

# Argus report sample

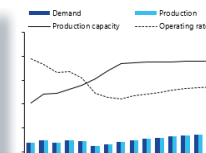
## Toluene and Xylenes Analytics

June 2024

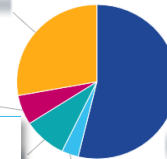
### Toluene global supply & demand

Europe would continue to persist to be a major toluene supplier for African region

#### Global Toluene Summary



#### Global Toluene Demand



Northeast Asia emerged as a net toluene exporter back in 2021. This trend has gotten stronger as the net toluene trade has increased between 2019 and 2022. However, rising costs could put added pressure on regional net trade.

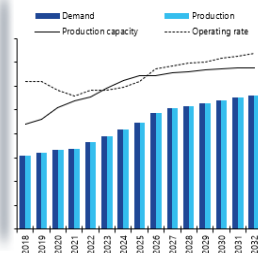
- In 2024, the sector embattled with high costs and heavy labor and regulatory expenses. In spite of this, the region would continue to persist to be a major toluene supplier for the African region.
- In 2023, the subdued refinery and subsequent reformer operating rates in 2023 compared to the year prior continued to curtail domestic production of aromatics. International toluene trade in and out of the region will rely on the regional refining complexes align to tepid growth in gasoline consumption.
- The region catered to more than half of toluene demand in 2023. It is expected to maintain this ratio till 2032.
- Toluene usage as a feedstock to remain near constant in North America while in Europe its use would witness a drop. Other derivatives such as toluene diisocyanate (TDI) could see modest growth supported by the demand.
- The region are facing challenges as crude barrels have been taken out of the circulation from Europe as well as the US. In its place, the oil cut coming out of the being used which has a lighter yield, which translates to those higher-octane chemicals being of greater importance to gasoline blenders.

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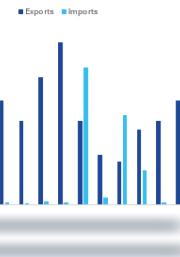
### Global mixed xylene supply & demand

to lead in terms of capacity addition, with the country looking to bridge the import gap.

#### Global Xylenes Summary



#### US mixed Xylene Trade Flow, 000t



- Global xylenes production in 2023 was estimated at 1.1 mmt with global nameplate capacity estimated at 1.6 mmt during the same year.
- More than 80% of xylenes globally came from refineries via extraction from reformate, disproportionation and with another 20% acted from co-product pygas at ethylene steam crackers. The remainder of xylenes produced comes from coal and xylenes byproduct.
- China is contributing the most in terms of capacity addition, with notable xylenes capacity additions in the next five years as it looks to lower its xylenes trade deficit.
- US imports in first quarter of this year is same as last year. However, US imports of MX declined sharply in the first quarter. The decline of MX imports can be explained in part due to the PX length globally, with little need for feed stock MX into PX production.
- Premium component blend value has supported the demand for gasoline blending, favoring imports of mixed xylene from the global market.
- The largest xylene consuming segment is to produce paraxylene. The paraxylene segment accounts for more than 50% of xylene demand and this demand share is expected to marginally decline in the next 5 to 10 years.

argus

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## About this report

Argus Toluene and Xylenes Analytics is a data-driven evaluation of supply-demand fundamentals forecasts for T/X markets, published twice a year.

The service includes a 10-year forecast and five-year history covering balances and capacities, organized by country and region.

In this sample, we share global demand trends and the latest changes across Paraxylene, Toluene, Orthoxylene and Mixed Xylenes.

Subscribers receive a PowerPoint PDF written by our experts plus the accompanying Excel data files.

To find out more, [click here to get in touch](#).



# Key features



**10-year forecast and a five-year history**  
Covering capacities, supply and demand, trade, and feedstock forecasts for leading derivatives, by country and region, published twice a year.



**Detailed report**  
In an easy-to-read PowerPoint format focussing on new plant capacities, growth rates in relevant markets, and regulatory developments.



**Regional insight**  
Covering capacities and forecast operating rates based on global trade and economics.



**Downloadable datasets**  
With data on supply, demand, capacities, operating rates and trade balances, by country and region.

