

OCEAN WALL

THE CASE ON URANIUM – MARCH 2022

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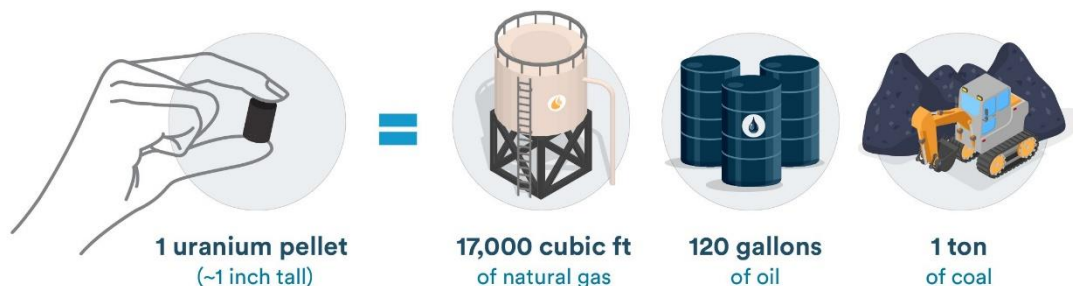
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THE THESIS

Nuclear energy is enjoying a renaissance. There is now an almost global political consensus that it presents a scalable, non-intermittent and zero-carbon solution. Intermittent power sources such as wind and solar cannot be relied on for continuous energy output and do not supply the same baseload power that nuclear energy can produce. One only needs to look at the images of frozen wind turbines in Texas last year to visualise the importance of non-intermittency. Additionally, nuclear power presents one of the lowest operating costs at around 2 cents per kilowatt-hour and is extremely energy dense.

Fast Facts on
NUCLEAR ENERGY

Nuclear fuel is **extremely energy dense.**



Source: EIA

Currently 11% of the world’s electricity is delivered using nuclear. With the ‘electrification of everything’ and advancement in nuclear energy delivery through Small Modular Reactors (SMR) there is a compelling proposition presented in terms of cost, scalability, and sustainability.

As COP26 only reinforced, all economies are coming under increasing scrutiny to deliver on initiatives to accelerate reductions in CO₂ output and meet the Paris climate goals. The US, EU, UK, France, Japan, Canada (to name a few) have all pledged to carbon neutrality by 2050, with China committing to by 2060.

Over 30 countries are now working with the International Atomic Energy Agency (IAEA) to explore introducing nuclear power. The IAEA forecast nuclear-generation capacity to double by 2050.

The host of benefits nuclear presents are becoming too apparent to ignore, particularly considering rising global energy prices and more frequent power outages. As the world concentrates on natural gas and oil prices, uranium (the fuel needed to run nuclear reactors) has more than doubled in the past 12-months. The move follows a 10-year secular bear market after the nuclear accident at the Fukushima Daiichi nuclear power plant in 2011. Having hit a low of \$19/lb, uranium recently touched \$60/lb.



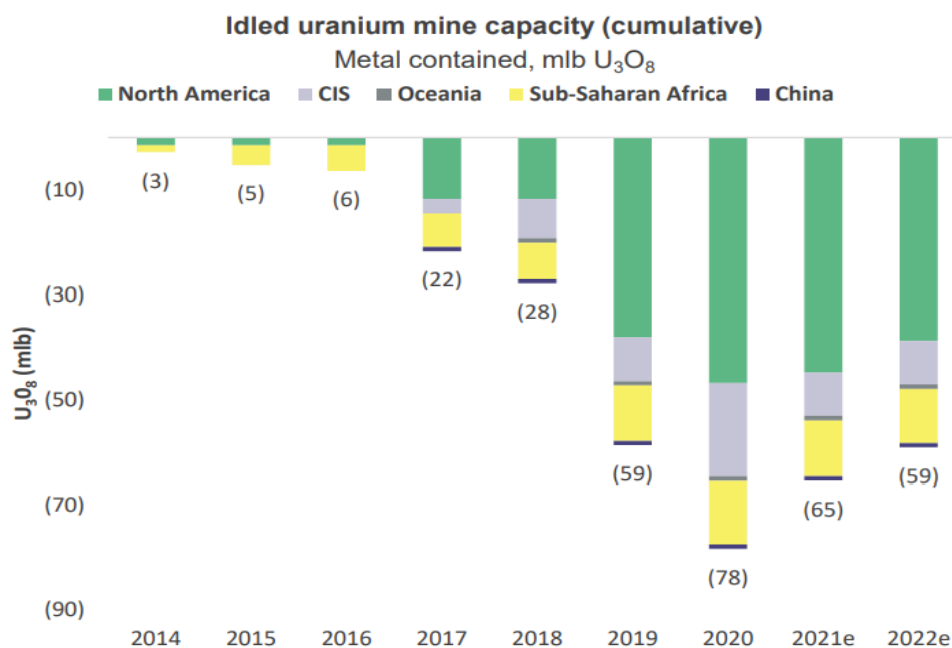
Source: Trading Economics

After Fukushima, the Japanese decommissioned their nuclear fleet and flooded the uranium spot market with inventory. As the chart shows, prices collapsed getting to distressed levels that saw most uranium mining operations become cost ineffective. Whilst operating expenses differ by location and company (e.g., Kazatomprom \$20/lb compared to Cameco \$50/lb), the average breakeven of a uranium mine is around \$55/lb. Just as rising uranium prices have a compounded effect incentivising exploration and mining activities so falling prices have the reverse and only recently has investor capital begun to return.

