

India

Underweight (no change)

Chemicals - Overall

Urea, NH3 and NH4NO3 prices to rise

- Ammonia, urea, and ammonium nitrate prices are expected to rise due to geopolitical disruptions, sanctions on Iran, and Europe's need to import them.
- China's declining urea exports & growing consumption will lead it to import either NH3 or urea. India to import 5-6mt urea, making Russia the key supplier.
- Integrated ammonia and ammonium nitrate production companies stand to benefit.

Europe will have to import 8.5mt urea or 5mt ammonia in CY25F

Changing geopolitical conditions have rendered Ukraine's 6mt of ammonia production capacity defunct. Additionally, due to political sanctions, multiple European countries are not purchasing ammonia from Iran's 8mt capacity. Germany also faces challenges due to its limited natural gas regasification capacity and the availability of only 28bcm of reverse gas flow, making it difficult to sustain ammonia production at full capacity. As a result, Europe is expected to become a major buyer of either ammonia (5mt) or urea (8mt). In Asia, China may emerge as an importer of either urea or ammonia, further driving the demand for Middle Eastern and Russian ammonia/urea. Given the market dynamics, it is more advantageous for Russia to produce urea and capture higher margin rather than selling ammonium nitrate at lower margin. These shifting trends are expected to drive up the prices of ammonia, urea, and ammonium nitrate. In our view, integrated Indian companies with backward ammonia integration facilities stand to benefit.

China's quest for urea inventory to exert pressure on global supply

China used to export approximately 4-5mt of urea to the global market. However, exports have declined significantly as China is building its urea inventory. At the same time, China's urea consumption is growing at a 3% CAGR, which will eventually force the country to either import urea or ammonia to meet this demand. Based on our analysis, we have assumed that China will import ammonia to produce urea, though it could choose either option. To maintain the necessary inventory in the system, China needs to import either 1.4mt, 1.9mt, and 2.9mt of ammonia in CY25F/26F/27F or 2.3mt, 3.2mt, and 5mt of urea in those years. Additionally, India is expected to import more than 5-6mt of ammonia in CY25F, and for both China and India, the primary source of urea and ammonia will be Russia. Meanwhile, Russia stands to benefit from exporting urea at higher spreads rather than ammonium nitrate. As a result, in the coming period, we expect a rise in the prices of ammonium nitrate, ammonia, and urea.

Integrated ammonium nitrate producers ideally positioned to benefit

With an integrated production facility and a likely shift by Russia to produce higher quantity of urea in place of ammonium nitrate, it will lead to higher prices of ammonia, urea and ammonium nitrate.

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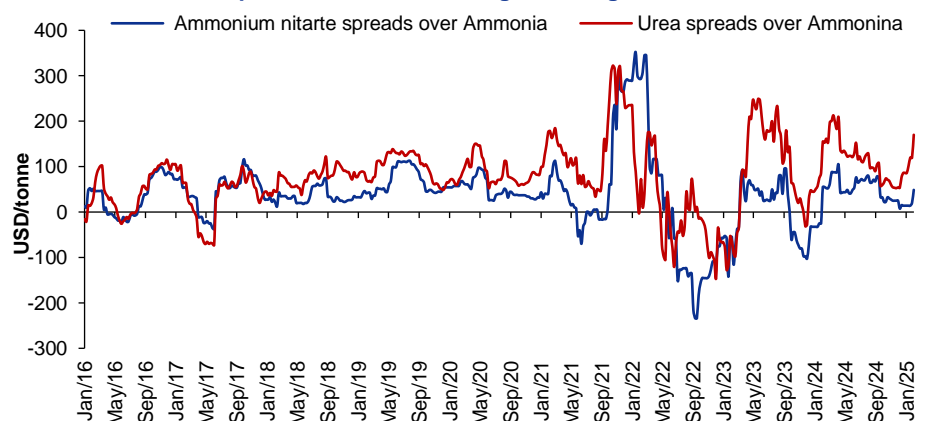
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Figure 1: Rising urea and ammonia demand from key allies China & India may force Russia to shift to urea production, thus creating a shortage of NH3 and NH4NO3



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Urea, NH3 and NH4NO3 prices to rise

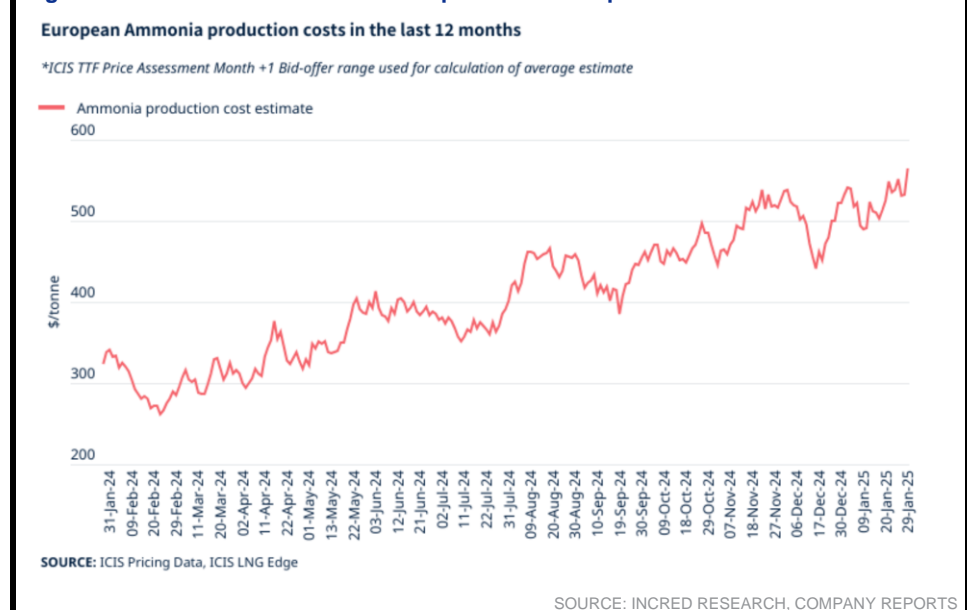
Changing geopolitical conditions have rendered Ukraine’s 6mt of ammonia production capacity defunct. Additionally, due to political sanctions, multiple European countries are not purchasing ammonia from Iran’s 6mt capacity. Germany also faces challenges due to its limited natural gas regasification capacity and the availability of only 28bcm of reverse gas flow, making it difficult to sustain ammonia production at full capacity. As a result, Europe is expected to become a major buyer of either ammonia (5mt) or urea (8mt). In Asia, China may emerge as an importer of either urea or ammonia, further driving the demand for Middle Eastern and Russian ammonia/urea. Given the market dynamics, it is more advantageous for Russia to produce urea and capture a higher margin rather than selling ammonium nitrate at a lower margin. These shifting trends are expected to drive up the prices of ammonia, urea, and ammonium nitrate. We believe that integrated Indian companies with backward ammonia integration stand to benefit. Additionally, prices of other nitrogen-based fertilizers are also likely to rise in the coming months.