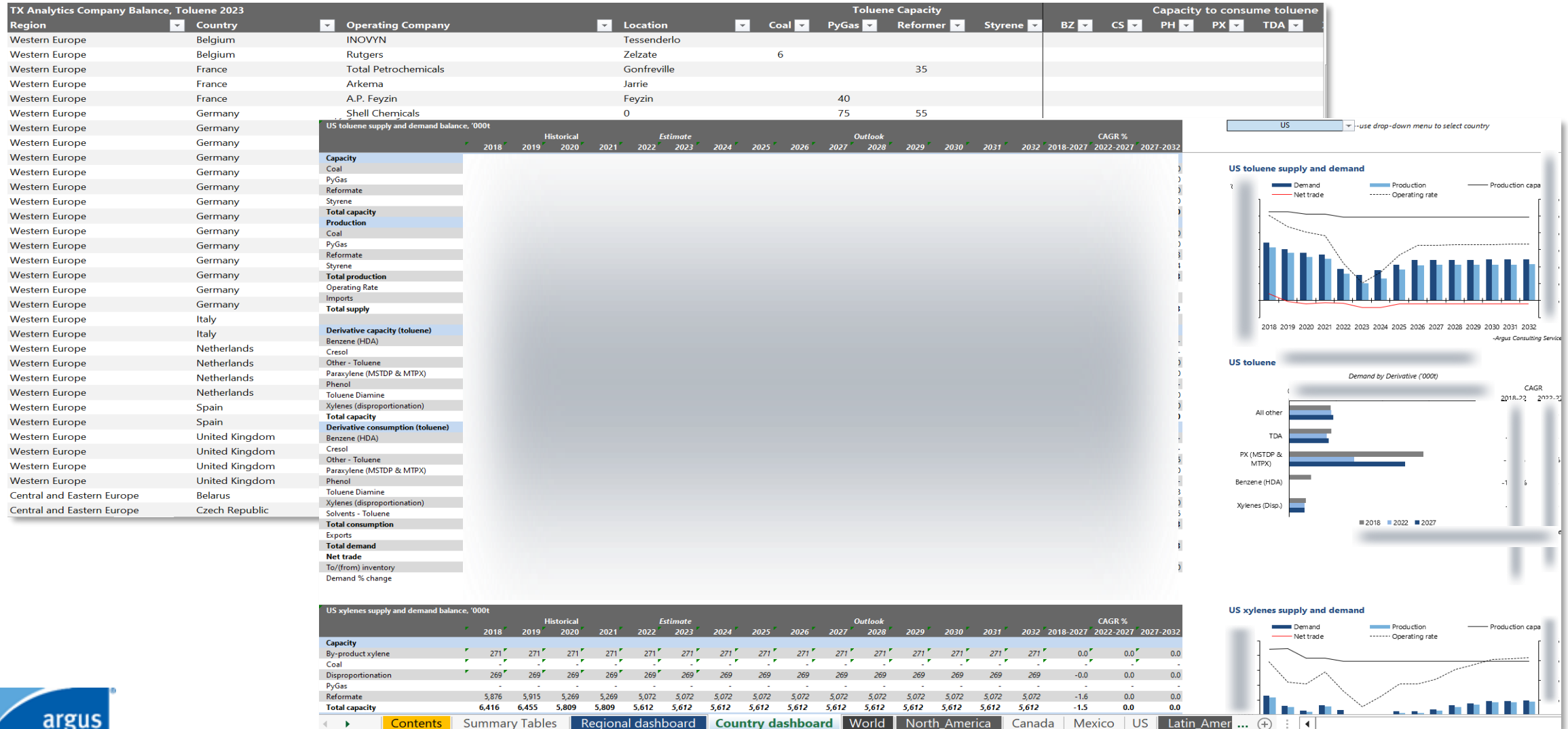


**Access to specialists**  
Speak to the experts behind Argus' long-term analytics forecast services.