Investment in uranium	Operable reactors ⁽¹⁾	Reactors under construction ⁽¹⁾	Planned reactors ⁽¹⁾	Proposed reactors ⁽¹⁾
World Nuclear Reactor Fleet	441	56	101	325
China Reactor Fleet	51	18	37	168

Source: World Nuclear Association

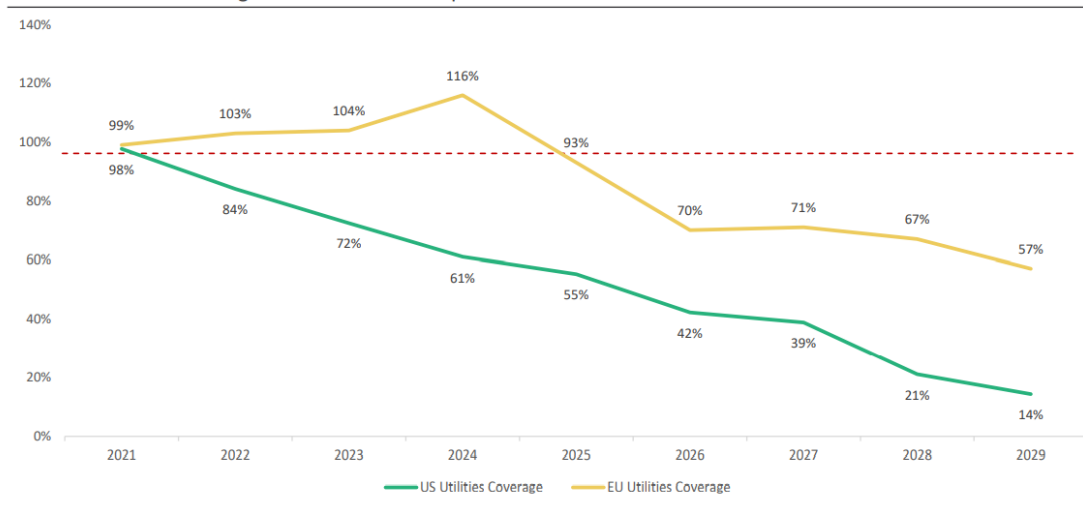
As less uranium was required post-Fukushima, exploration companies and miners curtailed their production, because even though capacity was there, demand was not. Uranium is currently in a supply deficit as idle mines wait for the spot price to reach the point where they can resume their operations. This has been exacerbated by the pandemic which forced Cameco, the world’s second largest producer, to close every one of its uranium mines in Canada, while the US produced zero uranium in 2020. Primary supply will not reach previous levels even when the spot price exceeds \$55/lb as idle mines take 12-18 months to restart as government approvals, safety checks, capital, workers, and machinery all need to be reengaged.



Source: MineSpans

Additionally, many contracts are coming to an end which will see utilities sign new contracts at above market prices. After 2007, global operations were at a near decade long standstill, this meant utilities were not looking to secure uranium in the long-term due to uncertainty around price. As nuclear makes its comeback, utilities will once again look to source long-term security of uranium, tightening the spot market and driving prices. Historically, inventories had been stockpiled and regularly replenished to satiate demand for uranium, however today, inventories held by the world’s largest uranium producers are at their lowest ever levels contracted out the next eight years. At current rates, uranium stockpiles will run out in the middle of the next decade and upward pressure on prices will be added to as inventories continue to deplete.

Future contracted coverage rates of US and European utilities



Source: EIA

It is worth noting that the ‘nuclear renaissance’ of 2006/07 was a single movement, today it is part of a much wider climate crisis agenda. Capital is flooding into sustainable, cheap, and scalable forms of energy and nuclear is once again showing why it not only should be in the discussion but must be.

THE SUPPLY DEFICIT & PRICE INELASTICITY

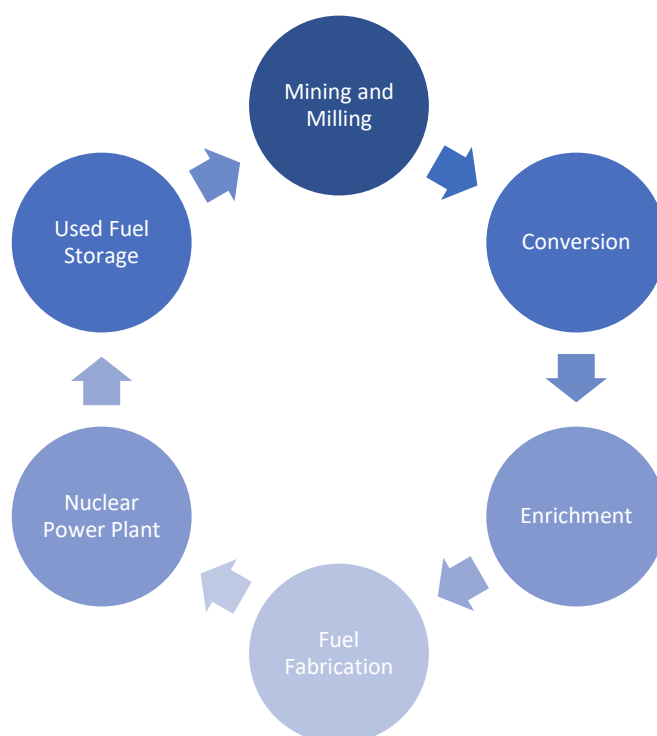
‘There is a risk that there may not be enough material to satisfy all existing global demand in the mid- to long-term.’ – Askar Batyrbaev, Kazatomprom CCO, September 2021.

The fuel buyer at the nuclear power plant will never get in trouble for the price they pay for uranium, but instead for not securing the supply of it. To the world’s nuclear power plants uranium is completely price inelastic – they must have it. They are also price agnostic – uranium represents c.5% of a nuclear plant’s ongoing costs. As history showed in 2007, buyers will pay \$137/lb as readily as \$20/lb because, if they ever run out, the restart costs of a nuclear plant are hundreds of millions of dollars. Adjusted for inflation, the 2007 uranium price would be \$190/lb.

