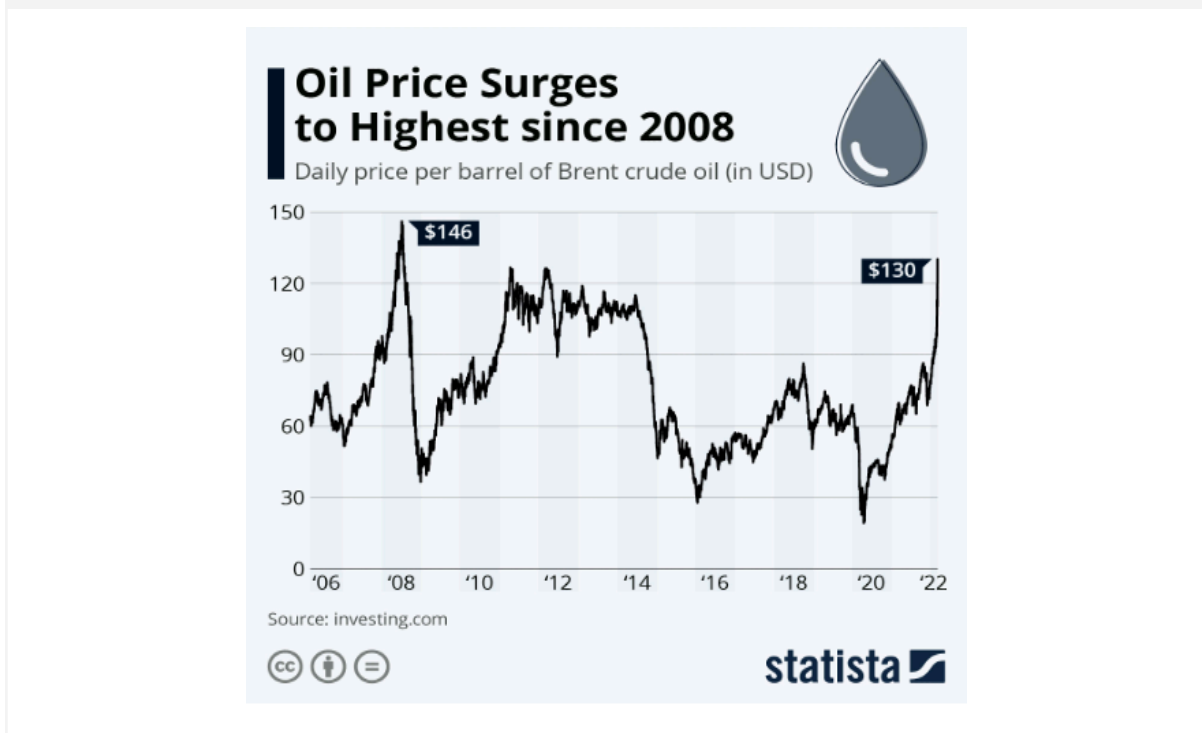
The Ukrainian-Russian Conflict and its Impact on Oil:

The conflict between Russia and Ukraine, which started in February 2022, has been a major factor in the price of oil as Russia is the second largest exporter of oil in the world with 12% (Statista) of global exports. This has led to a series of changes in oil supply and its prices, mainly in Europe.

The EU has taken steps towards the separation of itself from Russian oil with measures such as the launch delay of the Nord Stream 2 gas pipeline between Russia and Germany, imposing price caps on Russian crude and refined oils, and implementing oil embargoes against Russia.

Despite these measures being taken, the price change in oil has been fairly mixed. When the war began in February of 2022, the price of oil spiked immediately after the conflict had begun, this was because of a worry about Russian exports being very much limited and causing global oil demand to exceed its supply, allowing it to soar to more than \$130 per barrel.

Figure 2. Brent Crude oil (in USD) from 2006 to 2022²



Despite this, oil prices have since fallen to pre-conflict levels of an average of \$80 per barrel due to various factors such as the EU's full oil embargo against Russia and the G7s price cap on Russian oil. Nevertheless, Russia has managed to sell its oil exports well above the \$60 per barrel cap imposed by the G7+ nations and the EU, as strong demand from China and India has allowed for the average price of oil to remain above the \$60 cap.

² [Chart: Oil Price Surges to Highest since 2008 | Statista](#)

Furthermore, the Russian integration into BRICS (Brazil, Russia, India, China, and South Africa; with now more countries entering) has allowed the group to go from 20% of worldwide oil production to 42%, in fact, reporters from institutions like the FT and Bloomberg, say it's becoming the new OPEC. However, with its constant objective to trade in currencies other than the US\$, for example with the Chinese Yuan, the prices of oil per barrel in US\$ have been very volatile. BRICS have increased their influence in the global energy market, and the shift away from the so-called “petrodollar” could have negative long-term implications for oil prices in Western countries.

