

**T**here's a huge push globally to find cleaner alternative sources of energy to coal and oil, and this once again has major global powers revisiting uranium as a key energy source which could result in significant price appreciation in a commodity that has largely been ignored over the last decade. Indeed, a significant increase in price on uranium, to potentially USD\$50 a pound, is not out of the realm of possibility if a number of macro-economic factors continue to align in its favour.

We are approaching the one-year anniversary of the World Health Organization (WHO) officially declaring COVID-19 a global pandemic, forcing the lockdown of many major economies. As vaccinations hopefully allow us to turn the tide against the virus, there seems to be growing optimism that a broader global economic recovery is on the horizon.

As we move toward a recovery, it seems that big changes and a growing focus on the environment, social welfare and future-focused policy decisions will be more important than ever. Governments everywhere are setting ambitious goals and aiming for zero emissions over the next 20 years. These goals will require a completely different approach to energy generation than we've seen in our lifetime.

For example, Shell, a major oil and gas company, recently announced that it anticipates its oil production to decline — a major shift in its stated strategy.

In addition to Shell, other major oil and gas companies, like BP, are rebranding themselves as energy companies and investing in renewable energy. A focus on alternative energy sources seems to be on everyone's mind.

Stimulus plans from global governments are boosting commodities, with many of them off to great start so far in 2020. Uranium, which may play an important role in the shift towards renewables, is no exception.

### Uranium's Role in the Energy Revolution

Nuclear power is a [zero-emission clean energy source](#), like solar, wind or hydro power. It also can offset air pollution and atmospheric CO2 emissions produced by "dirtier" energy generation sources.

In the United States, the largest economy in the world and one of the world's largest producers and consumers of oil, U.S. President Joe Biden has made it clear that climate change is a priority for his administration. One of his first decisions as President was to rejoin the Paris Agreement, a legally binding climate change treaty led by the United Nations implemented to curb global warming. While this is certainly a positive for renewable energy such as solar and wind, could it also be a positive for the fate of the 90+ nuclear reactors currently operating in the U.S.?





Nuclear power currently provides 20% of U.S. electricity and 55% of its emission-free power. But the same reactors have been under a lot of competitive pressure on the energy market from cheap natural gas. Since the shale gas revolution began in the 2010s — which [enabled](#) the U.S. to significantly increase its domestic oil and natural gas production with hydraulic fracturing and horizontal drilling — nuclear power plants have been struggling to be economically competitive and several [have closed](#) early. Others are currently facing the same fate.

**H**owever, this has not been the only bad news for uranium. Globally, the uranium market has been in a bear market for the better part of the past decade. Since the Fukushima nuclear accident in 2011, uranium prices have been overwhelmed by excess inventory from nuclear plant closures and scrapped growth plans. Japan shut down all of its nuclear plants following Fukushima and have been slow to turn them back on following the disaster, and other countries seemed to have moved away from nuclear power following the accident. Germany made a commitment to get out of nuclear, while China slowed down new reactor approvals and constructions. The public concerns over the environmental impacts surrounding the topic of nuclear waste disposal also remains an issue for governments considering recommissioning aging nuclear power plants and the planning of future nuclear initiatives.

To adjust to this new reality, the supply of uranium had to be cut back. And due to long-term contracts, these production adjustments were slow to arrive. But in the past few years, we've seen significant uranium supply reductions.

Saskatoon-based Cameco, the world's largest publicly traded uranium company, took the largest step by shutting down the MacArthur River mine, which was the largest uranium mine in the world. Several other uranium mines have closed in the past several years, including Langer Heinrich, Ranger, Cominak, while Kazakhstan's uranium miner Kazatomprom and BHP's Olympic Dam in Australia have reduced growth plans.

### **COVID-19's Impact on Uranium**

The pandemic has affected different sectors in different ways, but uranium supply was dramatically impacted by the coronavirus. Global uranium production was already in a downtrend before the pandemic hit, but the problems has only been exacerbated by COVID-19 protocols.

The Cigar Lake mine in Saskatchewan, at the time, the largest actively producing uranium mine in the world, was forced to shut down during the initial lockdown in spring 2020 and is now once again in lockdown. Kazakhstan, the world's largest producer of uranium, has also seen production growth curtailed, further increasing the expected uranium deficit as global demand increases. Even entering into 2020, there wasn't enough primary supply to satisfy existing demand and inventories were being drawn down, but with all of the disruption caused by the pandemic, this deficit has likely only increased.