This price inelasticity of demand helped start a bull market that saw uranium’s price explode. It went from around \$23/lb in 2006 to peak at \$137/lb in June 2007. The trigger was the flooding of Cameco’s Cigar Lake in October 2006. There was a 70m lb uranium surplus then. Last year there was a 55m lb deficit. Financial players are clearly accelerating price discovery in a thinly traded spot market, but this would not be occurring were there not a fundamental supply deficit.

THE NUCLEAR FUEL CYCLE

The nuclear fuel cycle describes the entire process of converting natural uranium (the raw material) to serviceable nuclear fuel. The infographic below outlines this process:

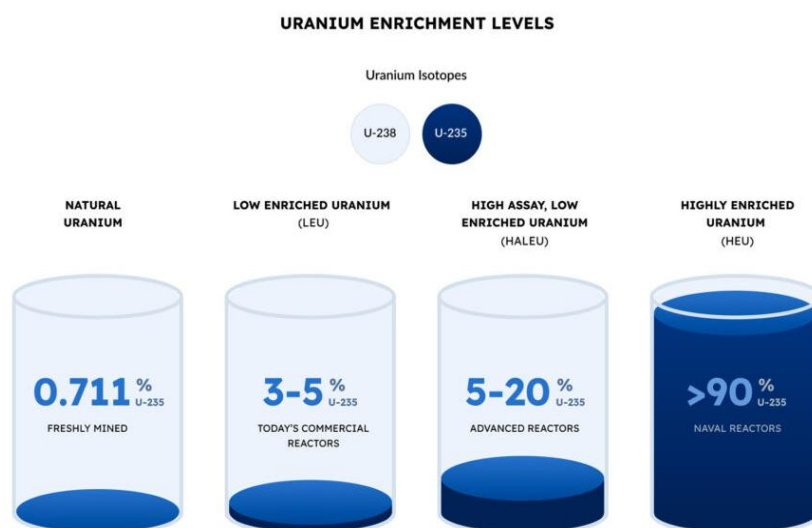


Source: Centrus Energy

- Mining and milling: Natural, or unenriched, uranium is removed from the earth in the form of ore and then crushed and concentrated.
- Conversion: Uranium concentrates (U^3O^8) are combined with fluorine gas to produce uranium hexafluoride (UF^6), a solid at room temperature and a gas when heated. UF^6 is shipped to an enrichment plant.
- Enrichment: UF^6 is enriched in a process that increases the concentration of the U^{235} isotope in the UF^6 from its natural state of 0.711% up to 5%, or LEU, which is usable as a fuel for current light water commercial nuclear power reactors.
- Fuel Fabrication: LEU is then converted to uranium oxide and formed into small ceramic pellets by fabricators. The pellets are loaded into metal tubes that form fuel assemblies, which are shipped to nuclear power plants.
- Nuclear Power Plant: The fuel assemblies are loaded into nuclear reactors to create energy from a controlled chain reaction.
- Used Fuel Storage: After the nuclear fuel has been in a reactor for several years its efficiency is reduced, and the assembly is removed from the reactor's core. The used fuel is warm and radioactive and is kept in a deep pool of water for several years.

URANIUM ENRICHMENT LEVELS & USES

There are varying enrichment levels of nuclear fuel depending on its final destination. Natural uranium is 0.711% U^{235} and needs to be enriched to between 3-5% (Low-Enriched Uranium – LEU) for use in a light water reactor (most common type of nuclear reactor today). Small Modular Reactors (SMRs), however, will require High-Assay, Low-Enriched Uranium (HALEU), which is uranium enriched up to 20%.



Source: Centrus Energy

URANIUM EQUITIES

Hedge funds and the Sprott Physical Uranium Investment Trust (SPUT) catalysed gains in the uranium market at the end of 2021. Since launching in August 2021, SPUT quickly ran through its initial \$300mn AUM and now has a total net asset value of \$3bn, holding over 52m lbs of uranium (as of March 21st 2022). SPUT is now the world’s largest physical ETF. One could compare what we are seeing with Sprott to what we saw with the Grayscale Bitcoin Trust, which gave investors direct exposure to Bitcoin. Sprott has done the same thing for uranium and as a result, a previously opaque spot market now has real price discovery and liquidity.

In conjunction with this, we saw unprecedented levels of retail participation in uranium equities as the ‘Reddit Crew’ further drove the bull run, although this involvement contributed to a harsh correction at year end reflecting that they were not long-term holders.

The emergence of players like Sprott (SPUT) and Yellow Cake (YCA) also brought more institutional capital to the sector, bringing with it deeper and more widespread analyst coverage. An example of this is multi-billion-dollar hedge fund Caxton, who in March 2022 bought an estimated \$250m of physical uranium.

The fundamentals are now the tightest they have been. However, the number of uranium sector stocks has dropped from 600 in 2007 to 45 publicly traded names today. In fact, the total value of global uranium stocks is \$42bn. Strip out the two main producers Kazatomprom and Cameco and 43 stocks have the combined market cap of \$21bn. In 2007 the global market cap of uranium was over \$150bn!

As to the convexity some of the uranium explorers can have to uranium, in 2007 there was a 1,000x share price increase for the miner Paladin Energy and large-cap Cameco went from under \$4 to \$60, so returning 15x.