# Associated Data

## TX Analytics Company Balance 2023; global supply, demand and trade by country

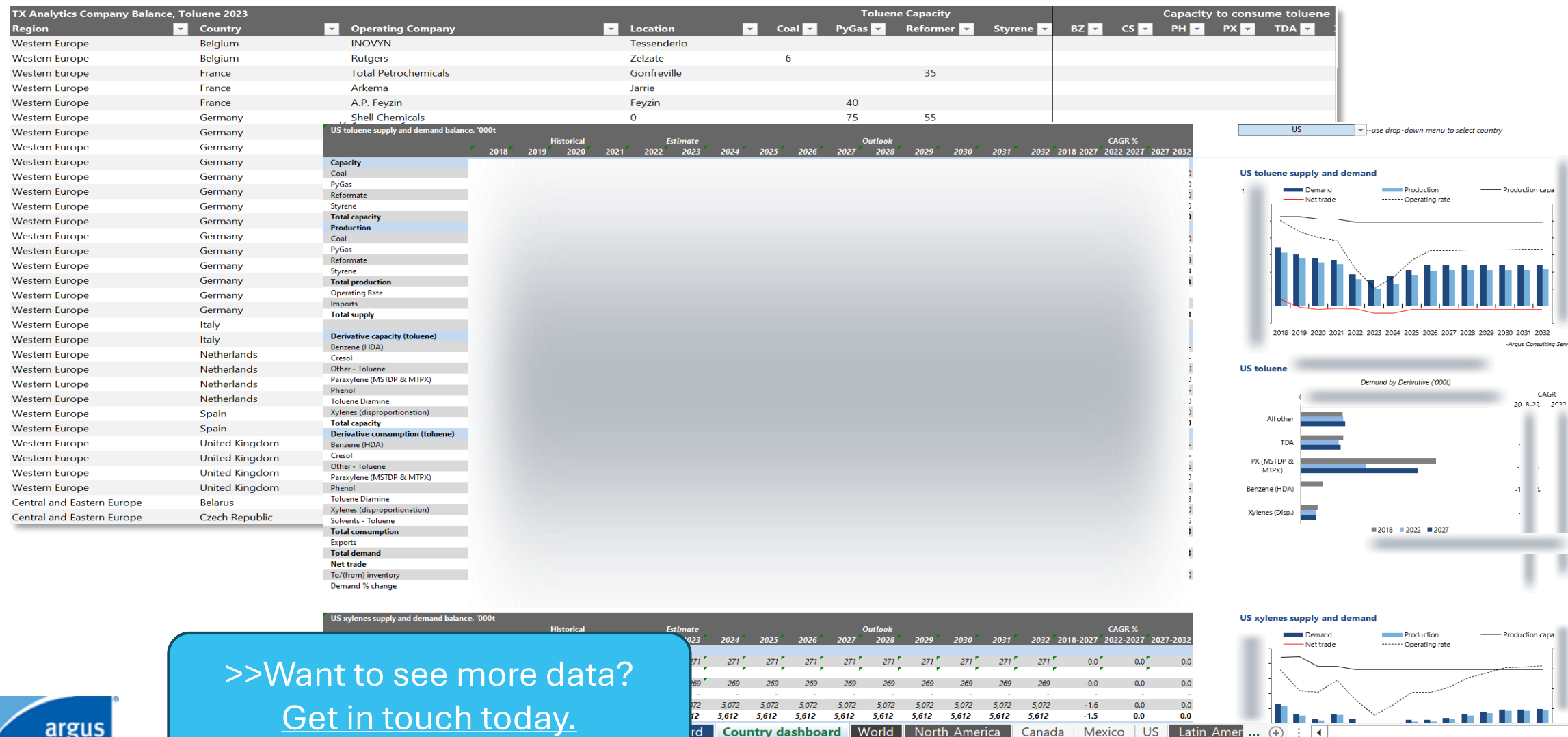
Subscription  
includes detailed  
Excel downloads