European actions will lead to higher FOB Middle East ammonia prices

Unless European gas prices fall significantly, ammonia production in Europe will continue to decline. Import reliance will rise, benefiting Middle Eastern and North African ammonia producers. The long-term survival of European ammonia may depend on state subsidies, faster green ammonia adoption, or energy price corrections—but for now, it’s largely unviable. With Iran under European sanctions and tit-for-tat duties likely on the US, the only sources of ammonia for European countries will be the UAE, Saudi Arabia, and Oman. With no significant capacity addition in Saudi Arabia or the UAE, it’s more likely that FOB Middle East ammonia prices will rise in the coming weeks

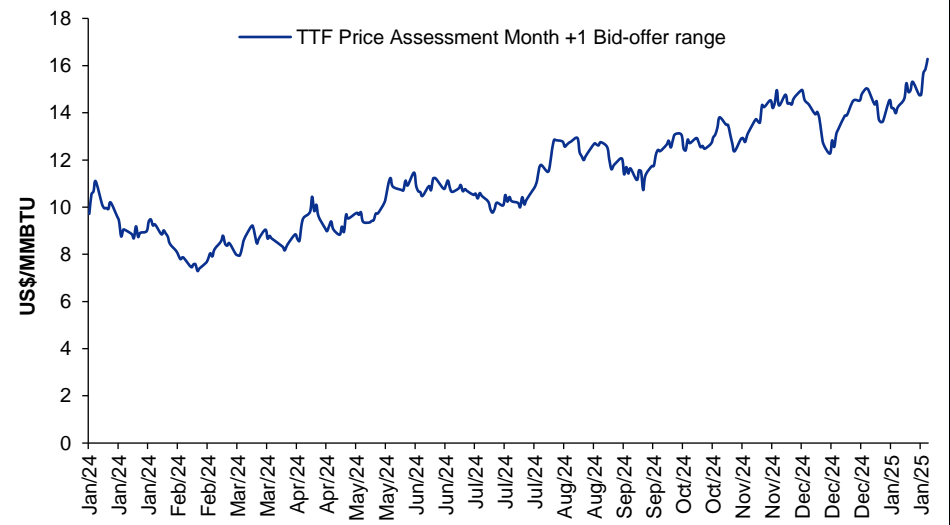
European ammonia production costs are rising ➤

Figure 2: Over the last 12 months European ammonia production costs have doubled



Remember, rising TTF is not the only factor behind the rise in ammonia production costs in Europe ➤

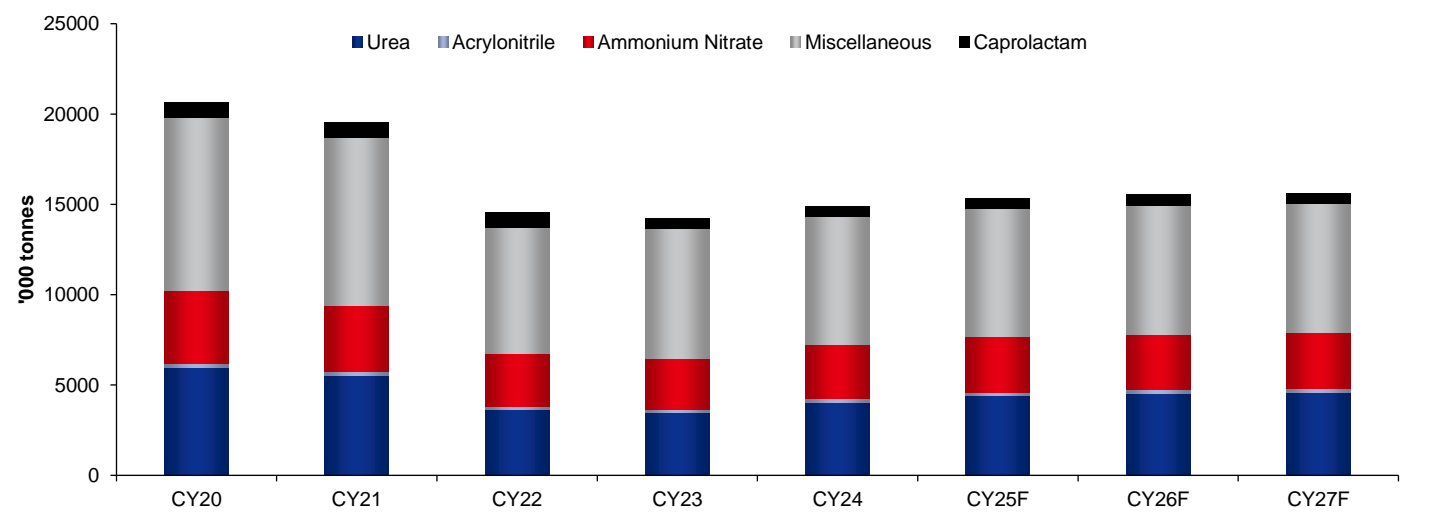
Figure 3: European TTF prices have risen by 50% over the last one year



SOURCE: INCRED RESEARCH, COMPANY REPORTS

European ammonia consumption is likely to go up as fertilizer demand will push ammonia consumption higher ➤

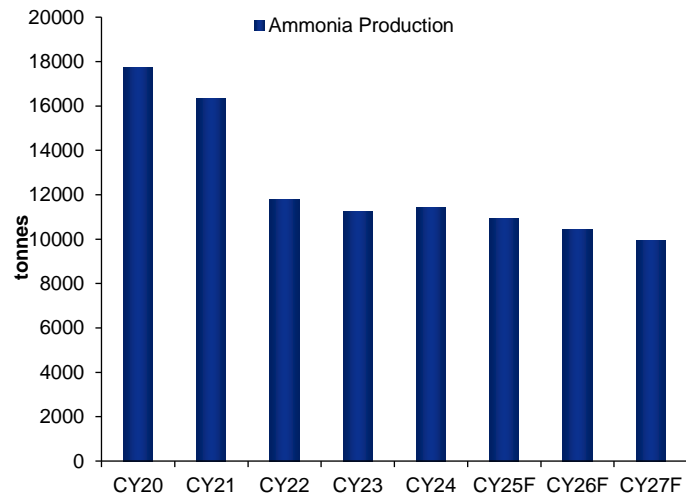
Figure 4: European ammonia consumption will rise primarily driven by higher urea production



SOURCES: INCRED RESEARCH, COMPANY REPORTS

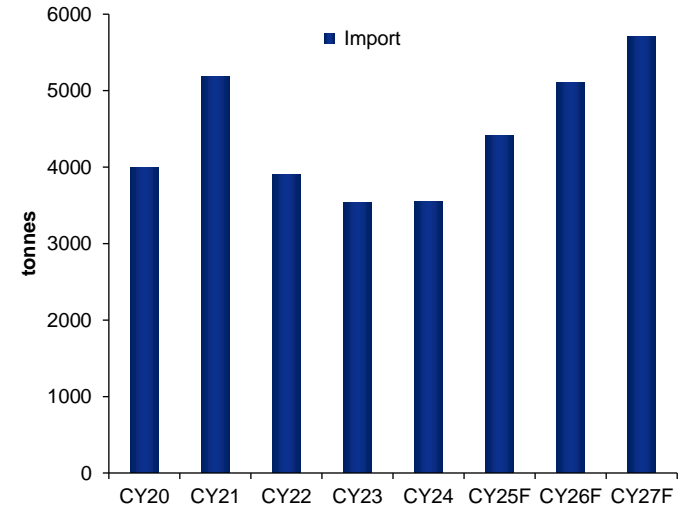
However, ammonia production in Europe will falter as gas availability is key ➤

Figure 5: European ammonia production will decline as gas availability will become an issue



