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# **Tariffs on Russian Fertilizer and the Cost to Canadian Farmers**

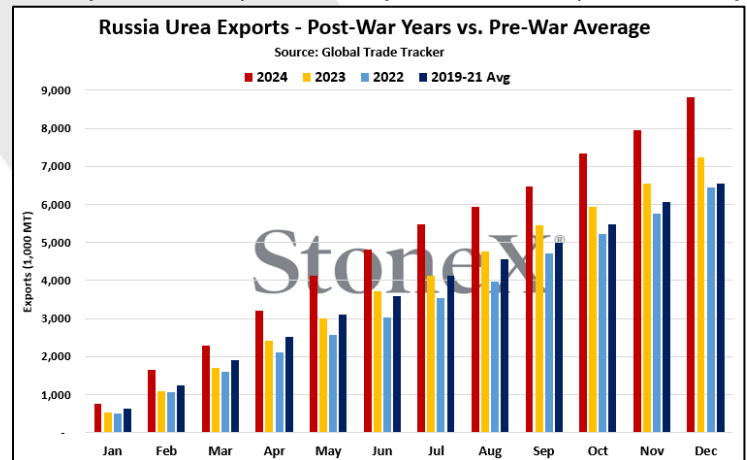
**Prepared for:**  
**Grain Farmers of Ontario**

**At the core of every country around the world, food security remains the single most important focus. Fertilizer is necessary to produce that food. Recent global events have put supplies in danger and, as a result, have threatened global farmers' ability to provide food to a growing global population.**

## Update on Russian Fertilizer Exports

The global market's fear of losing Russian fertilizer supply following their invasion of Ukraine in February 2022 was a major contributing factor in driving prices to all-time highs that spring. However, that fear proved not to be justified in the years that followed, as the disruption to Russian fertilizer exports was extremely short-lived (save for anhydrous ammonia), with the only real impact being a shift in trade flows, not overall supply. In fact, Russia's fertilizer exports have in fact continued to grow since then.

Focusing specifically on urea, the accompanying chart provides a comparison of Russia's exports in the three years prior to the invasion vs. post-invasion. As can be seen, Russia's urea exports grew considerably in 2023 and again in 2024. At approximately 8.8 MMT, Russia's urea exports last year were their largest in a single year since 2011, marking a 35% increase in volume relative to their pre-war (2019 – 2021) average.



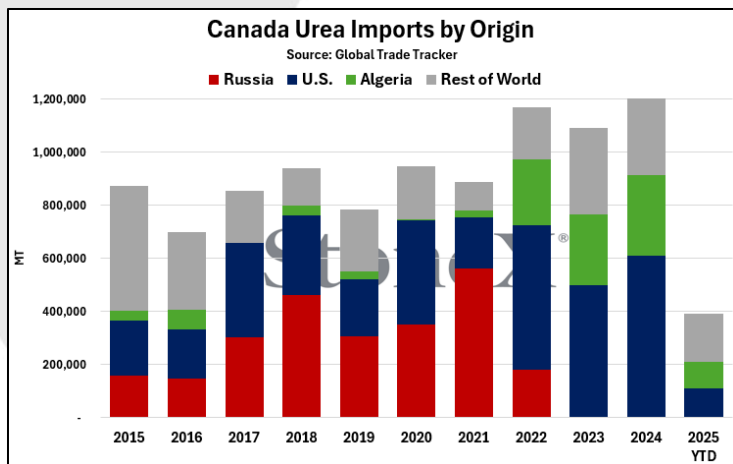
While much of the change in Russia's trade flows seen since 2022 has been an uptick in exports to fellow BRICS+ members (namely Brazil and India), one of the most noteworthy changes is the rise in Russian urea exports to Canada's southern neighbor, the US. As can be seen in the accompanying chart, total US urea imports from Russia have risen steadily since taking a step back in 2022, while the percentage of total US urea imports coming from Russia have steadily risen as well. In 2024, the US imported a new all-time record of 1.29 MMT of urea from Russia, which accounted for 25.2% of the country's total urea imports. That trend is continuing thus far in 2025 as well, with Russia accounting for 27.4% of the urea imported to the US over the January – April period. A similar situation has played out on the UAN side as well, with Russia being comfortably the largest origin for UAN imports to the US each year since their invasion, setting a record for total UAN imports from Russia in 2023 at over 1.6 MMT. US UAN imports from Russia did take a step back in 2024, but that was more a function of Russia shifting production away from UAN in favor of urea due to the limited available buyers on the UAN side amid Canadian, Australian, and EU tariffs.



Canada's tariffs on Russia implemented in 2022 have completely shut off urea imports from Russia since. In 2021, the last full year before Russia's invasion, the country accounted for 63.1% of Canada's total urea imports. Now, that number is 0%. Since then, Canada has become more reliant on the US, while also shifting more demand to Algeria and other North African/Middle East suppliers. In 2024, Canada imported a record volume of urea from the US at over 610,000 MT, accounting for just under half (47.0%) of the year's total. Canada's increased reliance on the US for their urea supply means that US policy and the factors influencing the US fertilizer market now have a bigger impact on Canada.