GEOGRAPHICAL BREAKDOWN

RUSSIAN INVASION OF UKRAINE

Russia's invasion of the Ukraine in February 2022 highlighted the need for governments and utilities to reduce their reliance on Russian resources. The geographical supply of uranium is incredibly concentrated, and utilities remain at the mercy of ongoing geopolitical risk from the world's largest uranium producers.

The invasion saw investors flock to commodity markets seeking a safe haven to hedge their portfolios from what was already a highly volatile equity market. The prices of oil, natural gas, fertiliser and nickel – to name a few – skyrocketed, carrying other hard assets with them, including uranium.

Russian forces went as far as attacking Europe's largest nuclear plant, Ukraine's Zaporizhzhia, starting a fire, and causing panic around Europe of a 'Chernobyl-like disaster'. Shortly after, it was reported that no radioactivity had been detected and a quick sell-off in uranium stocks reversed.

In addition, it was reported that security data was no longer being transmitted to the United Nations watchdog from Chernobyl. This came after fighting around the nuclear plant caused a power outage, sparking radiation concerns about spent nuclear fuel assemblies. The International Atomic Energy Agency said there was no immediate safety threat from the loss of power.

The war in Russia taught us three key lessons about uranium and nuclear power:

- Global governments and utilities must reduce their reliance on Russian energy resources
- Nuclear reactors can withstand the brutality of war
- As the West imposed sanctions on an array of Russian exports, uranium was initially exempt

The role uranium plays in the energy materials mix is integral. Most notably, unlike oil, there is not significant reserve inventories, and you cannot turn on the tap and start pumping uranium. The ongoing supply deficit has come into the spotlight over the past few weeks, uranium is completely demand inelastic, utilities must have it or run the risk of hundreds of millions of dollars in losses resulting from plant closures.

However, on March 17th 2022, four Senators introduced a bill to ban imports of Russian uranium. Russia's Rosatom accounts for ~35% of the world's enriched uranium supply. New investments in Russian conversion, enrichment fabrication and purchase are already banned. As Rosatom is directly involved in taking control of Ukrainian reactors it is highly likely Russian uranium will be sanctioned.

The war also had uranium investors anxious over the resulting response of Kazakhstan, the world's largest producer of uranium.

KAZAKHSTAN

As 40% of the world's uranium supply, Kazakhstan sits at the epicentre of uranium discussions. For context, Kazakhstan's dominance in uranium is four times that of Saudi Arabia's contribution to global oil production. State-owned Kazatomprom (KAP) is the largest uranium producer in the world, with a 25% free float for international participation.

Events of January 2022 in Kazakhstan saw major protests over rising fuel price inflation. Rising prices have caused major political and investor unrest in Kazakhstan. Inflation is both unpopular and potentially destabilising and has seen the price of fuel skyrocket. As one would imagine, this had major implications for uranium equities globally.

KAP's asset base goes into decline in 2026 and production collapses after 2031. Although it has a portfolio of exploration assets the incentive price to mine those will be considerably more than \$20/lb it currently costs.

The events serve as a reminder for utilities that an over-reliance on any one source of supply is risky. It also reinforces the shift in risk from suppliers to utilities that has occurred in this market.

In a March 2022 earnings call, KAP's management noted that the company had secured trans-Caspian supply routes which were already operating. Considering 50% of their deliveries travel through the Port of St. Petersburg (Russia), KAP has implemented sufficient risk mitigation strategy to ensure contract orders are fulfilled.

UNITED STATES

Under the Biden administration, the US officially re-joined the Paris Agreement, and in November 2021 set out its plan to distribute a \$1 trillion infrastructure package, of which \$2.5 billion has been allocated towards the development of SMRs. The US is also set to construct a \$4 billion power plant backed by Bill Gates and Warren Buffet in Wyoming.

The United States receives 20% of its electricity generation from nuclear power. It currently has 94 operating commercial nuclear reactors at 56 nuclear power plants in 28 states. Florida, for example, gets 90% of its clean energy from five nuclear reactors (Progress Energy's Crystal River, Florida Power & Light's St. Lucie 1 and St. Lucie 2 in Jensen Beach, and FPL's Turkey Point 3 and Turkey Point 4). Additionally, a major nuclear site has been approved for development in the Midwest of the United States, where [fusion](#) technology has emerged as a possible future source of energy.

For context, 50% of uranium into the US is from Kazakhstan, Uzbekistan, and Russia, meaning that 1/10 homes in the US are run on fuel from these countries.

The political stance on nuclear is changing too, with Joe Manchin, the powerful Senator for coal and natural gas-rich West Virginia, wanting to implement a tax credit to keep nuclear plants operating. Under the version passed by the House, a credit of as much as \$15 per megawatt-hour could be claimed for the next six years. Manchin, whose support is necessary for Senate Democrats to pass the legislation on a party-line vote, wants the tax credit to last 10 years instead.

RUSSIA

Putin's superpower is built on a foundation of oil, gas, and uranium and these assets are his weapons in the Colder War. He has embraced such diverse international pariahs as theocratic Iran, Assad's Syria, and socialist Venezuela. He has cut deals on all sides, everywhere from China to Israel, from Algeria to Brazil and it is always about energy. Putin is turning his country's newfound influence against a Western alliance that is unprepared for the geopolitics of energy. Before the war, Russia supplied c.50% of the EU's natural gas imports. Most of the rest comes from Norway and Algeria.

Last October, Moldova declared a one-month state of emergency as it attempted to secure gas supplies amid a crisis over rising prices. Gazprom, the Russian state-owned energy company, said during negotiations with Moldova that the country could get a better deal on gas if it gave up some pro-EU policies. The Moldovan crisis has been part of a wider European gas crunch that has led critics of Gazprom to suggest it is trying to extract political concessions and punish countries and governments that it disagrees with. The EU's foreign policy chief described Gazprom's approach to its negotiations with Moldova as 'the weaponisation of the gas supply.'