# Associated Data

## Capacity list for toluene, xylenes and xylene isomers with first-line derivatives

Subscription  
includes detailed  
Excel downloads



1. Executive Summary

2. Spotlight

3. Global Supply and Capacity Changes

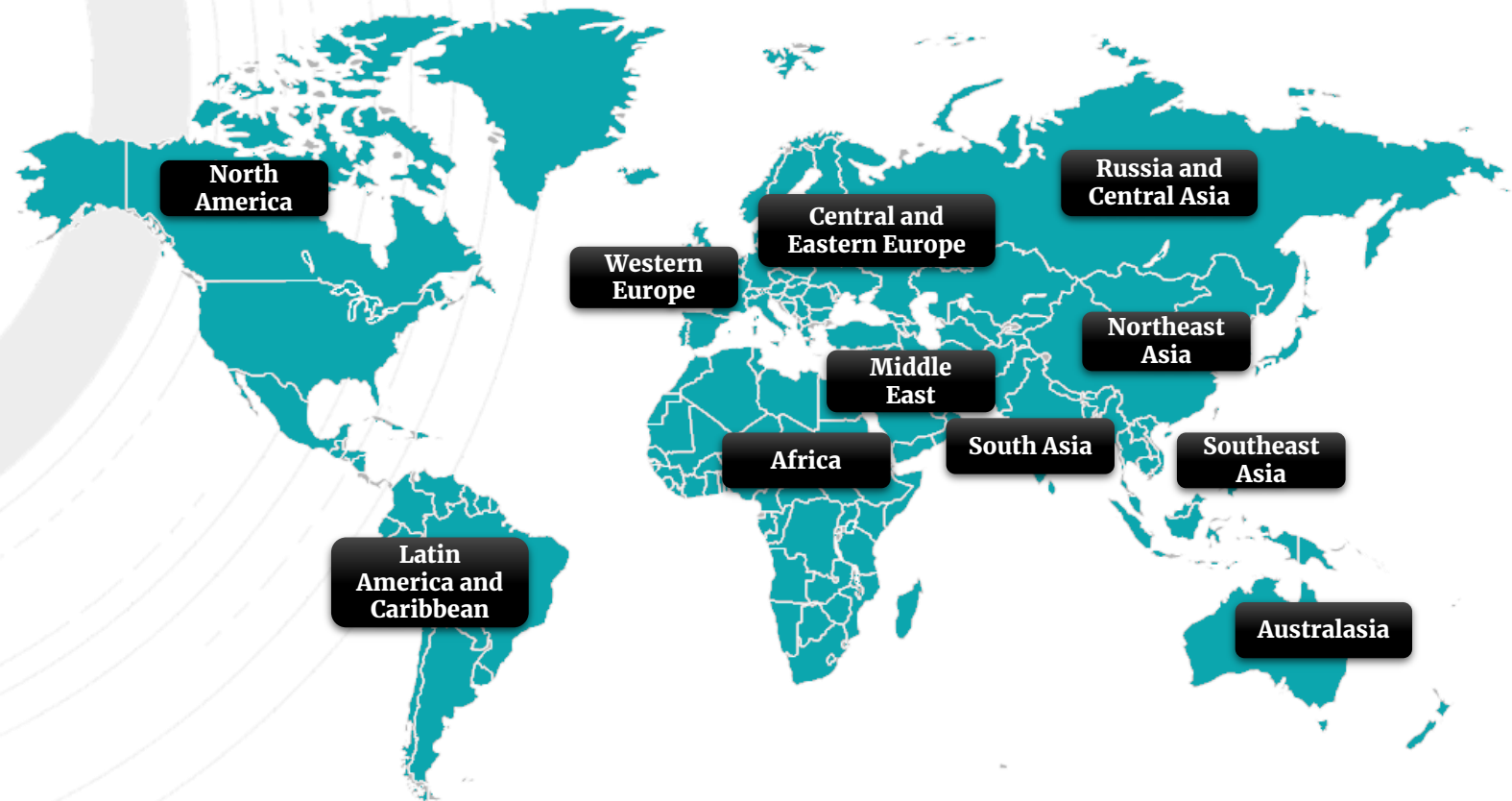
4. Breakdown of Key Regions

5. Contact us

6. Appendix

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**balances** dataset  
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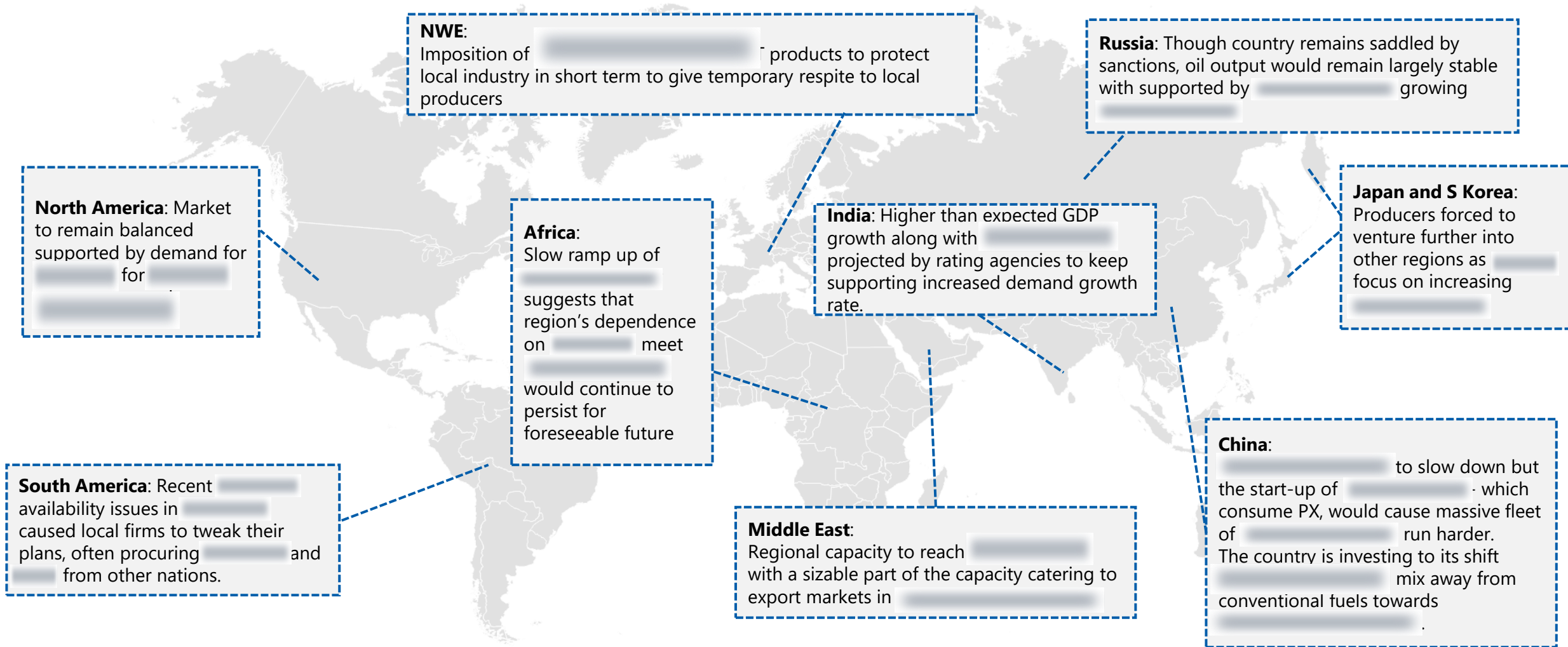
# Executive Summary

## Refineries to lead [REDACTED] due to their close connection with the expansion of [REDACTED]

- In 2023, more than [REDACTED] c of th [REDACTED] X originated from [REDACTED] products, while approximately [REDACTED] 20pc came from [REDACTED] crackers.
- Refineries would continue to lead supply growth over the coming decade due to their close connection with the anticipated [REDACTED] ester demand and the [REDACTED] i [REDACTED] supply. Reformate will continue to be [REDACTED] gasoline blending pool driven by stronger d [REDACTED] to the peak driving season.
- Higher crude prices generally favo [REDACTED] OTC), which utilize an array of different processes to [REDACTED] paraxylene yields. These projects are mainly driven by PET and PTA producers who link [REDACTED] PET [REDACTED] P [REDACTED] e usage. Lower crude prices on the other hand will t [REDACTED] supp [REDACTED] y extraction from reformate.
- [REDACTED] ns will continue to drive PX demand, and countries blending premium octane components to the gasoline pool will drive the prices.
- A series of [REDACTED] s are expected to open this year, i [REDACTED] cers will benefit [REDACTED] prices. This would compel non-in [REDACTED] er PX-PET production units in other countries and [REDACTED] cons [REDACTED] rod [REDACTED] But China's trade partners are starting to pus [REDACTED] a massive expansion of its petrochemicals sector. The EU imposed anti-dumping duties on imports of Chinese PET, with others [REDACTED] w suit.
- Long shi [REDACTED] from Russia to Asia-Pacific to have an impact on aromat [REDACTED] d India appear keen to procure Russian energy at a hefty markdown but are reluctant to participate in the country's oil and gas sector.