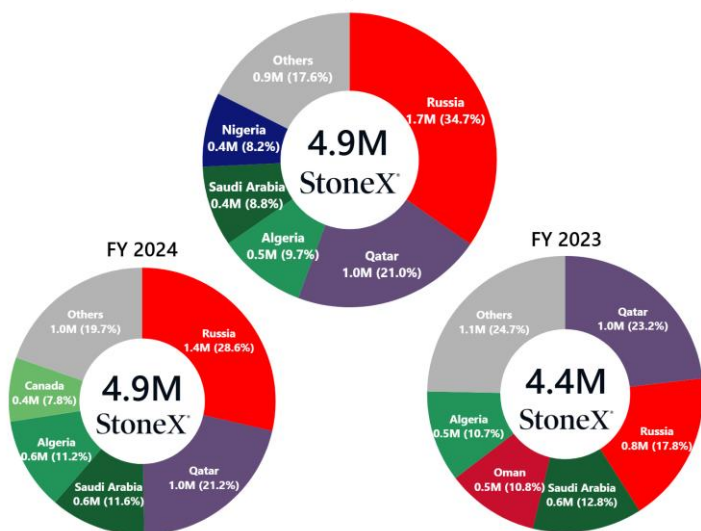
Given the US's growing reliance on Russian urea imports, this also means that Canada can't guarantee they're not indirectly bringing in Russian product at an inflated price. Granular, fertilizer grade urea is an indistinguishable commodity, meaning individual tons are very difficult (if not effectively impossible) to trace. The vast majority of US urea exports to Canada enter the country through inland border crossings, but that doesn't mean the urea received can't be a blend of imported Russian tons with domestically produced American tons.

Additionally, this comes at an increased cost. With Canada importing so much of their urea from the US, they are effectively paying US costs plus the freight it takes to get the product into the country. Due to the unwillingness of some countries, like Canada, to do business with Russia, they are often the cheapest tons on the market. That means American companies are essentially able to benefit from both sides—importing cheap Russian urea and exporting expensive American urea. Without any subsidy or other programs in place to help offset the increased cost, the Canadian farmer ends up being the one to foot the bill for these tariffs. Given the ugly state of grain prices in 2025, farmer margins are already being squeezed. The inflated cost of fertilizer, one of the biggest portions of a farmer's input costs, only squeezes those margins even further.



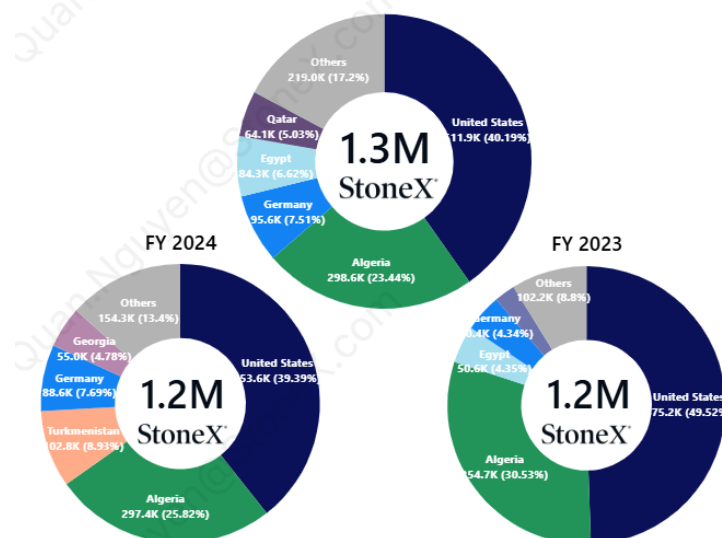
Market Share of U.S. Urea Imports in FY 2025 (MT)  
(Jul - Jun)

Source: U.S. Dep. of Commerce



Market Share of Canada Urea Imports in FY 2025 (MT)  
(Jul - Jun)

Source: Global Trade Tracker



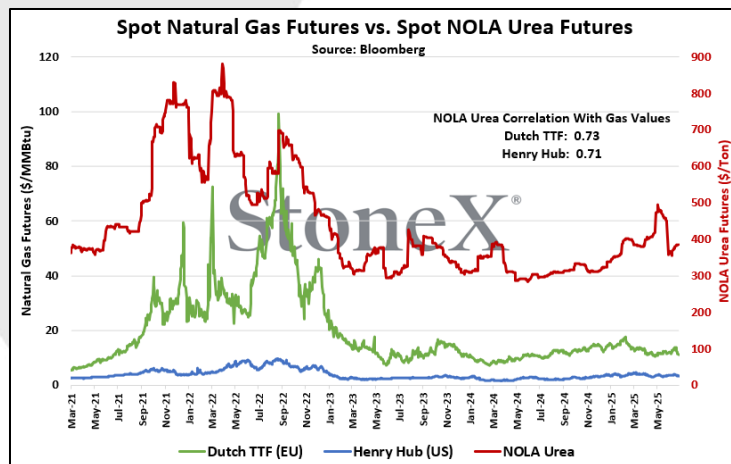
## European Nitrogen Production Remains Reduced, Fresh Tariffs Complicate Further

Since before the start of Russia's invasion of Ukraine, Europe had been pushing back on Russian gas flows through the Nordstream pipeline complex. This caused Russia to shut off gas flows. Then, on September 26, 2022, an explosion ruptured both Nord Stream 1 & 2 lines. That act of sabotage shut Europe's most efficient source of natural gas which caused Dutch TTF values to skyrocket into the low \$100/MMBtu range. That high input cost caused nitrogen production to nearly completely stop.