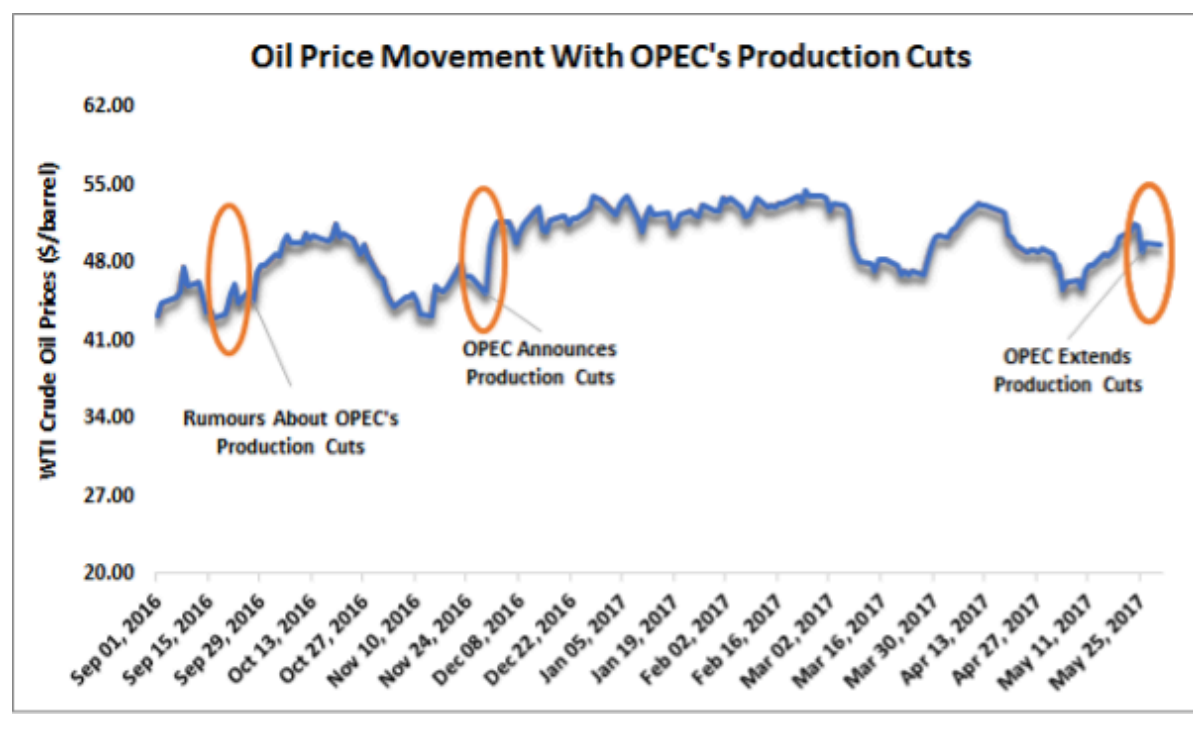
Middle East tensions & Israel-Palestine Conflict:

News from the 20th of November 2023:

The current tensions and conflicts in the Middle East are too new to understand the long-term effect on commodities, especially oil. However, analysts speculate that these tensions have led to discussions within OPEC+ (which will meet on November 26th) about further oil production cuts, with an additional cut of 1 million barrels a day being considered³.

This decision would potentially inflame tensions with the US as geo-political aspects start to influence the price of oil, since the majority of Middle Eastern producers and global powers in oil production have backed Palestine, and the US has backed Israel. The price of oil could be expected to soar once more, showing us how the effect of wars and crises affect commodities.