# Paraxylene: What's changed?

Market in [redacted] region to remain [redacted] supported by [redacted] demand



# PX-PTA-PET capacity update

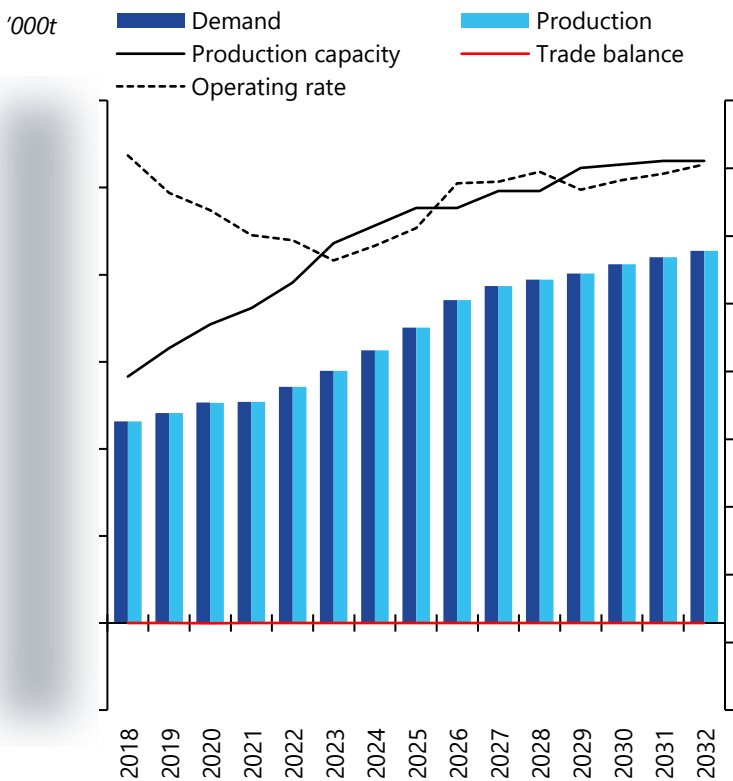
Projects got delayed and unit closed amid tighter margins and overcapacity.

Key project updates		
Country	Operating Company	Update
Abu Dhabi		
Brunei		
China		
Indonesia		
Iran		
Japan		
Thailand		
Turkey		
UAE		
USA		
USA		
USA		

# Paraxylene global supply

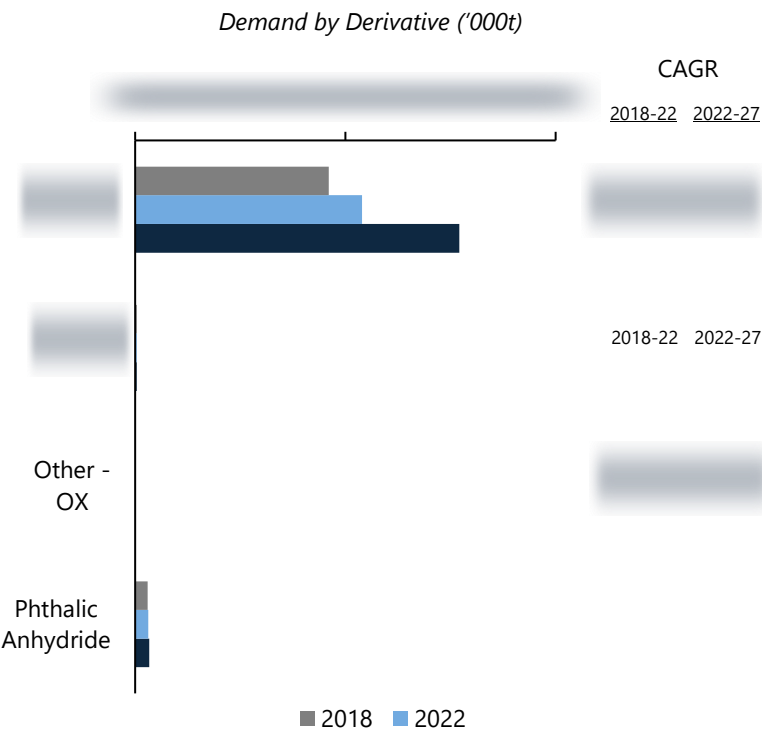
## New aromatics capacity coming up in [redacted] to [redacted] the margins