As markets tend to do, new "normal" supply routes of gas were established, and Dutch TTF values fell. However, they remain elevated from their historical ranges, and the result is that approximately 25% of European nitrogen fertilizer production remains offline. That means millions of tons of nitrogen fertilizer are not being produced which further impacts the global S&D.

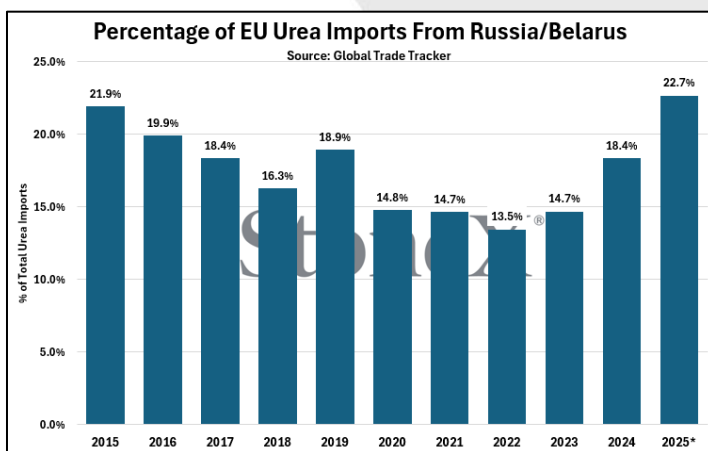
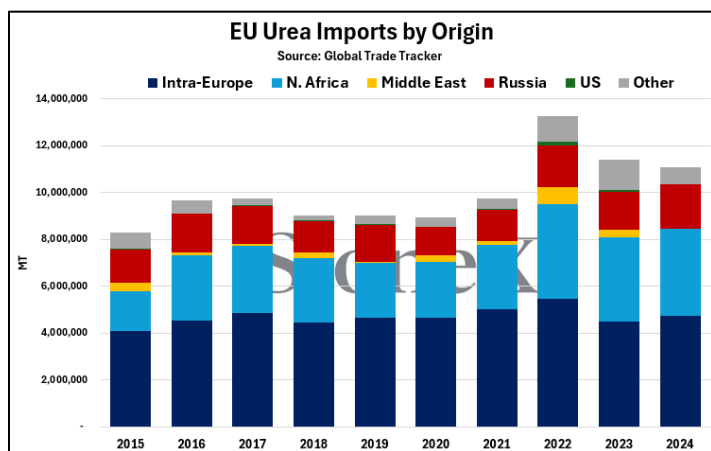
Some may argue that Europe's production does not matter but, as prices have shown, even North American urea values show a stronger correlation with Dutch TTF than Henry Hub. There is hope that pressure on Russia by many countries around the world will result in peace being found, but that will not have an immediate impact on European nitrogen production as gas flows

will take time to return...if ever. If relations were to improve, there is still the matter of repairing the Nord Stream pipelines which are deep under water. Those repairs take time. Then there is the matter of restarting those plants—Europe has some of the oldest nitrogen production facilities in the world. They are nowhere near as efficient as newer plants and, after having been offline for several years, they may struggle to resume production due to the capital investments and maintenance needed to bring them back up and keep them running. There is no firm timeline of when European nitrogen production will resume at normal rates. In fact, there is no guarantee that European nitrogen production will ever resume pre-war production rates. If that happens, global supplies remain much tighter and, in turn, values higher.



Following this loss of production, we’ve seen a notable uptick in nitrogen import demand in the E.U., peaking in 2022 but remaining elevated ever since. Looking specifically at urea, imports to the E.U. increased 35.9% year-over-year from 2021 to 2022, with 2023 and 2024 coming in 22.8% and 19.3% above the pre-war 5-year average, respectively.

Given the tight global supply situation during this time, that increase in overall import demand also led to a major increase in imports coming from Russia. As can be seen in the accompanying graphics, the percentage of total E.U. urea imports coming from Russia and Belarus bottomed out in 2022 in the immediate wake of the invasion. However, the share of urea imports coming from Russia and Belarus grew steadily each year after 2022, peaking at 22.7% through the first four months of 2025. This is a higher market share than any of the ten years prior.



Much of the increase in imports from Russia were simply a matter of price, with their supply being vastly cheaper than domestically produced E.U. urea due to the significantly higher natural gas costs alluded to above. This increase in competition from cheap Russian/Belarusian tons led major European nitrogen producers to push for measures to stem the flow in order to protect the struggling domestic producer while also attempting to cut funding to Russia’s war effort.