Figure 3. Oil Price from September 2016 and May 2017⁴



³ [Opec+ weighs further oil production cuts as anger mounts over Gaza | Financial Times](#)

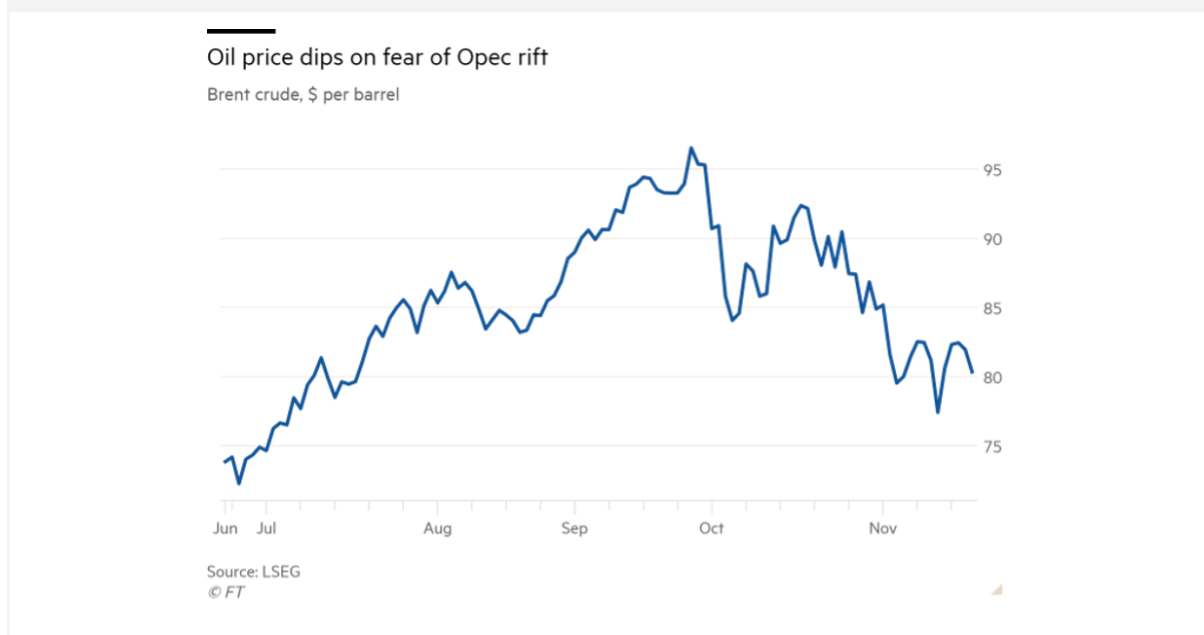
⁴ [Opec's influence on oil prices waning | Forbes](#)

News from the 26th of November 2023:

As of the 23rd of November 2023, OPEC+ had postponed the meeting that was supposed to happen on Sunday 26th of November 2023, and last until the 30th. The meeting had no renewal date yet as the group was struggling to arrive at a production agreement for the year 2024 as tensions in the Middle East worsened.

In fact, Brent (a physically and financially traded oil market based on petroleum production from Europe, Africa, and the Middle East) had dropped 2% and dropped to \$80.53 a barrel.

Figure 4. Oil Price from June 2023 to December 2023⁵



However, in early December 2023, OPEC+ agreed to make additional voluntary cuts to the amount of barrels produced per day. The most significant were Saudi Arabia, who agreed to extend its already existing voluntary cut of 1 million barrels per day into the first quarter of 2024, and Russia who agreed to sustain a cut in production for the whole year of 2024 of 500,000 barrels per day; all this in hope to offset what OPEC considers a stuttering global economy and rising supplies from its rival exporters.

The FT interviewed an MD at Eurasia Group who said the following:

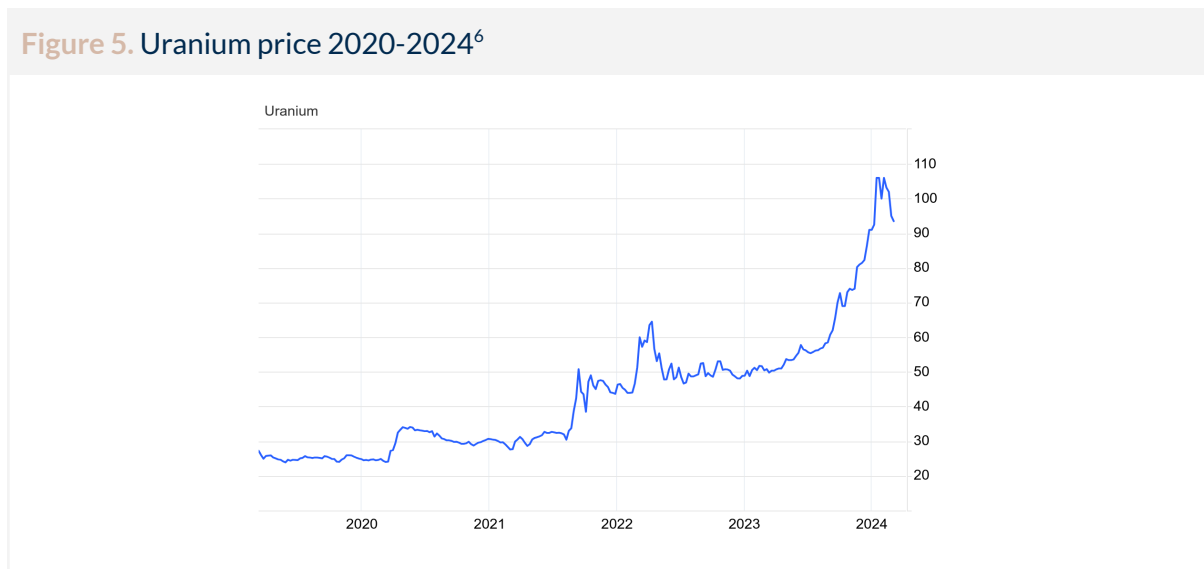
“The market is going to test OPEC+ and whether \$80 a barrel is really a floor they can defend”. “The cuts being billed as ‘voluntary’ undermines the psychological impact for the market a little, but if the full cut is realised, its impact on the market should not be discounted.” Analysts from the FT explain this continuous cut in oil production as a way for OPEC to protect its prices and not allow them to slip as tensions in the Middle East are being heightened by the Israel-Palestine conflict⁵.