In December 2021, a [report](#) came out of Russia from the Natural Resources Ministry that Russia may face a shortage of uranium raw materials by 2030-35 “due to a depletion of developed deposits.” Russia possesses significant uranium reserves, but the Ministry note that most are low quality.

AUSTRALIA

Despite holding one-third of the world’s uranium reserves, Australia accounts for only 7.4% of global supply. There are currently two operating mines in the country; BHP’s Olympic Dam and Heathgate’s Beverley operations, there is also a third mine preparing to restart production.

Australia, which has bans on nuclear power stations in every state and territory due to environmental and safety concerns, has never had an operating nuclear power station. However, in October 2021, the national secretary of the Australian Workers Union (AWU) called for these bans to be revisited and proposed the introduction of Small Modular Reactors (SMRs) into Australia’s climate change discussions.

EU

The EU Sustainable Taxonomy, the EU’s ambitious labelling system for green investment, was passed on 9th December 2021 and came into force on 1st January 2022. It will describe the sustainable criteria for renewable energy, car manufacturing, shipping, forestry, and bioenergy and more, and include a “technology-neutral” benchmark at 100 grams of CO₂ per kilowatt-hour for any investments in energy production. It is worth noting that Western and Central Europe (including Great Britain) is responsible for almost one third of current global civilian uranium demand and is a growing electricity market.

The European Union has elected to classify some nuclear energy projects as ‘green’ in its Sustainable Taxonomy draft. Under the draft’s terms, nuclear power plants would be classified as green provided the project has a plan, the required funds, and a site to safely dispose of radioactive waste. The development also needs to receive its construction permits before 2045.

The Commission collected comments to its draft up until 12th January 2022 and hopes to adopt a final text by the end of the month. After that, the text can be discussed with EU governments and parliament for up to six months. Note that the likelihood of the draft being rejected appears to be relatively low as that would require 20 of the 27 EU countries to say “no”.

The EU’s Commissioner for the Internal Market, Thierry Breton, has given an [interview](#) with France’s weekly Journal Du Dimanche saying that a “colossal” investment will be needed over the next 30 years to meet the EU’s emission targets. Existing nuclear plants need EUR50bn of investment through to 2030, while the next generation will require EUR500bn between now and 2050. Breton said nuclear energy combined with investment in renewable sources will be crucial for meeting the EU’s objective of net zero emissions by 2050.

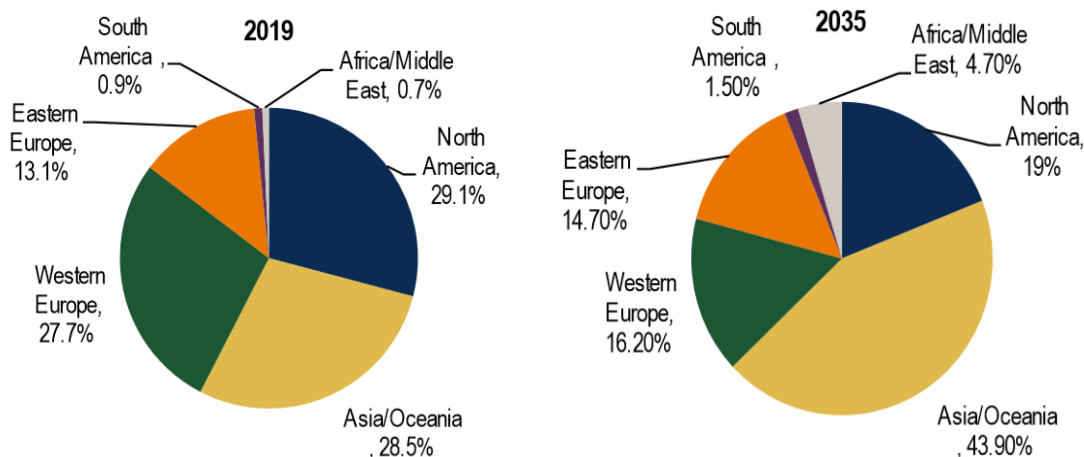
CHINA

China plans to become the world’s biggest nuclear power generator, with 150 new reactors to be built in the next 15 years. Costing \$440 billion, their plans would see the country build as many reactors in 15 years as have been created globally over 35 years. In 2021 China announced their plan to create a strategic uranium stockpile at a location on the border with Kazakhstan. The ‘Alashankou’ warehouse is expected to hold an amount equal to around 40m lbs, or the annual production of Kazakhstan.

In 2019, the EU and US accounted for over half of nuclear energy production, however, with such aggressive plans for expansion, forecasts show China will quickly overtake both in becoming the global nuclear powerhouse.

Couple this with countries like Germany who have plans to close their remaining three nuclear plants and it becomes quickly apparent how China will soon assert dominance on production.

Nuclear power generation capacity by region:



Source: Bank of America Merrill Lynch

FRANCE

After the oil shock of 1974, France created energy policies to rapidly expand the country’s nuclear power capacity. As a result, France has achieved substantial energy independence and is the world’s largest net exporter of electricity due to its very low cost of generation.

Over 70% of France’s electricity is generated using nuclear power, the most by any nation globally. It comes as little surprise therefore to see French President Emmanuel Macron announcing in October 2021 that nuclear power must continue to play a significant role in the country’s energy program. Additionally, in November 2021 he [announced](#) that France would build additional nuclear reactors to support energy independence and forecasting that construction of six new reactors would be announced shortly.