SOURCE: INCRED RESEARCH, COMPANY REPORTS

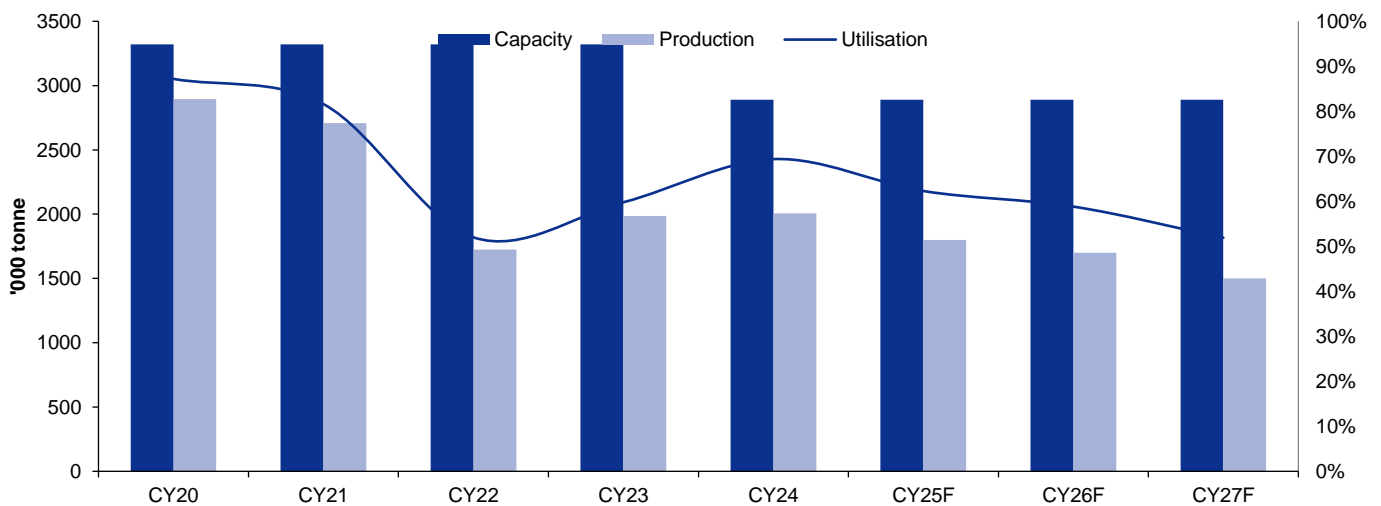
Figure 6: Ammonia imports will rise in Europe as more plants close and urea requirements rise



SOURCE: INCRED RESEARCH, COMPANY REPORTS

A big fall in ammonia production is likely in Germany ➤

Figure 7: A big fall in ammonia production is likely in Germany



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Can't Germany import cheap LNG from the US and run its ammonia plants? The answer is No ➤

As of now, Germany doesn't have enough regasification capacity and adjoining pipelines to cater to its ammonia plants. The closure of Nord Stream-1 & 2 gas pipeline has taken a heavy toll on the ammonia production capacity of Germany. Please remember that Germany has significant regasification capacity and the country is building a new one as well.

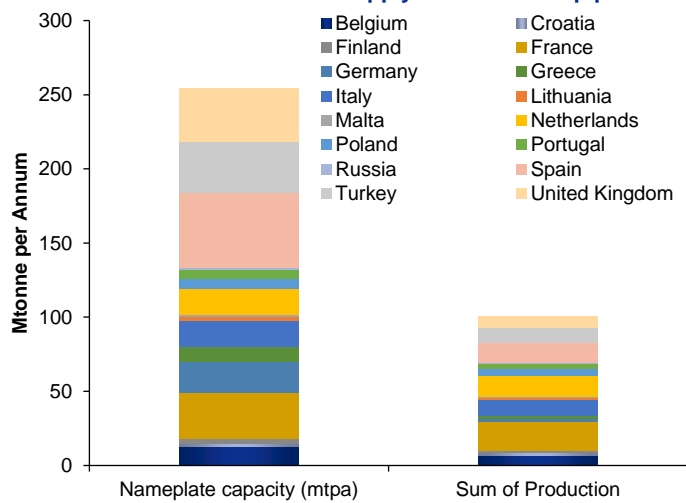
Figure 8: Germany has significant LNG regasification capacity; however, lack of internal networks leads to sub-optimal utilization

Terminal	Nameplate capacity (mtpa)	Utilization rate (%)	Production	Operational status	Notes
Stade FSRU	5.4		0	Operational	FSRU using the Emerges Force vessel.
Stade Hanseatic Energy Hub	9.6		0	Under construction	Operators Hanseatic Energy Hub took FID on the project on 21 Mar 2024. Will replace existing FSRU at Stade.
Mukran	9.6		0	Operational	Two FSRUs now in place at Mukran, the Energos Power since Mar 2024 and Neptune since Jul 2024.
Wilhelmshaven FSRU I	3.6	45%	1.62	Operational	
Wilhelmshaven FSRU II	3.3	45%	1.485	Under construction	Second FSRU project at Wilhelmshaven.
Brunsbüttel FSRU Phase 1	2.5	29%	0.725	Operational	The Brunsbüttel LNG terminal was constructed following the Russian invasion of Ukraine as a measure to reduce Germany's dependence on Russian pipeline gas imports. The 170,000cbm Hoegh Gannet acts as the FSRU for the project.

SOURCE: INCRED RESEARCH, COMPANY REPORTS

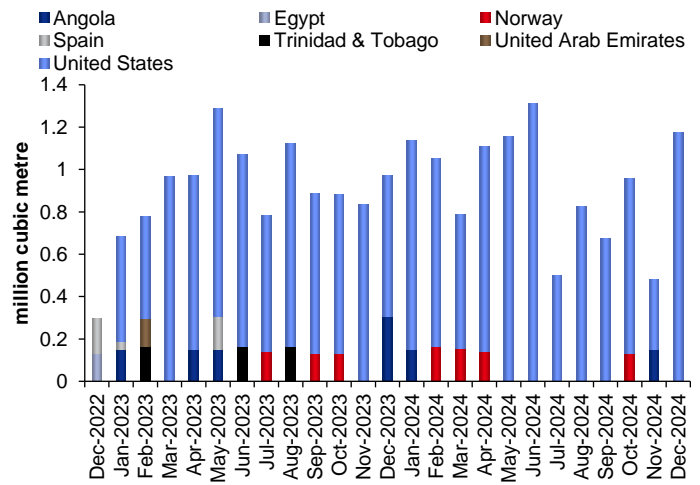
Germany doesn't have a well-connected regasification capacity to operate its regasification terminals ➤

Figure 9: Overall European regasification capacity operates at ~40% utilization rate as there is supply constraint via pipelines



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 10: The US and Norway are main exporters of LNG to Europe