⁵ [News updates from November 23: Eurozone economy shows signs of bottoming out; Turkey lifts interest rates to 40% | Financial Times](#)

2. Uranium

One cannot write about trends in the commodity market in 2023 without mentioning the impressive rise of uranium. This element, also referred to as “yellow cake”, is one of the more understated commodities that has been impacted by the ongoing war in Ukraine and overall shifts in the energy economy. There are three key factors contributing to uranium’s growth, which saw an 80% increase this past year: sustainable energy commitments, larger developing nations’ increasing energy demand, and inherent supply constraints. With this combination of increasing demand and contracting supply, an inherent market mismatch is present, which culminated in a bull market in 2021 and is contributing to both short and long-term upward price pressure.

Figure 5. Uranium price 2020-2024⁶



Historical trends and development:

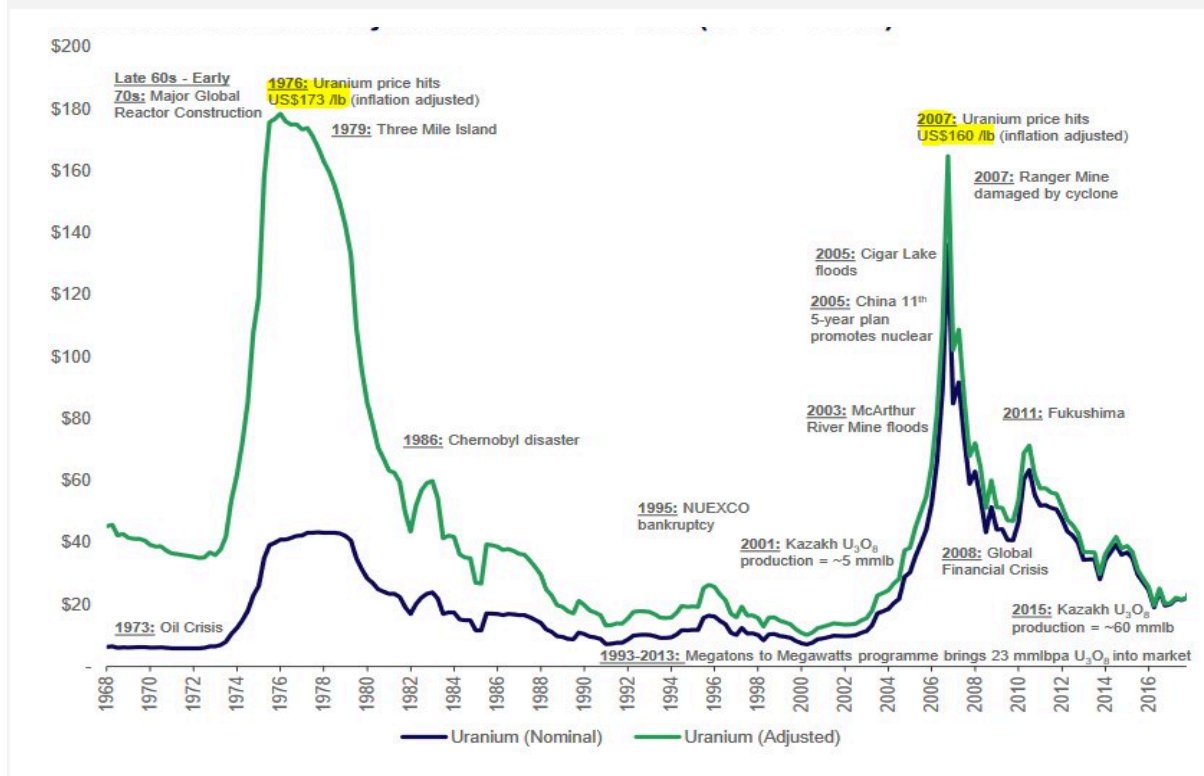
To better understand the current evolution of uranium prices and how ongoing geopolitical developments will affect the market, we need to examine past movements. The uranium industry is defined by external shocks that impact its securitization of supply as a nuclear fuel, and it has experienced significant fluctuation and volatility over time.