In recent months, this effort resulted in a fresh round of E.U. tariffs on fertilizer imports from Russia and Belarus being implemented, officially going into effect on July 1, 2025. These new tariffs are designed to increase by €20/MT per year in 2026 and 2027 before ballooning to €315/MT in 2028, which in theory should shut off trade entirely. This means E.U. importers will have to shift their purchases elsewhere, likely meaning an uptick in imports from the Middle East and North Africa on the urea side and an uptick in imports from the U.S. on the UAN/ammonia side.

While the intention of E.U. leadership to cut off funding for Russia’s ongoing war effort is commendable on its surface, it’s also important to recognize the impact that these tariffs are expected to have—higher fertilizer prices at the retail level. Barring any announcement of additional subsidies paid to farmers to offset this increased cost, these tariffs will most likely raise input costs

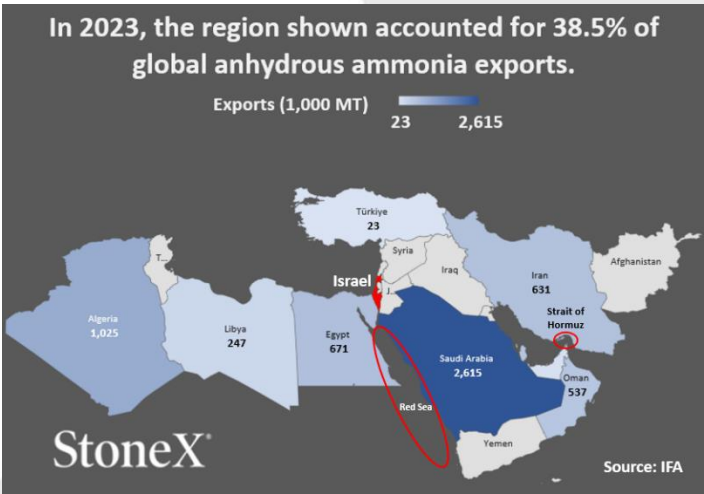
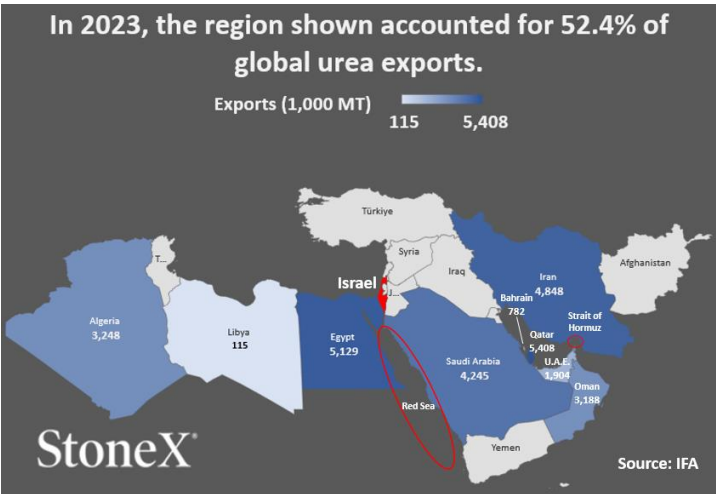
for European farmers, effectively making them pay the ones to pay the price; this is essentially the same situation the Canadian farmer is in. Given the current economics of the global agriculture industry, especially in the wheat and corn heavy E.U., any additional pressure on profitability is very unwelcome at the farm level.

EU tariffs for urea, AN, CAN and UAN of Russian origin	Source: ICIS
Time period	Proposed tariff
From 1 July 2025 until 30 June 2026	6.5% ad valorem + €40/tonne
From 1 July 2026 until 30 June 2027	6.5% ad valorem + €60/tonne
From 1 July 2027 until 30 June 2028	6.5% ad valorem + €80/tonne
From 1 July 2028	6.5% ad valorem + €315/tonne
<i>ad valorem "according to the value"</i>	

### Middle East Fighting Hurts Nitrogen Production, Threatens Half of Global Urea Exports

The highlight of global news this summer was the fighting between Israel and Iran which eventually saw direct U.S. involvement. While most of the world was focused on oil and/or the broader energy sector, nitrogen fertilizer saw an even larger impact. The fighting caused a couple of direct impacts on nitrogen production:

- **Iran** – Iran’s urea exports reached 4.5M tons in 2024, making them the 3<sup>rd</sup> largest urea exporter in the world. Following Israel’s strikes on Iran’s nuclear programs and people associated with them, Israel also struck a production site in the South Pars gas field, shutting down natural gas production. The result was that nitrogen manufacturing facilities had to shut down until feedstock became available.
- **Egypt** – Egypt’s urea exports reached 4.3M tons in 2024, making them the 4<sup>th</sup> largest exporter in the world. Many folks in the industry may have been confused as to why Egypt was affected. Iran’s retaliation involved sending hundreds of rockets at civilian areas. Expecting this, Israel also took the precautionary measure of shutting down their natural gas production to avoid major damage, and this affected Egypt because Israel supplies considerable amounts of natural gas to Egypt through pipelines in the Mediterranean Sea.