SOURCE: INCRED RESEARCH, COMPANY REPORTS

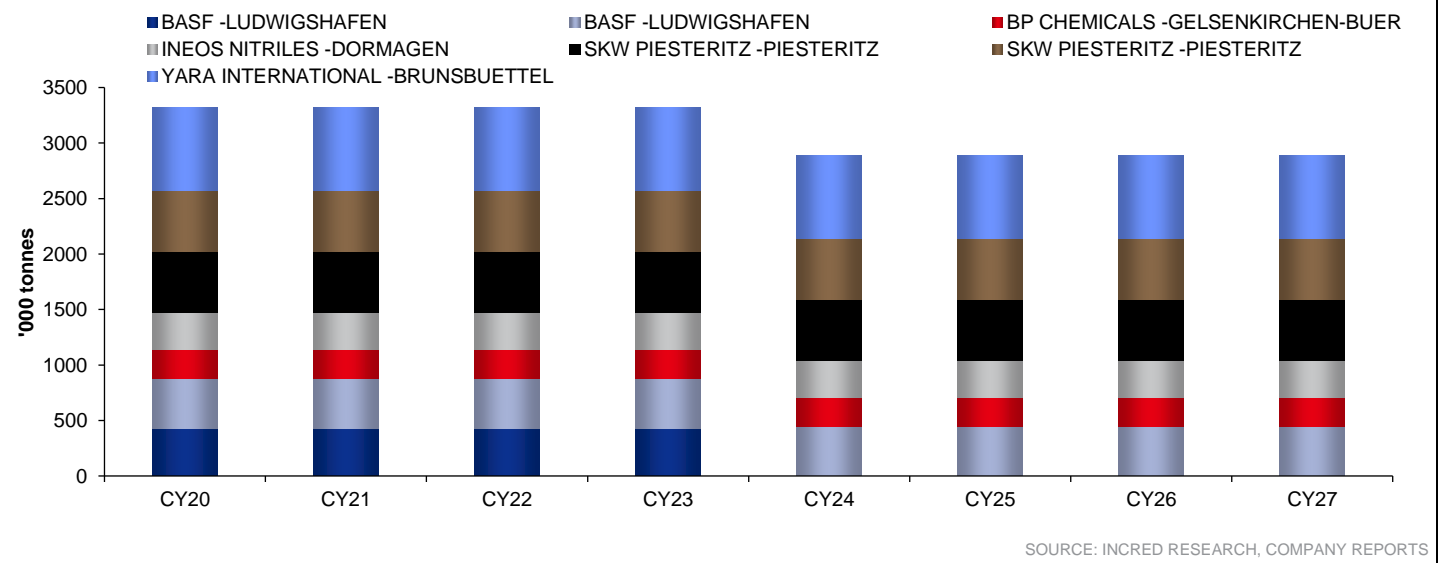
Spain and the UK have enough regasification capacity; however, at best, they can supply 28bcm gas to Europe provided the network is free ➤

Spain and the UK can supply natural gas to Germany through Belgium's infrastructure, although the routes and capacities vary.

1. Spain indirectly sends gas via France, with a maximum of 7.3bcm/year (limited by the Spain-France pipeline capacity).
2. The UK directly supplies to Belgium via the interconnector pipeline (IUK), contributing up to 20.5bcm/year.
3. Combined, these sources provide Belgium with ~28 bcm/year. Belgium then channels this gas to Germany through pipelines like Zibeline (9.6bcm/year) and TENP (18.5bcm/year), alongside other infrastructure, totalling ~28 bcm/year of export capacity to Germany.
4. However, internal consumption in transit countries (e.g., Belgium, Netherlands, Switzerland) and competing flows reduce the final volume reaching Germany. With the Netherlands' Groningen field phasing out by 2028, Belgium's Zeebrugge LNG terminal plays a critical role in maintaining gas flows to Germany.
5. Thus, while Spain and the UK can theoretically supply ~28bcm/year to Germany via Belgium, the actual delivery depends on network constraints and regional demand.

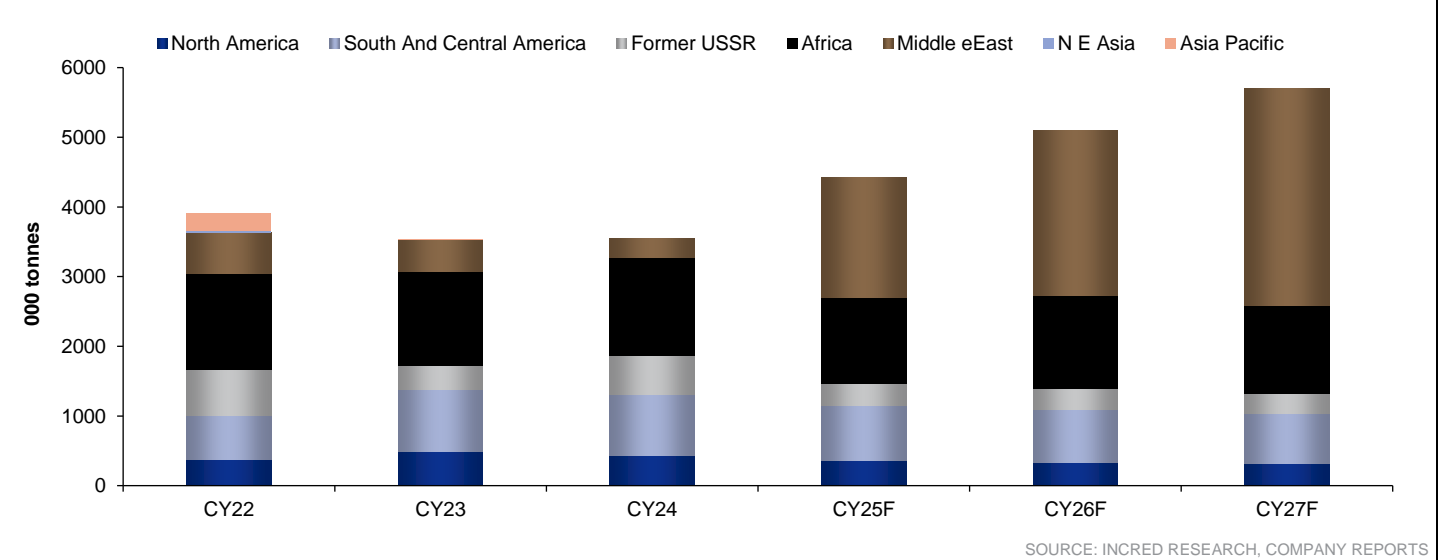
Hence, despite having enough ammonia capacity, unless Germany goes back to Russia for gas supply, it cannot operate plants at high utilization rate ➤

Figure 11: Germany has 2.8mt ammonia production capacity; however, lack of gas will lead to not even 50% capacity utilization in the coming future



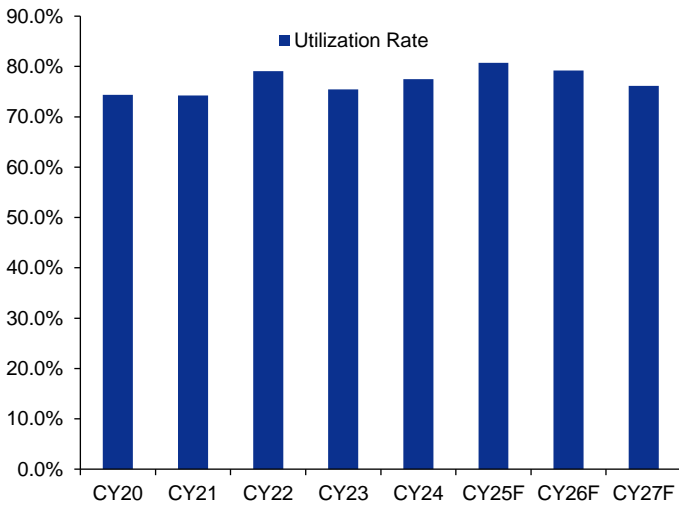
The duty drama by the US and Europe will keep North American ammonia out of reach for European urea plants; the only possible source of ammonia for Europe will be the Middle East ➤

Figure 12: Europe will have to look towards the Middle East for its ammonia requirements



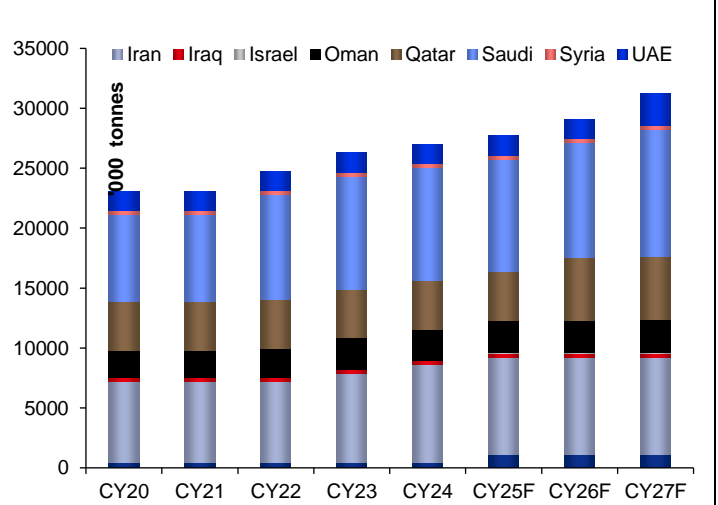
The Middle East has enough capacity to meet this requirement >

Figure 13: The Middle East's capacity utilization rate can still climb



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 14: However, as the major capacity is in Iran it will have to ramp up faster



SOURCE: INCRED RESEARCH, COMPANY REPORTS

However, Europe cannot buy ammonia from Iran, as the latter is still a pariah >

Europe's options for securing ammonia supplies are increasingly constrained. With the push for decarbonization, traditional ammonia exporters like Russia face sanctions, while green ammonia projects in Europe are still in their infancy.