The first major fluctuation in uranium prices occurred following the 1973 oil embargo and subsequent oil crisis, which greatly increased the demand for nuclear energy as a strategic alternative to oil. This was subsequently undone by the Three Mile Island and Chernobyl crises in the late 70s and 80s, raising concerns regarding the safety of this energy source. The second peak in 2007 was due to increased demand from developing nations such as China during the era known as the "nuclear renaissance," facing supply disruption stemming from the flooding of one of the world's largest mines, Cigar Lake. This bull market was abruptly halted by the 2008 financial crash and, more importantly, the 2011 Fukushima disaster. This crisis led to a fierce global reaction, with states such as Japan and Germany completely shutting down⁷ their 54 and 17 plants, respectively, contributing to a long-term decline in the price of uranium to \$18/lb in 2017.

⁶ [Uranium - Price - Chart | Trading Economics](#)

⁷ ["Understanding What's Behind the Uranium Market." | JD Supra](#)

Figure 6. Historical inflation-adjusted uranium price (1968-2016)⁸



In 2000, the uranium market was dominated by firms involved in its production and supply, accounting for 95%⁹ of spot prices. Since 2011, their pricing role has decreased to about 30-40%, with the rest occupied by institutional and retail investors, increasing market liquidity. The post-2007 deflated uranium price is mostly due to increased competition that uranium faced from new sources of energy in the US after its 2011 shale revolution, state subsidization of sustainable green energy sources (primarily in the EU/US), and the negative connotations brought by the Fukushima nuclear disaster.

Surging global demand:

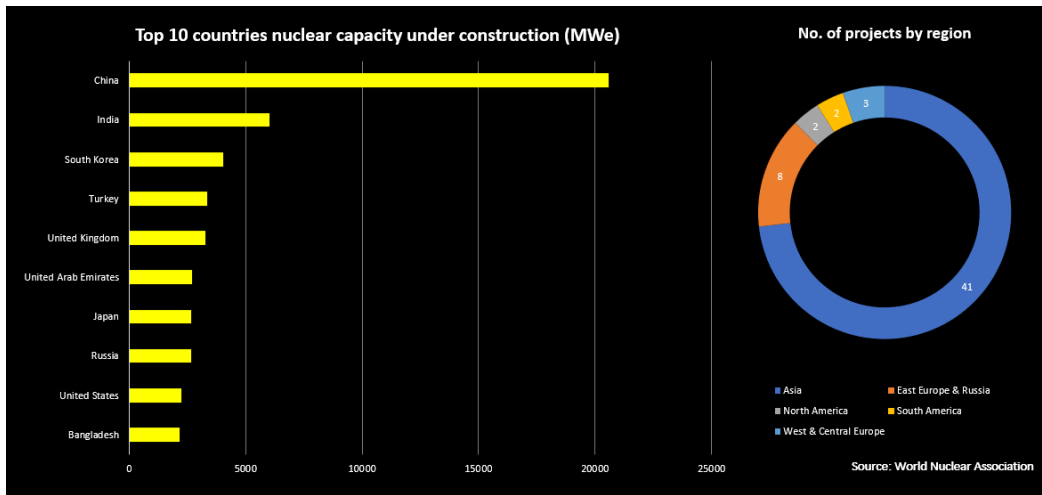
According to a Forbes¹⁰ article in 2020, the two major concerns for the uranium industry were the lack of demand in domestic markets and the closure of well-performing nuclear power plants. Currently, these fears have been drastically recalibrated, and just like in 2007, we are currently witnessing a "perfect storm" of rising demand and contracting supply.