Following a couple weeks of back-and-forth fighting, the U.S. intervened by dropping bunker busting bombs on Iran’s nuclear sites. For a short time, tensions reached a high enough level that the Iranian government voted to block the Strait of Hormuz. Again, global energy markets took notice, but the impact it could have had on global nitrogen/urea supplies would have been unimaginable. With millions of tons produced and exported through that body of water, closing the Strait would have blocked these shipments and done unimaginable damage to global nitrogen markets. Much of Iran’s own urea exports must transit this passage, while Qatar (the world’s #2 urea exporter) and Saudi Arabia (#6 urea exporter) are both effectively entirely dependent on that passage, as are Bahrain and the United Arab Emirates who are also both sizable urea exporters. While calmer heads prevailed and that step never occurred, it did show how important that region is. With over 50% of global urea and nearly 40% of global NH3 exported from the North Africa/Middle East region, any impact in the area carries significant risks for global nitrogen markets. In fact, the first vessel sunk by the Houthis in the Red Sea was carrying fertilizer.



## Middle East Fighting Also Puts Saudi Phosphate Exports in Danger

As mentioned before, the height of Middle East tensions saw Iran threatening to close the Strait of Hormuz. While most of the focus in the fertilizer market was on nitrogen impacts, there was danger to the global phosphate market as well.

In 2024, Saudi Arabia was the 3<sup>rd</sup> largest exporter of DAP/MAP with nearly 5.3 MMT exported, and effectively all of these exports go off the countries Persian Gulf coast, primarily through the Ras al-Khair Port. If Iran had been successful in blockading the Strait of Hormuz, another major supplier of phosphate would have been removed from an already consolidated market.

Saudi Arabia accounts for roughly 50% of U.S. phosphate imports, while the U.S. typically accounts for roughly 50-60% of Canada's phosphate imports. If the U.S. loses Saudi's supply, this would cause a spike in prices due to the difficulty in finding replacement supply given the ongoing CVD rates still in place on Morocco and Russia. Because of their reliance on the US, Canada would subsequently see a spike in prices as well. Again, closure of the Strait never happened, but the threat served as a reminder of what could be in the future, especially with these tensions continuing to simmer indefinitely.

## Chinese Urea Exports Remain Restricted

Historically, China had been the 2<sup>nd</sup> largest urea exporter in the world, trailing only Russia. However, in late 2021, China shifted their export approach following the increasing volatility in the global market.

During that period, global fertilizer values started to climb significantly higher in the wake of a string of black swan events, as well as the fear that Russia's invasion of Ukraine would result in their exports being slowed/stopped. This created a fear within China that massive exports to capture the premium would cause local supply tightness and major price increases to Chinese farmers. The government decided to get involved.

Export restrictions started to be put into place with two goals: ensuring adequate domestic supplies and helping to lower domestic values vs. the rest of the world. Fortunately for Chinese farmers, this plan accomplished both goals in spectacular fashion at the expense of import-reliant farmers around the world.

While global supplies and prices have since corrected, the Chinese government has kept restrictions in place, resulting in 2024's exports only reaching 262K vs their "normal" range of 5 - 5.5 MMT. This was a drop of 93.8% year-over-year and marked the smallest urea exports out of the country since 1999. For 2025, it appears the government is going to allow up to 2-3 MMT to be exported, though that is not guaranteed as they still hold the kill switch if they see domestic values increasing too much.

It is clear that this restrictive approach will remain, which could keep global urea/nitrogen supplies much tighter than they normally would be.



## U.S. Tariffs Raising North American Fertilizer Values

In commodity markets that are well-supplied by domestic production, imports of those commodities will have to compete hard for market share on price, quality, etc. A great example is the U.S. beef industry where the domestic supply more than adequately meets domestic demand, and imports from Australia or Canada must compete with U.S. ranchers. In that case, when tariffs are raised on beef imports, foreign exporters reduce their price to remain competitive and bear the cost themselves.

But the United States' fertilizer industry does not function like that. The market is incredibly reliant on imports of fertilizers, as the alternative is a massive shortage of tons since domestic production does not cover domestic demand. Tariff costs won't be borne by foreign exporters as they hold the pricing power because they know the U.S. needs the tons. Most of the tariff costs will

be passed down the supply chain along each step and farmers are the ones eventually footing the bill as the end user. When imports are artificially at least 10% more expensive, that creates an artificial price floor in the market, and domestic producers have no incentive to sell at less than replacement costs despite none of their inputs being tariffed. The result is that domestic producers raise their prices to match import prices and capture more margin per ton for their products.

If U.S. farmers are paying for the costs of tariffs, so will Canadian farmers secondarily. The U.S. accounts for roughly 40-50% of urea imports into Canada and roughly 60-70% of the MAP market share. Because of that, Canadian urea and MAP price is pegged to values in the U.S. Midwest, so when prices rise in the U.S., Canada sees higher prices. And when Canada goes to import from other suppliers, they will demand to sell at a similar price to U.S. replacement costs plus freight.