Iran has large ammonia and urea production capacity due to its abundant natural gas reserves, and its exports have continued despite sanctions, often through intermediaries. If Europe turns to Iran for ammonia, it would be a pragmatic but politically complex move. While some countries may resist direct imports due to geopolitical concerns, traders and intermediaries could facilitate the flow indirectly, as seen in other sanctioned commodities.

As a result, there will be high demand for ammonia from Qatar, Saudi Arabia and the UAE >

The ammonia demand from Qatar, Saudi Arabia and the UAE will be much higher and hence, we expect FOB Middle East prices to rise in the coming quarters. Remember, the UAE and Saudi Arabia are not increasing their capacity in a significant manner, which means a tough time for Europe as FOB Middle East prices will rise faster.

China may turn into a big importer of ammonia or urea and India will come in big way to import urea as well, leading to rise in urea and ammonia prices

China used to export approximately 4-5mt of urea to global markets. However, exports have declined significantly as China builds its urea inventory. At the same time, China's urea consumption is growing at a 3% CAGR, which will eventually force the country to either import urea or ammonia to meet this demand.

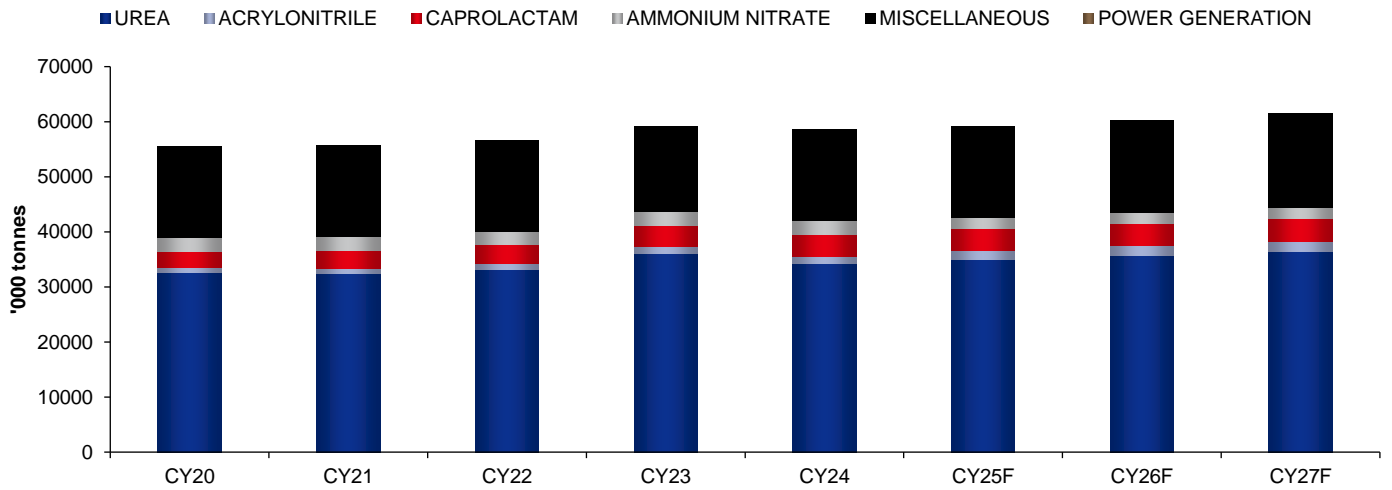
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Additionally, India is expected to import more than 5-6mt of ammonia in CY25F, and for both China and India, the primary source of urea and ammonia will be Russia. Meanwhile, Russia stands to benefit from exporting urea at higher spreads rather than ammonium nitrate.

As a result, in the coming period, we expect a rise in the prices of ammonium nitrate, ammonia, and urea.

China is a major consumer of ammonia ➤

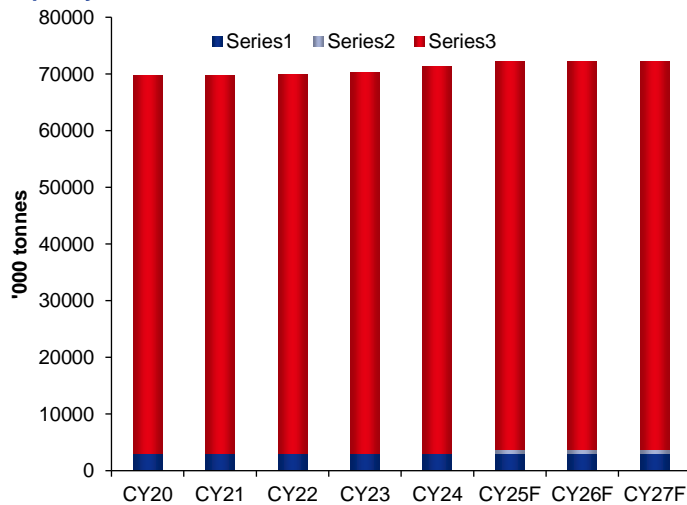
Figure 15: China is the largest user of ammonia in the global market; much of the ammonia is consumed in urea production



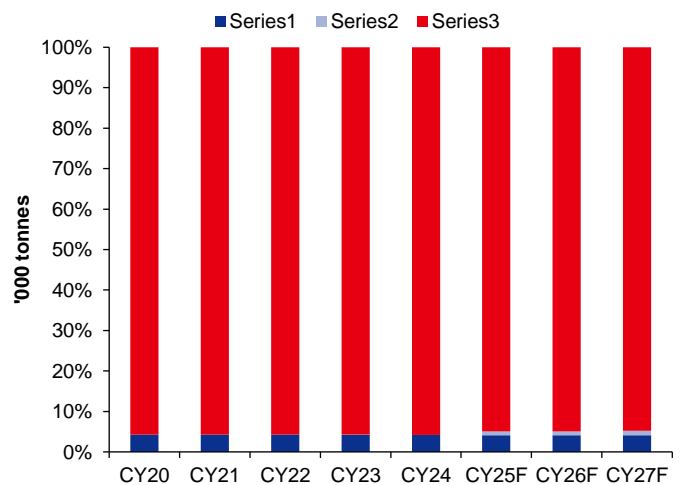
SOURCE: INCRED RESEARCH, COMPANY REPORTS

A major portion of China's ammonia production is through the coal-based route ➤

Figure 16: China has more than 70mt of ammonia production capacity **Figure 17: However, more than 95% of the capacity is coal-based**



SOURCE: INCRED RESEARCH, COMPANY REPORTS



SOURCE: INCRED RESEARCH, COMPANY REPORTS

The coal-based ammonia production route is being discouraged in China ➤

China is gradually discouraging the coal-based ammonia production route due to its high carbon footprint and environmental concerns. However, the pace of transition is influenced by multiple factors:

Key Reasons for Discouragement:

- Carbon Emission Targets** – China has committed to peak carbon emissions before 2030 and carbon neutrality by 2060. Coal-based ammonia production is highly carbon-intensive (~2.6-3.0t of CO₂ per 1t of ammonia) compared to natural gas-based production (~1.6-1.8t of CO₂ per 1t).
- Energy Efficiency & Pollution** – The coal-to-ammonia route is less energy-efficient and produces more pollutants (e.g., SO₂, NO_x, particulate matter) compared to natural gas-based methods.