⁸ [Yellow Cake PLC](#)

⁹ ["Uranium Markets." | World Nuclear Association](#)

¹⁰ ["Uranium supply isn't the crisis in the Nuclear Industry | Forbes](#)

Figure 7. Global nuclear projects are mostly in Asian countries, led by China and India¹¹

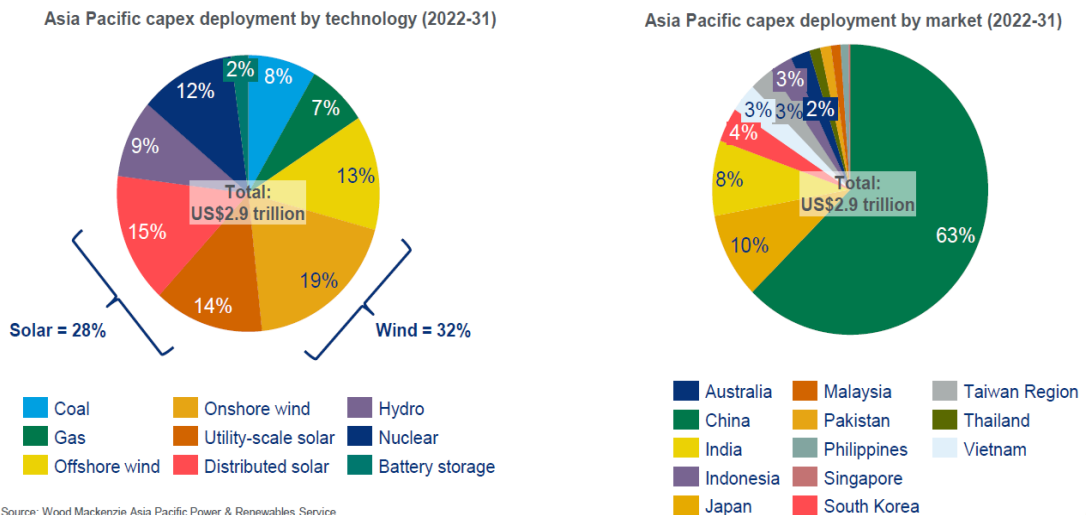


These changes have resulted from sustainable energy commitments made in the Paris Climate agreements, coupled with supply tensions stemming from geopolitical conflicts¹². Talks revolving around nuclear energy have grown louder in the past half-decade as all options to achieve net-zero climate emission targets are being explored. Even before the start of the conflict in Ukraine, the International Energy Agency stated that the nuclear energy sector would require a doubling of its energy output to support these climate initiatives.

Figure 8. Asia Pacific capex deployment by technology and market (2022-31)¹²

Asia Pacific will attract US\$2.9 trillion of investment in power generation in the next decade, increasing 21% from a year ago

Wind and solar investment to hit US\$1.8 trillion over the decade, 60% of the total



¹¹ [Global energy crisis drives rethink of nuclear power projects | Reuters](#)

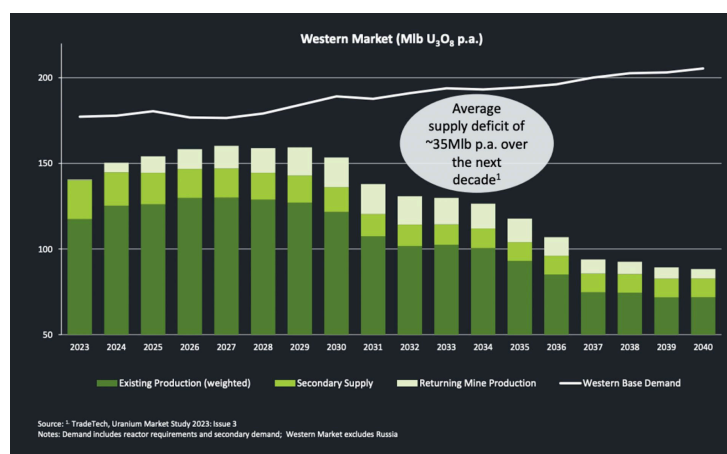
¹² [Global energy crisis drives rethink nuclear power projects | Reuters](#)

Nonetheless, war in Europe brought drastic shifts in global gas/oil supply chains due to Western sanctions, making states realize that a successful green energy transition will require the revival of nuclear energy capabilities. China and India have made significant investments in this sector and see it as a key energy source to sustain their large populations. Currently, there are 60 reactors under construction worldwide (22 of them in China) with another 110 planned and 30 more countries considering or already starting new nuclear programs. Besides China, India is also leading the way in nuclear energy, planning to commission 20 plants by 2031, with the first one becoming operational next year.