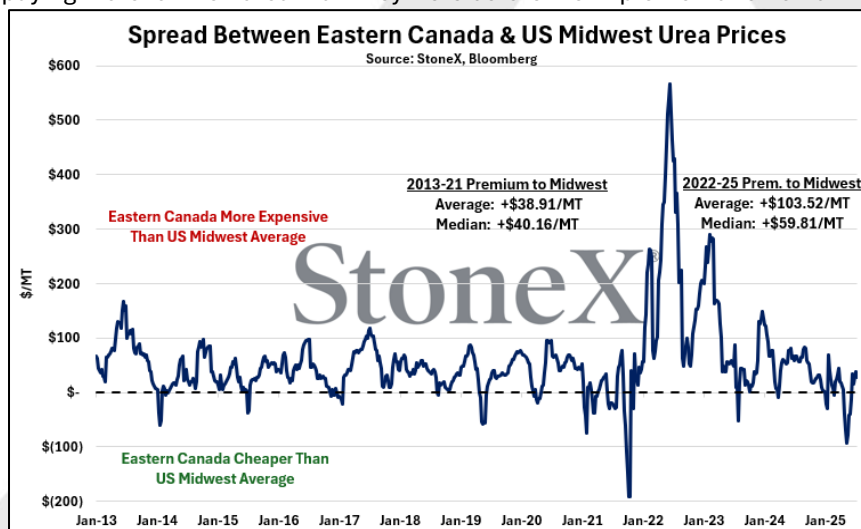
In summary, in a market where supply is less than demand like the North American fertilizer market, tariffs increase prices across the board by imposing a tax on imports that is not absorbed by exporters, but rather the farmer who is the end user. When U.S. fertilizer prices see a spike because of tariffs, Canadian farmers will also be affected too.

## Retail Fertilizer Price Differences in Ontario vs. US

At the heart of this issue is what drives Canada's agriculture industry—the Canadian farmer. While the entire world saw major price spikes in 2022, with many global benchmarks reaching all-time highs, the Canadian farmer saw some of the worst price pressures. With the implementation of 35% tariffs on imports from Russia, Canada's former top urea supplier, a major portion of Canadian urea supply was shut off, leading to an unprecedented rise in prices.

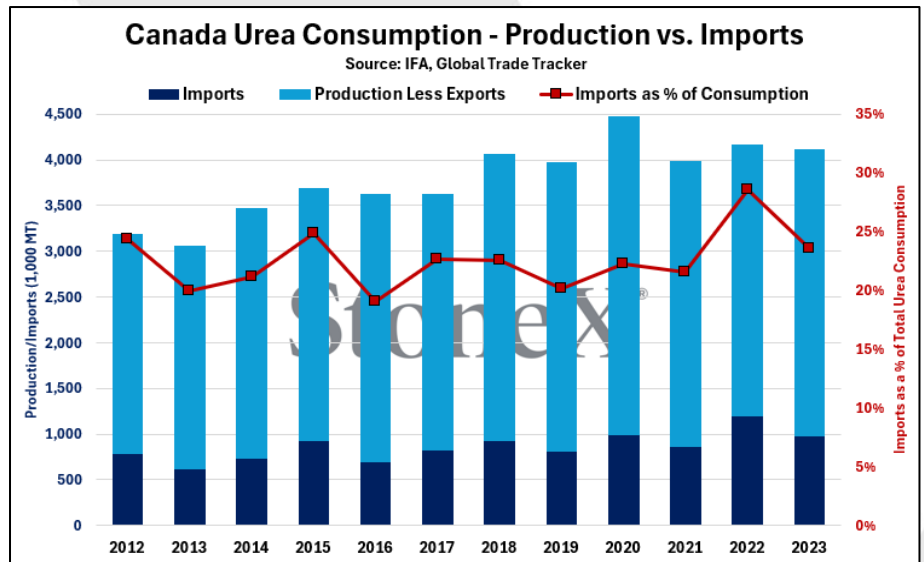
As shown in the below graphic, urea prices in Eastern Canada typically trade at a premium to the U.S. Midwest, averaging roughly \$40/MT from 2013 through 2021. Following Russia's invasion of Ukraine and the subsequent implementation of tariffs, Eastern Canadian urea prices skyrocketed to all-time highs, a dramatically sharper move higher than their southern neighbor as the premium to the Midwest surpassed \$500/MT. The spread between Eastern Canadian and Midwestern urea prices continued to trade at a sharply higher than normal level for over a calendar year before eventually correcting back closer to typical levels.

Even with the correction seen as Canada gradually diversified away from Russian supply and found their new "normal," Eastern Canadian urea prices have seen their average premium to the Midwest grow. Since Russia's invasion of Ukraine, Eastern Canadian urea prices have, on average, traded at over a \$100/MT premium to the Midwest. That average is obviously skewed by the extreme shocks seen through 2022 and early 2023, but even the median has risen closer to the \$60/MT mark, roughly \$20/MT higher than pre-2022. While there is no question regarding the Canadian government's intention of helping cut off the Russian government's ability to finance their war effort in Ukraine, the bottom line is that these tariffs are having a negative impact on the Canadian farmer. The Canadian farmer is now paying more for their urea than they were before the implementation of tariffs on Russian imports. When these tariffs were initially implemented in 2022, farmers were at least benefitting from high grain prices to help offset some of the impact—that is not the case anymore. Farmer margins are significantly tighter in 2025 than they were in 2022, making the impact of these ongoing tariffs even more punitive as they are the ones effectively paying the price. If the Canadian government isn't going to introduce support measures for the Canadian farmer in the near-term, the one immediate measure they could take to help lower input costs would be to remove the 35% tariffs still in place on Russian imports.