SAUDI ARABIA

Saudi Arabia plans to develop the country’s vast uranium resources to feed into its nuclear energy program and to supply the fuel to the world market. We assume that any uranium volumes are the ones identified by the Saudi geological survey rather than a pipeline of development projects. This implies execution of the project is many years away with no real indication of how much it will cost to develop.

In January 2022, Saudi Arabia’s energy minister indicated that the country was looking at producing “pink hydrogen”, which is hydrogen made using nuclear energy. The plans propose the construction of two reactors by 2030 and bring 17GW of nuclear capacity online by 2040. Alongside its nuclear industry, Prince Abdulaziz said the country would look to develop its own uranium reserves.

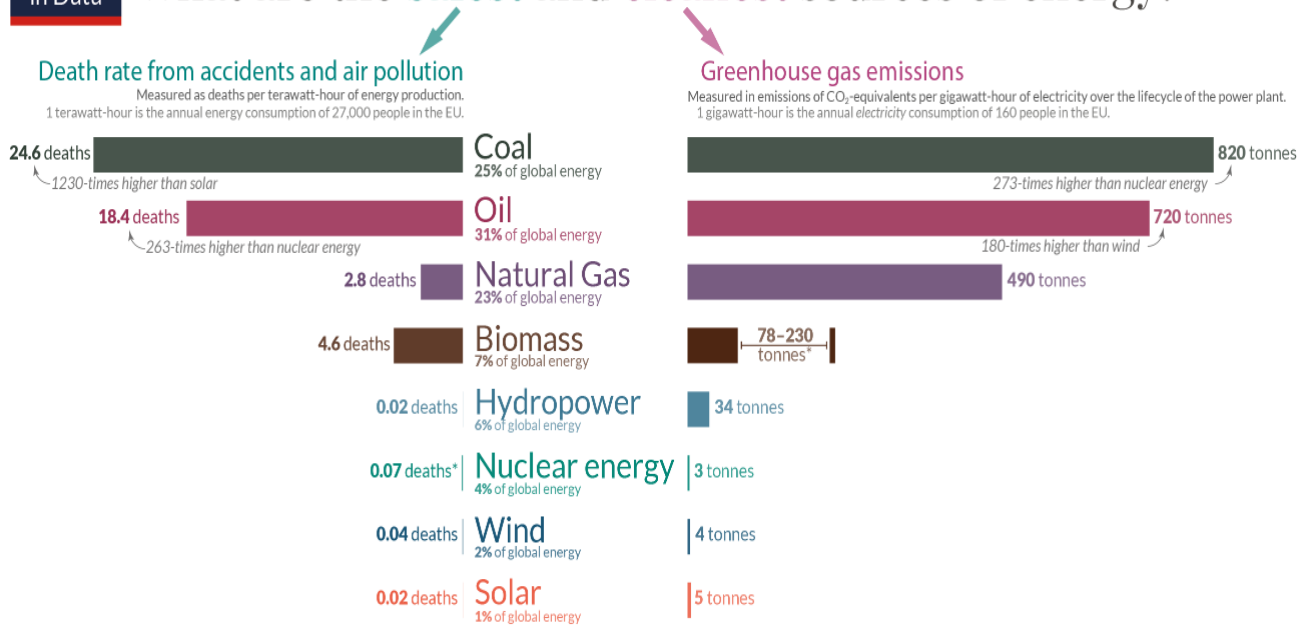
Neighbouring state, the **UAE**, has also stated plans to produce ~1mtpa of hydrogen from nuclear power.

NUCLEAR SAFETY AND SMALL MODULAR REACTORS (SMRS)

Nuclear accounts for only 0.07 deaths per terawatt-hour of energy production compared to 18.43 for oil and 32.72 for brown coal.



What are the **safest** and **cleanest** sources of energy?