World paraxylene supply and demand



-Argus Consulting Services

World xylene isomers demand by derivative



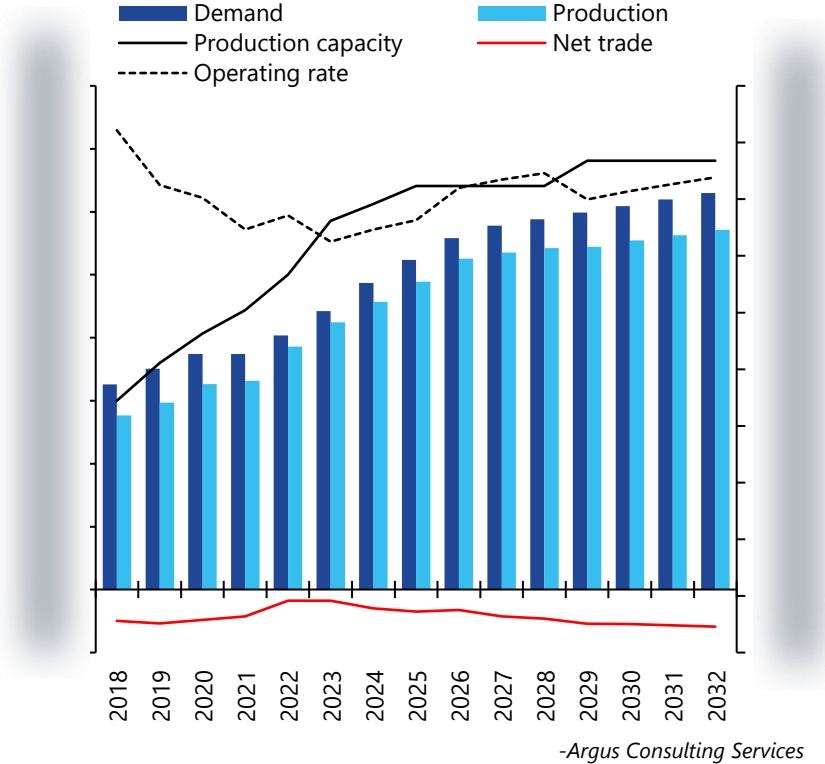
-Argus Consulting Services

- Production capacity would grow at [redacted] last year with operating rates registering a [redacted] 2024. The operating rates would [redacted] as the [redacted] to operate in full capacity. Central banks would start to lower reserve rates leading to increased demand due to lower cost of borrowing.
- Conventional extraction to remain the preferred way of PX production, accounting for [redacted] of total production and [redacted] of total capacity.
- PX supply in the [redacted] witnessed a [redacted] in 2024, this can be attributed to the abrupt halt of the [redacted] aromatics operations of its [redacted] lines located in [redacted].
- [redacted] city coming up in China is overwhelming other regional capacities. It has added pressure on [redacted], who have to contend with higher electricity and natural gas costs, leading to waning petrochemical competitiveness.