3. **Green Hydrogen Push** – China is investing heavily in green hydrogen (electrolysis-based), which could eventually replace coal-based hydrogen (from coal gasification) in ammonia production.
4. **Carbon Pricing & Regulations** – China's Emissions Trading System (ETS) and stricter environmental regulations are increasing the cost burden on coal-based ammonia producers.
5. **Shifting Feedstock Trends** – Newer ammonia projects in China are increasingly favouring natural gas and renewable hydrogen sources.

But Coal-Based Ammonia Still Dominates

- China remains the world's largest coal-based ammonia producer, with more than 70% of its ammonia production coming from the coal-based route.
- High domestic coal availability and cost advantages mean that many plants are still running and shutting them down prematurely would create supply risks.
- The shift to cleaner alternatives will be gradual, with existing coal-based capacities upgrading to carbon capture (CCUS) or co-producing syngas-based chemicals rather than shutting down immediately.

Outlook

- **No immediate ban** on coal-based ammonia, but incentives and policy measures are pushing toward greener alternatives.
- New projects are likely to favour **natural gas, electrolytic hydrogen, or CCUS-based ammonia** rather than traditional coal-based routes.
- **Regional policies vary**—some provinces with heavy coal resources (e.g., Shanxi, Inner Mongolia) may resist a rapid transition.

China has introduced multiple policies to reduce ammonia production through the coal-based route ➤

China is actively implementing policies to transition away from coal-based ammonia production due to environmental concerns and carbon reduction commitments:

1. **Promotion of Renewable Ammonia Projects:** The government is encouraging the development of renewable ammonia production facilities. For instance, projects in inner Mongolia are scaling up 'flexible' ammonia production powered by renewable energy sources like wind.
2. **Decarbonization Initiatives in Coal-Fired Power Plants:** The National Development and Reform Commission (NDRC) has announced plans to test decarbonization technologies in coal-fired power plants. These include co-firing with green ammonia and biomass, as well as deploying carbon capture and storage (CCS) technologies, aiming to reduce carbon intensity by 20% by 2025 and 50% by 2027 from 2023 levels.
3. **Carbon Pricing Mechanisms:** China's Emission Trading System (ETS) imposes costs on carbon emissions, making coal-based ammonia production less economically attractive compared to greener alternatives.
4. **Support for Green Hydrogen Production:** The government is investing in green hydrogen projects, which can serve as a cleaner feedstock for ammonia production, reducing the reliance on coal.

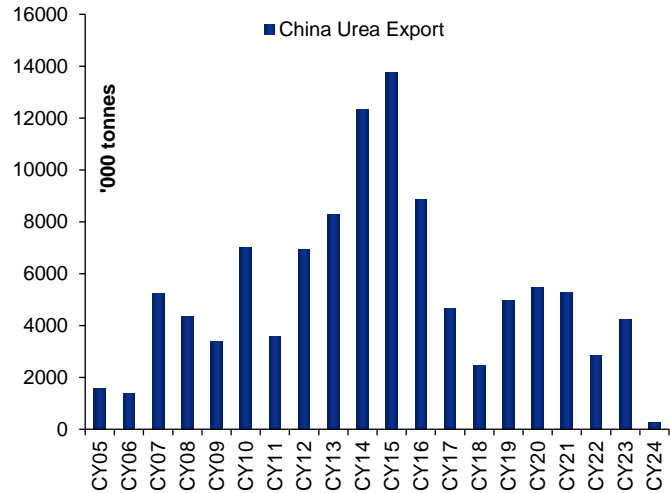
Hence, exporting ammonia, while creating inland pollution, is completely ruled out ➤

Given the big pollution concerns in the country, it is highly unlikely that China will increase coal-based ammonia capacity to export.

At the same time, China is reducing urea exports to the world ➤

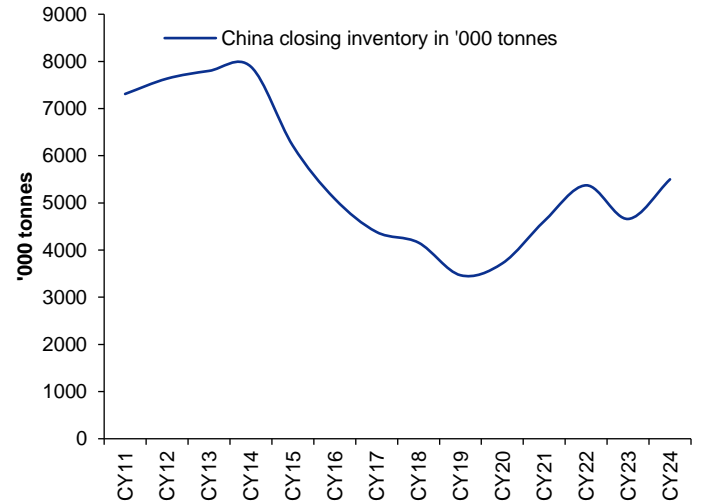
China normally exports 3-4 mt of urea; however, in the recent past, probably for food security concerns, it is hoarding urea. In fact, it appears that production of urea is also going down in China.

Figure 18: China's urea exports have declined by ~95% in CY24



SOURCE: INCRED RESEARCH, BLOOMBERG

Figure 19: At the same time, its urea closing inventory is increasing



SOURCE: INCRED RESEARCH, BLOOMBERG

Reduced Chinese exports will raise RoW (ex-China) ammonia demand by 2.5mt ➤

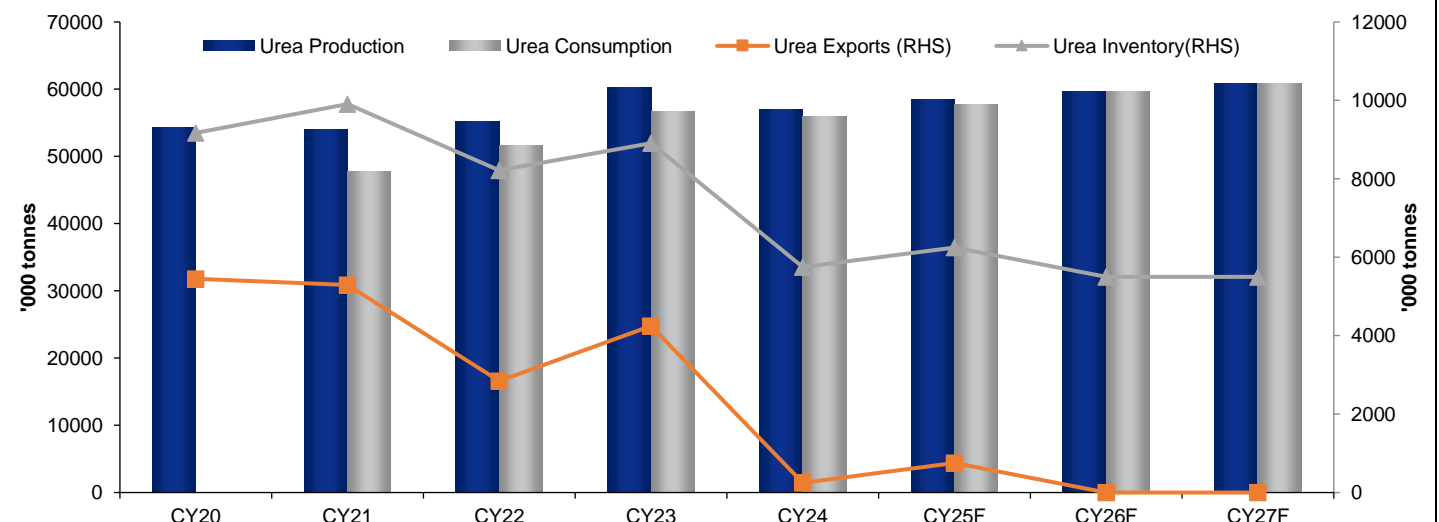
China normally exports 3-4mt of urea; however, in the recent past, probably for food security concerns, it is hoarding urea. Remember, 1t of urea requires ~0.6t of ammonia and hence, if Chinese exports go down by 4mt, then it raises RoW ammonia demand by 2.4mt.