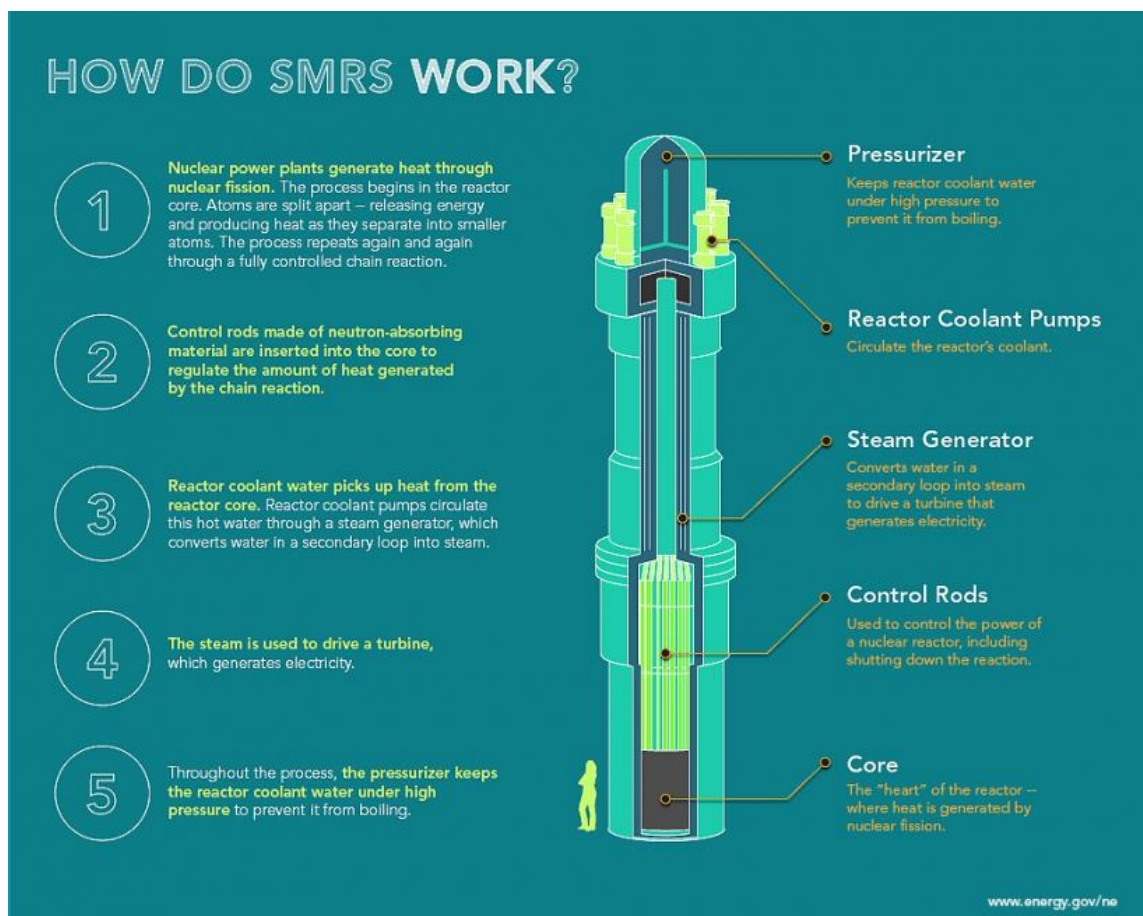


Source: Our World in Data

Over the last four decades, the average time it has taken to build a new nuclear power plant has ranged from 58 to 120 months – or, in other words, up to a decade. These projects are often completed late and significantly over budget. This is a long-term commitment, meaning that many countries simply idled capacity rather than tear it down even when the industry suffered image issues following Fukushima.

The advent of Small Modular Reactors is changing this. The benefits of SMRs are:

- **Safety:** Facility protection systems, including barriers that can withstand design basis aircraft crash scenarios and other specific threats, are part of the engineering process being applied to new SMR design.
- **Modularity:** the ability to be able to put major components of the reactor together in a factory, requiring limited onsite preparation
- **Cheaper:** Reduced capital investment due to the lower plant capital cost, mainly associated with modularity.
- **Location:** SMRs can provide power for applications where large plants are not needed or sites lack the infrastructure to support a large unit, creating far better site flexibility.
- **Efficiency:** SMRs can be coupled with other renewable energies or fossil fuels to leverage resources and produce higher efficiencies and multiple energy end-products while increasing grid stability and security.
- **Economic:** deployment of a 100 MW SMR could create 7,000 jobs and generate more than \$1 billion in sales.



Source: energy.gov

The Roll-Royce SMR project, for example, targets a 500-day construction time on a 10-acre (4 ha) site. Overall build time is expected to be four years, two years for site preparation and two years for construction and commissioning. These SMRs will have power capacity of 470MW which can power a city of 1m people such as Sheffield and Leeds combined.

In 2017, the UK government provided funding of up to £56 million over three years to support SMR research and development. In 2019 the government committed a further £18 million to the development from its Industrial Strategy Challenge Fund. In November 2021, the UK government provided funding of £210 million to further develop the design, partly matched by £195 million of investment by Rolls Royce. They expect the first unit will be completed in the early 2030s.

In the US in 2020, the DOE awarded \$160 million to X-energy and TerraPower through their ‘Advanced Reactor Demonstration Program’. There is the potential for billions more in further funding, and projects completion dates are expected to be around 2027. The DOE intends to invest about \$3.2bn over the next seven years into advanced nuclear.

RISKS

The greatest edge-risk for the uranium sector remains another major accident like Chernobyl or Fukushima. An event of this kind would undoubtedly set the nuclear agenda back years. As we have discussed, the advent of SMRs is significantly improving safety concerns around nuclear.

Additionally, there is always the possibility of an alternative fuel to uranium. Thorium is a potential competitor, and while there are currently no operating thorium reactors, there are several in production. Notably, uranium reactors cannot be converted to thorium reactors, so the friction in transitioning from one metal to another will likely be sufficient to deter utilities.

As part of the European Commission Taxonomy, the first nuclear related activity that is mentioned is R&D of advanced technologies that minimise waste and improve safety standards. The main environmental concern associated with nuclear energy is radioactive waste. There are several companies exploring depleted uranium as a fuel source, which would significantly reduce the demand for the original metal.

Furthermore, advancements in energy storage will reduce the significance of non-intermittency, as the grid would have backup power stored to meet demand. Hydrogen is one possible threat as it can be easily stored due to its lightweight and high energy density.

Current nuclear reactors use fission technology which heats uranium atoms to incredibly high temperatures to create a nuclear reaction. Nuclear fusion slams two atoms together to create energy, the output is 3-4x more powerful than fission. Notably, the most advanced fusion project is in California, with estimates that the first nuclear fusion power will be delivered to the grid in 10-15 years.

Finally, part of our thesis derives from the supply deficit in the uranium market today. If this problem is resolved, prices will likely stagnate, although early investors will have already reaped the financial benefits by then.