This is an important trend as these two developing economies make up around one-third of the global population and will face significant future energy demand increases. This surging demand is already evident, with overall investments in energy increasing by 21% year-on-year in the Asia Pacific region. Pure global nuclear demand in 2021 was around 62,500 metric tons and is forecasted to increase to 79,400 and 112,300 metric tons by 2030 and 2040, respectively. This accelerating demand can already be seen in 2023 as utility uranium contracts, typically employed by power plants, have surpassed the volume of 2022, which was a 10-year-high.

On the other hand, Europe is politically divided on this issue, with certain countries like Austria, Denmark, Germany, Luxembourg, and Portugal calling for Nuclear not to be considered a green energy source, while others like France and Spain strongly support it. This divide becomes clearer when analyzing the energy sources of France and Germany, with the former generating 62GW just from Nuclear, while the latter generating less than 25GW from coal. Even though countries like Germany, due to Green Party politics¹³, may be hesitant to reopen nuclear power plants, demand is already growing, and nuclear power seems to be the main source of sustainable energy that can provide high yields for developing nations with growing populations transitioning toward middle-income status. Even Japan has lifted a ban on the world's largest atomic power plant, which shut down in 2011 following the Fukushima disaster, to reduce its dependency on imported fossil fuels such as LNG, which is projected to be reduced to 20% by 2030 from a current 37%¹⁴.

Figure 9. Uranium structural supply shortage¹⁵



¹³ [The Nuclear Phase-Out in Germany | Base Bund](#)

¹⁴ [How great is Japan's reliance on the Middle East Energy | Reuters](#)

¹⁵ [There is no bear case for uranium in 2024 | Stockhead](#)

Problems for the West: Supply Side

The 2022 Russian invasion of Ukraine has highlighted the interconnectedness of the global economy, particularly in Europe, and the need for a reevaluation and diversification of energy sources and supply chains. While natural gas and oil are often the first commodities that come to mind, it's worth noting that Russia supplies approximately 20%¹⁶ of the EU's uranium and roughly 15% of US demand. Russia holds an 8% stake in global uranium supply and controls 46% of the world's enrichment capacity, the process required to convert uranium into U-235 and U-239, which are essential for both nuclear weapons and nuclear fuel. Additionally, Russian technology accounts for 50% of global nuclear reactors under construction, including a significant portion of the new Small Modular Reactor¹⁷ (SMR) technology, which relies on High-Assay Low-Enriched Uranium (HALEU) fuel, sourced entirely from Russia. As a result, American SMR companies like Bill Gates' TerraPower have encountered operational challenges following the Russian invasion of Ukraine. Furthermore, on December 11th, the US government implemented a ban on the importation of Russian enriched uranium products, as part of its ongoing efforts to isolate Russia's economy from global markets.

This serves as another clear example of the influence of politics on energy markets, with the potential to increase enrichment costs by 20%, as a third of all enrichment of US-bought uranium takes place in Russia¹⁸. Congress, however, included a waiver clause in case alternative sources cannot be found or if the ban would interfere with current US nuclear reactor operations. This waiver highlights the US's dependence on Russian uranium and its inability to phase it out at present, signaling to the market the need for increased uranium supply.

To compound the situation, both European and American firms are aiming to produce HALEU at a commercial level but have estimated that it will take an average of 5 years from the project initiation point¹⁹. This presents a "chicken and egg" problem for the future uranium market, as countries may be reluctant to plan reactor construction without a stable fuel supply and vice versa, hindering the sector's development. Beyond these future challenges, the expansion of the nuclear energy supply faces current handicaps, as finding alternative uranium suppliers typically entails a 2-3 year waiting period, even after signing contracts. Moreover, there is an existing mismatch in supply and demand, with demand already exceeding 180 million lbs while the supply of Yellowcake for 2023 stands at around 145 million lbs. Kazakhstan, which produces 44%²⁰ of this supply, plays a crucial role in shaping the evolution of nuclear energy markets in the Western world, where energy sourcing has become a top priority since 2022. Concerns have arisen due to the sale of a stake in the Kazakh state energy supplier Kazatomprom to Russia's Rosatom²¹ in late 2022, as it raises the possibility of reduced uranium supply in response to Western sanctions against Russia. This supply is particularly critical for countries like France, which relies on Kazakhstan for 27% of its Uranium-238²² to fuel nuclear

¹⁶ [Why EU sanctions don't include Russian nuclear industry | Deutsche Welle](#)