It appears that China is building strategic reserves of urea and, at the same time, its consumption is also rising ➤

China appears to be building strategic reserves of urea and the past export patterns indicate that it plans to have at least 5.5mt of urea reserves.

Rising urea strategic reserves and consumption means China will have to import ammonia or urea in the coming years ➤

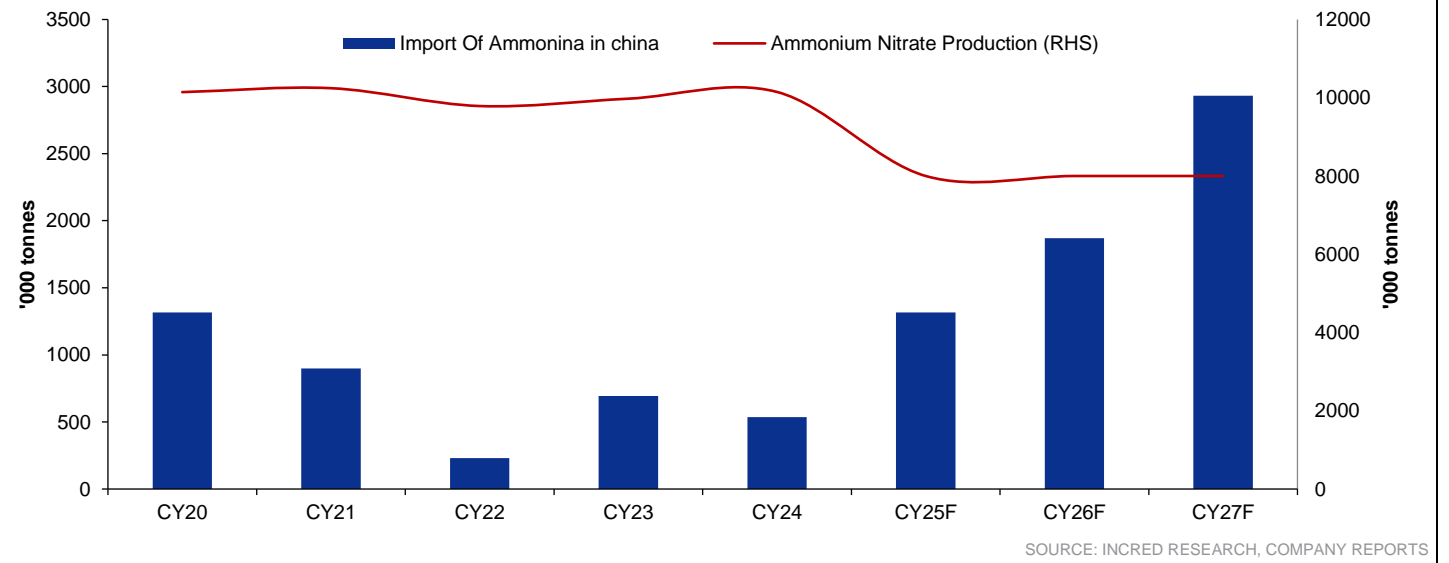
Figure 20: China's urea exports will decline as it will be in its interests to maintain around 5.5mt of urea inventory



SOURCE: COMPANY REPORTS, INCRED RESEARCH

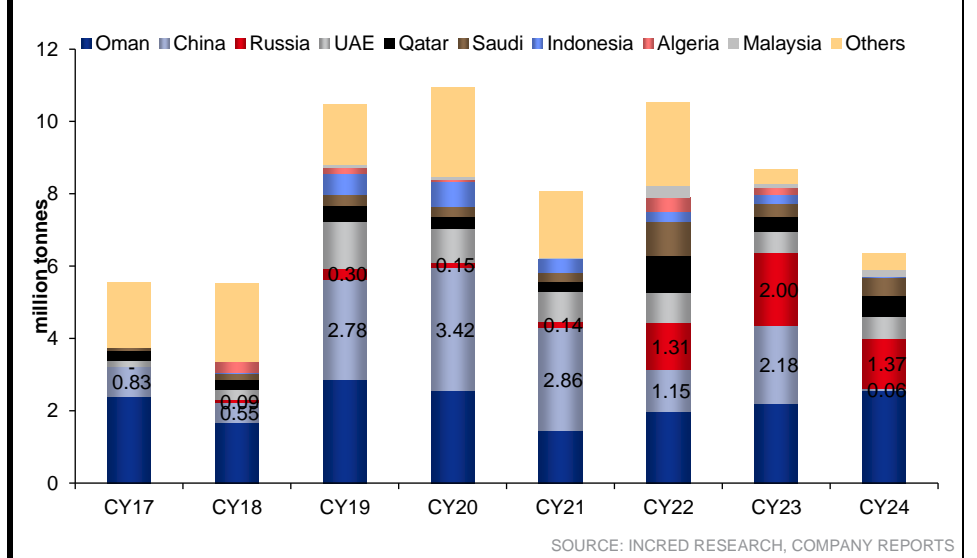
As a result, China is likely to become a big importer of ammonia in the coming years ➤

Figure 21: To meet urea requirement, China may need to import ammonia in the near term, and at the same time, ammonium nitrate production can decline in China



India is a big urea importer from China and as the latter goes off the market, India will look for alternate supply sources of urea, which can lead to futher global pressure on ammonia demand ➤

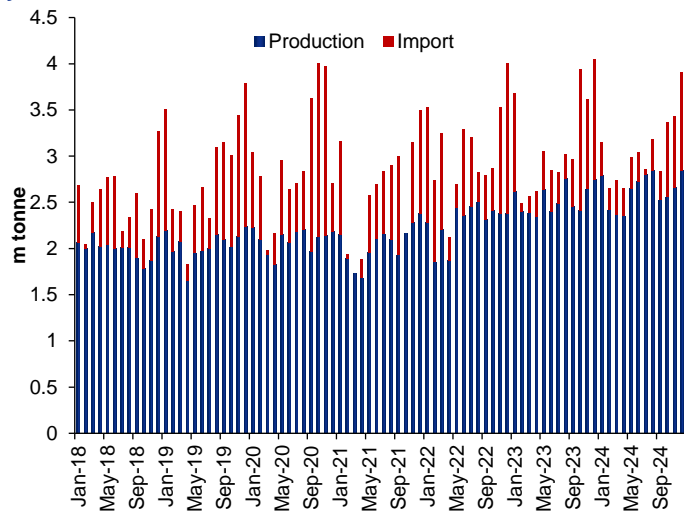
Figure 22: India Imported ~6mt of urea from the international market, as Chinese exports are drying up and India will have look at other sources



India still lacks sufficient capacity to meet all its urea requirements indigenously and lower imports have reduced system inventory by 4.6mt ➤