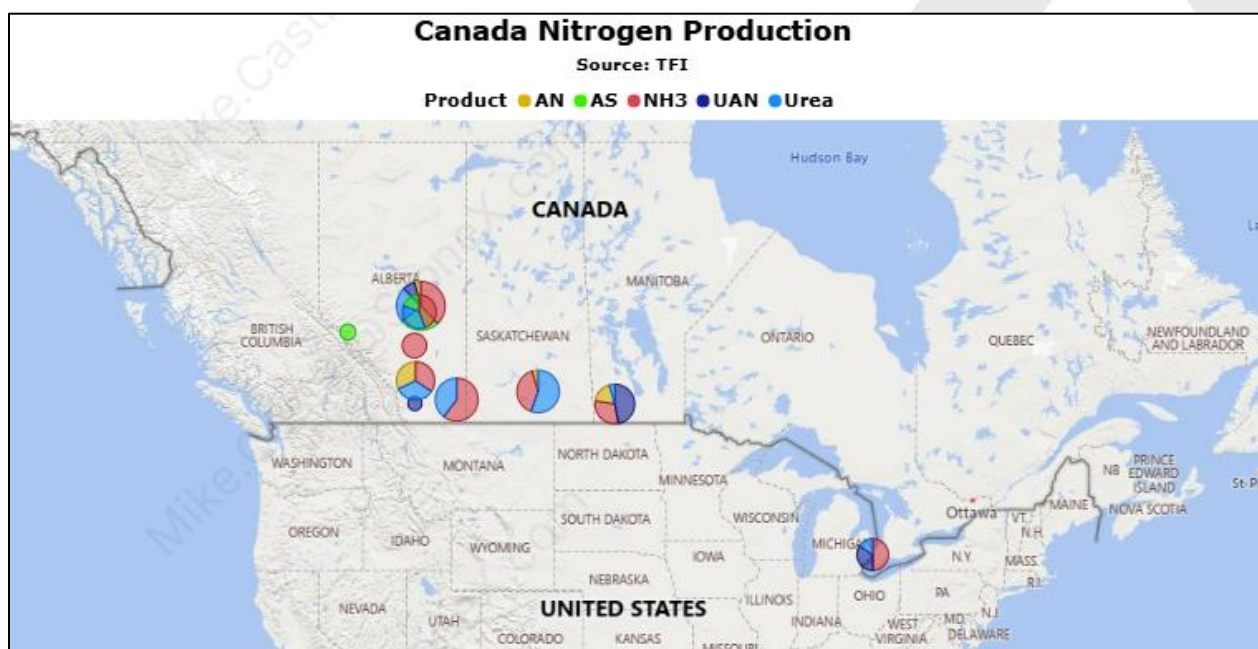
## Expanding Canadian Fertilizer Production

One way to reduce the potential for exogenous shocks like the one experienced in 2022 that led to dramatically higher fertilizer prices for the Canadian farmer is for Canada to expand their own domestic production. While the up-front cost of building fertilizer production facilities can be very expensive, it can also be very beneficial long-term. Building additional fertilizer production capacity would reduce Canada's reliance on imports, create jobs, and shorten the supply chain between the production of said fertilizers and the fields on which they will be applied. Canada does already have a solid amount of domestic production, ranking 10<sup>th</sup> globally in ammonia capacity and 12<sup>th</sup> in urea capacity as of 2025, but the country is still reliant on imports to some extent, especially in the east. The accompanying graphic highlights this situation, with the majority of Canada's urea supply coming from their own production, but roughly 25% - 30% of consumption coming from imports.



Part of the current issue with Canada's current fertilizer production, specifically for the Ontario farmer, boils down to geography. As can be seen in the graphic below, the vast majority of Canada's existing nitrogen fertilizer production is located in the country's west, with the largest portion in Alberta. As can be expected, this is due to the majority of Canada's natural gas production being located in this region. With natural gas being the main feedstock for nitrogen production, Canada's abundant supply of cheap gas is a major competitive advantage, leading the region to become a major fertilizer producer.