¹⁷ [Why small modular reactors will shape the future of nuclear debate | White & Case LLP](#)

¹⁸ [Russia and China maintain grip on Kazakhstan's uranium supply amid us and EU high reliance on it | Intellinews](#)

¹⁹ [Catalyzing a Domestic Commercial Market for High-Assay, Low-Enriched Uranium \(HALEU\) | Nuclear Innovation Alliance](#)

²⁰ *Ibid.*

²¹ [Russia Uranium Deal Caused Manager Exodus at Kazakh Mining Giant | Bloomberg](#)

²² Uranium-238 (U-238) is a naturally occurring radioactive isotope of uranium, making up approximately 99.3% of all natural uranium. It's a fertile material, meaning it can undergo nuclear reactions such as neutron capture, and transmute into other elements. Most importantly, it is an essential component in the nuclear fuel cycle and the production of plutonium-239 for nuclear weapons and power generation.

reactors, constituting 70% of its total energy production. Consequently, French President Macron visited Kazakhstan in November 2023, marking the first French state visit since 1991, with the aim of strengthening French-Kazakh strategic cooperation in rare earths and metals.

Similar threats to supply are observed in Niger, stemming from the coup d'état last July that led to the removal of French presence in the country and put 5%²³ of global uranium supply in an unpredictable situation. Like Kazakhstan, Niger provides France with a significant share (20%) of its uranium, making it crucial for maintaining France's energy grid. Analysts in the uranium industry are closely monitoring the political developments in both Kazakhstan and Niger, especially the competition between China and Russia²⁴ regarding the capture of uranium production in Kazakhstan, recognizing how changing contracts between states, carries great potential for supply shocks and other industry impacts. Already, we have seen Kazatomprom announce reduced uranium production in 2024 due to sulphuric acid shortages impacting operations, further straining supply.²⁵

New player: Sprott Physical Uranium Trust

Sprott, a metals commodity asset manager, established its uranium trust in July 2021 that aims at purchasing and storing the commodity for a long-run-oriented investment. The fund has amassed more than 12.7k metric tons of uranium U308, equalling around 1/8 th of total annual demand, with no intention of selling. In 2024, it announced that it would raise capital by \$1 billion²⁶ to be used under Sprott's "at the market" equity programme²⁷, allowing for a total valuation of \$1.3b.

The question is to what extent funds like this can influence the long-term uranium market, which has undergone large volatility in the past decade. Sprott aims to amass uranium as an investment vehicle and leverage its inventories to provide value to the renewable energy sector in the upcoming years. Hence why it is continuing its purchases of uranium despite rising spot rates²⁸, further supporting the upward price trend and overall uranium market. Similarly, Sprott's uranium ETF which amalgamates 40 uranium sector companies, has seen extreme growth with more than 44% return in the last year.²⁹ These two instruments provide high liquidity and easy investment in the uranium industry and highlight uranium's bull market transition.

Overall, uranium seems to be reclaiming its status as a source of clean and reliable energy, which we believe will help make it appealing to both "realist" and ESG-oriented investors. Additionally, inherent supply and demand mismatches are already present and will grow in 2024. Kazatomprom's announcement of a 12-14% reduction in guidance³⁰ means that the largest producer will have to become a buyer. This supply reduction puts Kazatomprom's contracts (which are already not entirely fulfillable with current supply rates) in jeopardy. Since these contracts are of utmost priority, spot uranium purchases could be required until supply is

²³ [Country profile Niger | World Nuclear Association](#)

²⁴ [Russia and China maintain grip on Kazakhstan's uranium supply amid US and EU high reliance on it | IntelliNews](#)

²⁵ [Kazatomprom expects adjustments to its 2024 production plans | Kazatomprom](#)

²⁶ [Sprott physical uranium trust announces | Finance Yahoo](#)

²⁷ [Sprott Physical Uranium Trust Announces Updated "At-the-Market" Equity Program | Finance Yahoo](#)

²⁸ [Sprott Physical Uranium Trust Continues Buying Physical Uranium at a Historical Pace | Yahoo Finance](#)

²⁹ [URNM Stock Fund Price and Chart | TradingView](#)

³⁰ [Sizzling uranium stocks extend surge on kazakh production cut | Bloomberg](#)

met, suggesting a uranium upside with no limit. Nonetheless, this does not mean a possible uranium correction is off the table, however, it does reassure uranium investors that a bullish trend is here to stay.

Overall, these supply dynamics coupled with geopolitical conflicts of interest continuing into 2024 put the uranium market in a position of opportunity for strong and stable growth.



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