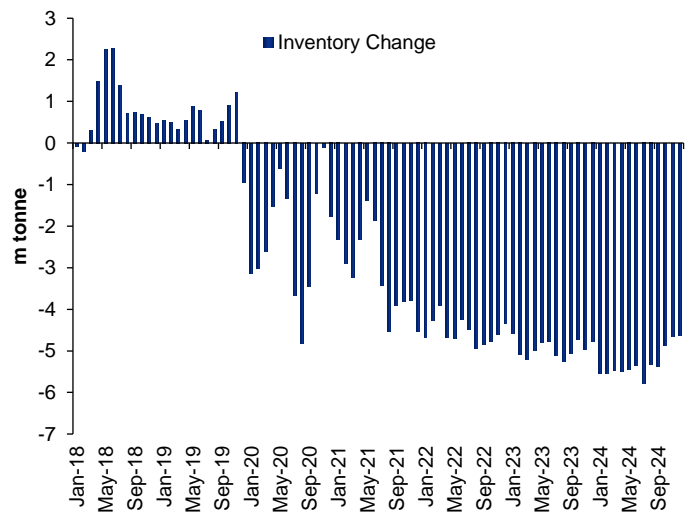
Due to significant inventory drawdowns, it seems unlikely that India's urea imports will decrease. Additionally, in recent times, India has shifted its urea imports from China to Russia.

Figure 23: Indian imports of urea have gone down in recent years...



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 24: ...which has led to significant inventory drawdowns



SOURCE: INCRED RESEARCH, COMPANY REPORTS

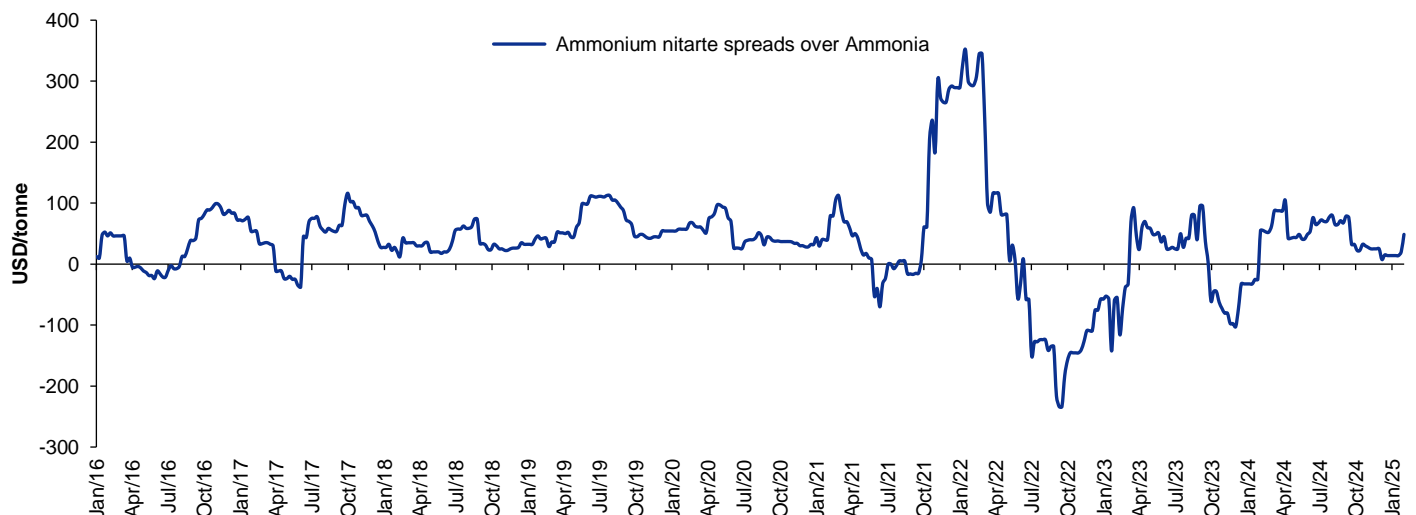
It's likely that India's urea imports from Russia will rise to 2.5-3mt in 2025F, which means Russia will be hard pressed for ammonia production

India's urea imports from Russia can rise to 2.5-3mt in 2025F as China will be out of the export market.

As a result, Russia's ammonia capacity will be stretched and ammonium nitrate production may come down

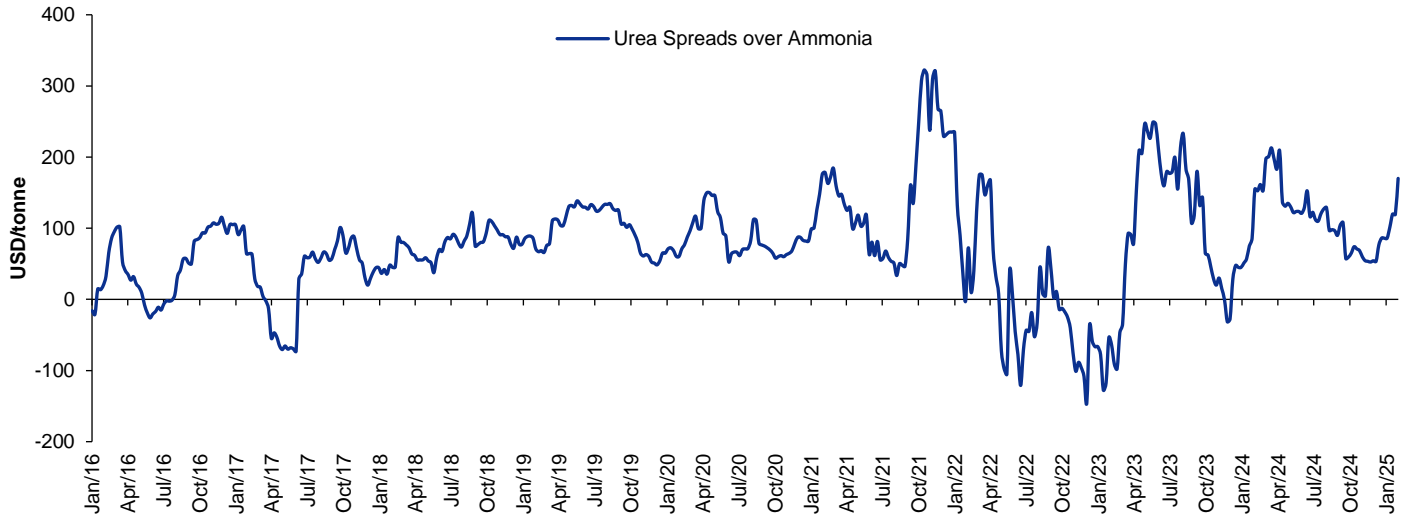
Russia will be the source of ammonia for China and the source of urea for India, which means its ammonia sales can rise. In any case, selling ammonia at US\$ 500/t or urea at US\$600/t is far more beneficial for Russia than ammonium nitrate at US\$220/t.

Figure 25: Producing 1t of ammonium nitrate requires approximately 0.5t of ammonia (in the form of pure ammonia and nitric acid); please note that nitric acid is also manufactured using ammonia



SOURCE: COMPANY REPORTS, INCRED RESEARCH

Figure 26: Spreads of urea over ammonia are much higher for a producer like Russia



SOURCE: INCRED RESEARCH, COMPANY REPORTS

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Recommendation Framework**Stock Ratings**

Definition:

- Add** The stock's total return is expected to exceed 10% over the next 12 months.
- Hold** The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
- Reduce** The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings

Definition:

- Overweight** An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
- Neutral** A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
- Underweight** An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings

Definition:

- Overweight** An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
- Neutral** A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
- Underweight** An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.