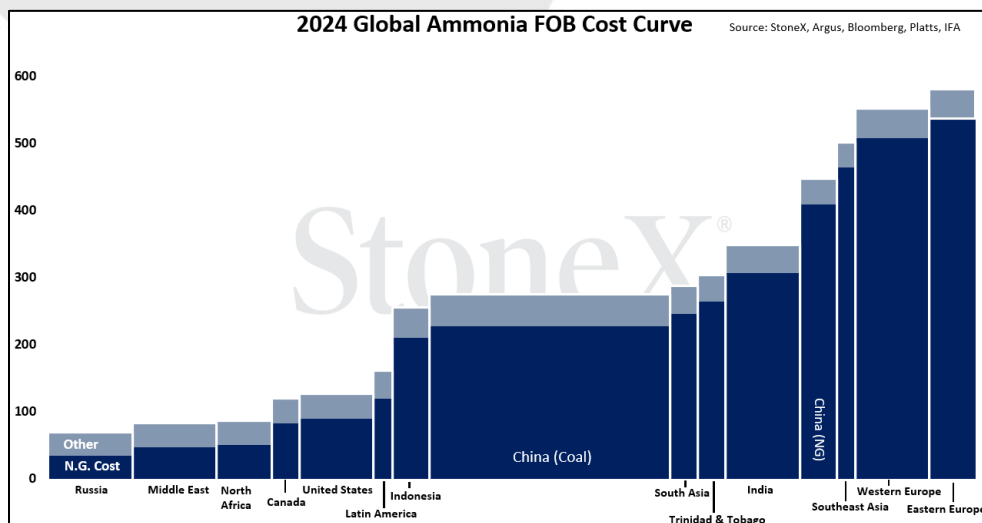
Despite the strong production in western Canada, one of the most glaring issues is the lack of sufficient east-west logistical capacity. While the CN and CPKC (formerly CP) do have existing rail routes from the nitrogen producing regions in western Canada to the heart of agricultural production in Ontario/Quebec, these lines are competing with shipments of a wide array of other commodities, keeping the per tonne shipping cost relatively prohibitive and necessitating imports in the country's east. Obviously, this is an extremely long haul for a truck as well, making that an inefficient and expensive route in its own right.





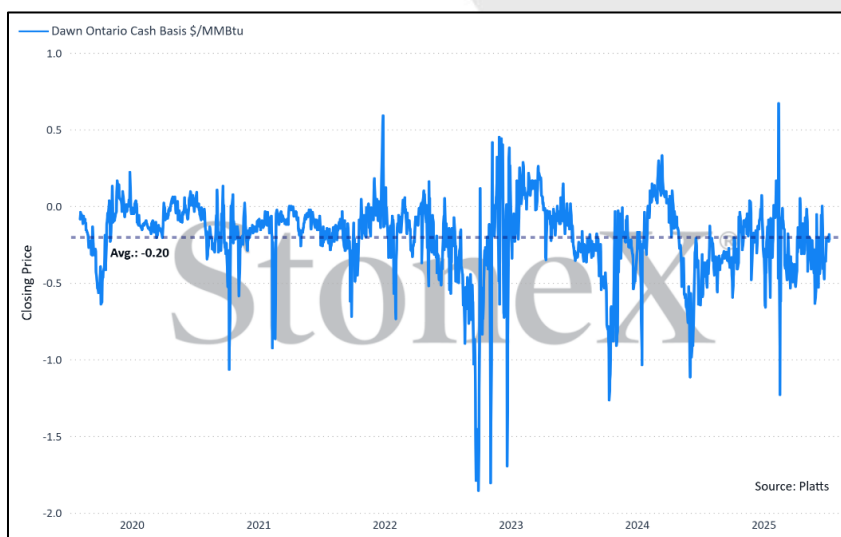
While the logistical infrastructure for shipping finished fertilizers from west to east in Canada is somewhat lacking, the infrastructure for shipping nitrogen fertilizer's feedstock, natural gas, is more plentiful given existing pipeline connections like the TransCanada (TC) pipeline. In fact, the only true commercial scale nitrogen plant located in eastern Canada (CF Industries' Courtright, ON plant) is located there in large part due to its access to consistent, economical

natural gas via the TC pipeline. This allows the producer to take advantage of the major competitive advantage for Canada—abundant cheap natural gas supply. As shown below, production costs for Canadian ammonia are among the lowest in the world due to this cheap gas supply, not far above the costs of export-focused producers in the Middle East, North Africa, and Russia. On average, they're even cheaper than the U.S. Gulf Coast, the biggest producing region in the country that has a growing export program.



These cheap gas costs that give Canada a competitive advantage in nitrogen production costs is not isolated to the heaviest-producing regions in western Canada either. The below chart shows cash basis values (the difference between physical and futures prices, in this instance U.S. Henry Hub futures whose delivery market is in southern Louisiana) for the Dawn Hub in southwestern Ontario. While spikes to the upside certainly occur, Dawn Hub gas is on average ~\$0.20/MMBtu cheaper than U.S. Gulf Coast prices, further highlighting the cost advantage available even in eastern Canada.

In summary, Canada (and Ontario specifically) has the opportunity to reduce their nitrogen fertilizer import reliance while also shortening the supply chain between producers and consumers by expanding their production. This would lessen the risk of exogenous supply shocks like the one seen in 2022 while also providing a more consistent, and potentially cheaper, source of supply to Canadian farmers.



## Conclusion

Global fertilizer supplies are unusually tight and unusually high priced today. Fertilizers are the biggest input cost per acre for the farmer and, coupled with very low grain values compared to the past few years, have put Canadian farmers in a very difficult position that has them hoping at best for a break-even year.

During tumultuous times like these, all supply avenues need to be left open to ensure that supplies can be found. While the Canadian government's blockade of Russian goods (fertilizer included) due to the 35% tariffs is well intended, we believe there needs to be consideration of exceptions. Food supply remains the most important goal of our government and without adequate supply availability, that goal could be in jeopardy. Lifting blocks on Russian fertilizer without touching other goods would keep pressure on Russia while helping to open a very important supply route, alleviating the strain on Canadian farmers.