OCEAN WALL URANIUM TRACKER

We have developed a proprietary live uranium tracker encompassing all uranium related equities and ETFs to analyse broad trends within the theme:

Ticker	Company Name	Last Price	USD Market Cap \$m	Status	Country
	Total Uranium Market Cap:	USD 35,373.21			
	KAZ & CCO - Market Cap (\$)	USD 18,409.30			
	KAZ & CCO - % Contribution	52.04%			
KAP	Joint stock company "National atomic company "Kazatomprom" (XLON:KAP)	USD 34.20	USD 9,720.30	Producer	Kazakhstan
CCO	CAMECO CORPORATION (XTSE:CCO)	USD 26.80	USD 8,689.01	Producer	Canada
NXE	NEXGEN ENERGY LTD. (XNYS:NXE)	USD 4.32	USD 2,071.43	Developer	Canada
PDN	PALADIN ENERGY LTD (XASX:PDN)	USD 0.77	USD 1,639.51	Producer	Australia
ERA	ENERGY RESOURCES OF AUSTRALIA LTD. (XASX:ERA)	USD 0.36	USD 956.81	Producer	Australia
DML	Denison Mines Corp. (XTSE:DML)	USD 1.55	USD 1,027.05	Developer	Canada
UUUU	Energy Fuels Inc. (XNYS:UUUU)	USD 6.60	USD 1,196.49	Producer	US
UUUU	Energy Fuels Inc. (XNYS:UUUU)	USD 6.60	USD 1,196.49	Producer	US
URA	Glob X Uranium ETF (ARCC:URA)	USD 22.13	USD 1,178.21	Fund	US
UEC	URANIUM ENERGY CORP. (XNYS:UEC)	USD 2.95	USD 788.40	Developer	US
BOE	BOSS ENERGY LTD (XASX:BOE)	USD 2.32	USD 507.70	Developer	Australia
URNM	NorthShore GI Urnium Min (ARCC:URNM)	USD 69.66	USD 693.20	Fund	US
YCA	YELLOW CAKE PLC (XLON:YCA)	USD 336.50	USD 872.48	Trust Fund	UK
GLO	Global Atomic Corporation (XTSE:GLO)	USD 3.37	USD 485.19	Developer	Canada
LEU	CENTRUS ENERGY CORP. (XNYS:LEU)	USD 42.82	USD 600.22	Developer	US
FCU	FISSION URANIUM CORP. (XTSE:FCU)	USD 0.80	USD 437.19	Developer	Canada
UROY	Uranium Royalty Corp. (XNAS:UROY)	USD 3.35	USD 325.97	Royalty	Canada
EU	enCore Energy Corp. (XTSX:EU)	USD 1.37	USD 325.19	Developer	Canada
URG	Ur-Energy Inc. (XNYS:URG)	USD 1.19	USD 322.58	Producer	US
LOT	LOTUS RESOURCES LIMITED (XASX:LOT)	USD 0.28	USD 210.80	Developer	Australia
SLX	SILEX SYSTEMS LIMITED (XASX:SLX)	USD 1.21	USD 189.99	Developer	Australia
VMY	VIMY RESOURCES LIMITED (XASX:VMY)	USD 0.20	USD 174.97	Developer	Australia
PEN	PENINSULA ENERGY LIMITED (XASX:PEN)	USD 0.20	USD 150.79	Producer	Australia
ALGF	ALLIGATOR ENERGY LTD (OTCM:ALGF)	USD 0.05	USD 147.96	Explorer	Australia
CUR	Consolidated Uranium Inc. (XTSX:CUR)	USD 2.78	USD 157.08	Explorer	Canada
GXU	GOVIEX URANIUM INC. (XTSX:GXU)	USD 0.33	USD 154.42	Developer	Canada
RDT	RED DIRT METALS LIMITED (XASX:RDT)	USD 0.74	USD 138.65	Explorer	Australia
UEX	UEX Corporation (XTSE:UEX)	USD 0.33	USD 150.16	Developer	Canada
ACB	A-CAP ENERGY LIMITED (XASX:ACB)	USD 0.16	USD 132.38	Explorer	Australia
FSY	Forsys Metals Corp. (XTSE:FSY)	USD 0.82	USD 131.16	Developer	Canada
OUIW	AZARGA URANIUM CORP. (XLON:OUIW)	USD 0.60	USD 150.77	Developer	US
AEE	AURA ENERGY LIMITED (XASX:AEE)	USD 0.32	USD 108.02	Developer	Australia
EL8	ELEVATE URANIUM LTD (XASX:EL8)	USD 0.47	USD 96.60	Explorer	Australia
LAM	Laramide Resources Ltd. (XTSE:LAM)	USD 0.61	USD 95.74	Developer	Canada
BKY	BERKELEY ENERGIA LIMITED (XLON:BKY)	USD 13.75	USD 151.57	Developer	UK
MGA	Mega Uranium Ltd. (XTSE:MGA)	USD 0.31	USD 85.29	Developer	Canada
EPM	ECLIPSE METALS LIMITED (XASX:EPM)	USD 0.05	USD 74.43	Explorer	Australia
MKA	MKANGO RESOURCES LTD. (XTSX:MKA)	USD 0.52	USD 82.35	Explorer	Canada
TOE	TORO ENERGY LIMITED (XASX:TOE)	USD 0.02	USD 64.54	Developer	Australia
SYH	SKYHARBOUR RESOURCES LTD. (XTSX:SYH)	USD 0.53	USD 55.18	Explorer	Canada
FIND	Baselode Energy Corp. (XTSX:FIND)	USD 0.73	USD 46.89	Explorer	Canada
WUC	WESTERN URANIUM & VANADIUM CORP. (XCNQ:WUC)	USD 1.47	USD 48.45	Developer	Canada
API	Appia Rare Earths & Uranium Corp. (XCNQ:API)	USD 0.52	USD 44.35	Developer	Canada
VO	ValOre Metals Corp. (XTSX:VO)	USD 0.44	USD 43.83	Explorer/Developer	Canada
GCL	GEIGER COUNTER LIMITED (XLON:GCL)	USD 50.50	USD 73.30	Investment Fund	UK

We publish weekly updates on the uranium sector in a segment called ‘Ocean Wall’s ion-U’. Should you wish to be added to the mailing list please contact nick@oceanwall.com

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