And what of future demand? The International Energy Agency (IEA) has been clear: if we are to meet our climate change goals, nuclear power will have to be part of the solution.



Germany's case might serve as a cautionary tale: while they were able to generate over 40% of their energy from renewables [in 2018](#), they still rely on fossil fuels for [39% of their energy needs](#). Furthermore, despite their big gains in wind and solar, Germany still generates more than double the CO2 emissions of neighbouring France, a country that relies on nuclear for [70% of its energy needs](#) (though France has plans to reduce this to 50% by 2035).

Where does each country stack up on nuclear energy generation? Learn more here:

[Each Country's Share of CO2 Emissions \(August 12, 2020\)](#)

### **The Potential Future of Uranium**

It has taken a long time, but we are finally at the point where not only is uranium demand increasing once more, but nuclear power generation is higher today than before the Fukushima accident. Most of the growth for nuclear power generation is coming from Asia. Two of the fast growing economies in the world, China and India, currently have the largest number of reactors under construction in the Asian region.

As a zero-emission energy source, uranium can play a role in countries where air pollution is a challenge. Currently, both China and India predominantly [rely on coal](#) for electricity generation, and both of these countries struggle with bad air quality and reduced life expectancy from air pollution. It can also be a helpful replacement for some renewable energy sources; Russia, a country where solar is not a useful option in the winter months, is investing heavily in nuclear.

Finally, we are also noticing a change in attitude towards nuclear energy in North America. The United States recently passed the American Nuclear Infrastructure Act (ANIA), a bipartisan bill aimed at promoting new nuclear technologies. Canadian governments at the provincial and federal level have also pledged support to develop new Small Modular Reactor (SMR) technologies: a smaller, and potentially safer, version of the traditional nuclear reactor that could be particularly useful for powering smaller and remote northern communities. In the media, [Bill Gates recently appeared on 60 Minutes](#) discussing the next generation reactors his company, TerraPower, is working on in his quest to help with addressing climate change.

We are seeing a fairly classic set up in economics: a commodity where demand is projected to grow as planned nuclear reactors are built, while supply has been constrained by mine closures, low investment and a decade of low prices. In our view, the expected outcome to this situation is continued support for uranium prices. **Most of the new mines will require much higher prices than we have today to incentivize production, with many requiring at least 50\$/pound to be profitable. Are higher prices around the corner?**



## Invest in Uranium with HURA

Investors interested in this commodity could consider the Horizons Global Uranium Index ETF (“HURA”). Its underlying index, the Solactive Global Uranium PurePlay Index, provides exposure to issuers primarily involved in the uranium mining and exploration industry, or invest and participate directly in the physical price of uranium.

### Performance Table:

ETF Name	1 month (%)	3 month (%)	6 month (%)	YTD	1 year (%)	3 year (%)	5 year (%)	10 year (%)	Since Inception* (%)
Horizons Global Uranium Index ETF	-7.39	43.17	28.59	-7.39	67.31	--	--	--	15.82
Solactive Global Uranium Pure-Play Index	-7.45	43.22	28.35	-7.49	67.57	--	--	--	16.94

Source: Bloomberg as at January 31, 2021.

\*PERFORMANCE SINCE INCEPTION ON MAY 15, 2019, AS AT JANUARY 31, 2021

The indicated rates of return are the historical annual compounded total returns, including changes in unit value and reinvestment of all distributions, and do not take into account sales, redemption, distribution or optional charges or income taxes payable by any securityholder that would have reduced returns. Additionally, index returns do not take into account management, operating or trading expenses that may be incurred in replicating the index. The rates of return above are not indicative of future returns. The ETF is not guaranteed, its value changes frequently, and past performance may not be repeated. The index is not directly investible.

To learn more, please visit [www.HorizonsETFs.com\HURA](http://www.HorizonsETFs.com\HURA)



Commissions, management fees and applicable sales taxes all may be associated with an investment in the Horizons Global Uranium Index ETF (the “ETF”) managed by Horizons ETFs Management (Canada) Inc. The ETF is not guaranteed, its values change frequently and past performance may not be repeated. The prospectus contains important detailed information about the ETF. **Please read the prospectus before investing.**

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