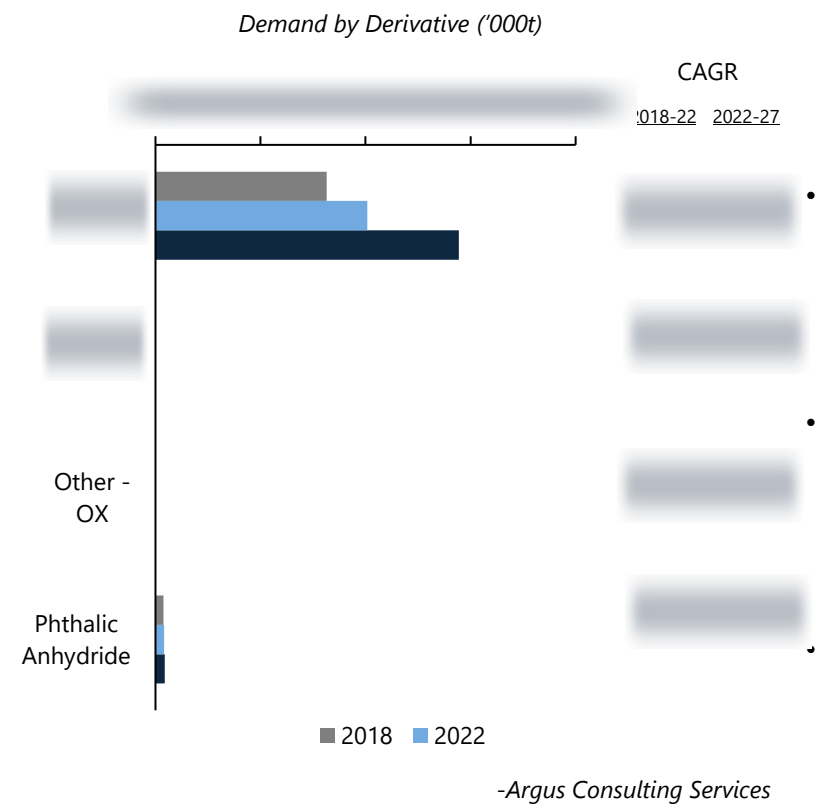
# Paraxylene global demand

## demand to continue to outpace supply for foreseeable future

Northeast Asia paraxylene supply and demand



Northeast Asia xylene isomers demand by derivative



Paraxylene demand CAGR was close to 2% mostly driven by demand in Asia. China's new feedstock, which will increase its need for naphtha, will force up run rates and require more naphtha. Given the expected growth of gasoline demand next year, refiners may divert into the petrochemicals sector.

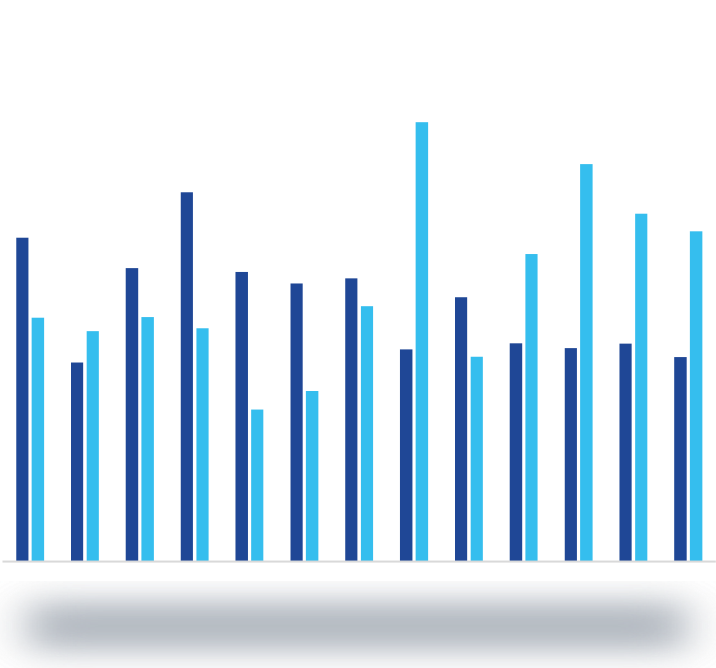
- PTA plants such as [redacted] have started to shutdown in [redacted], driven by relatively inexpensive imports. The [redacted] has increased prices across the region, contributing to increased production cost in the region and increased differential between [redacted] and other regions.
- PX demand in [redacted] is mostly driven by [redacted], supporting better margins compared to other regions globally. Following an increase in the US is receiving more PX each month – which is more competitively priced than PX produced using US feedstock MX.
- [redacted] saw a slight dip in [redacted] as DMT production in [redacted] dropped from [redacted] to [redacted]. In contrast, South Asia witnessed a increase as the region tried to keep up with consumption trends

# Paraxylyene trade

to increase to meet riding demand for PET production.

US PX Trade Flow, 000t

Exports Imports



Source: GTT

-Argus Consulting Services

US PX Trade Flow, 000t

	EXPORT	Q1	Q2	Q3	Q4
2016					
2017					
2018					
2019					
2020					
2021					
2022					
2023					
	IMPORT				
2016					
2017					
2018					
2019					
2020					
2021					
2022					
2023					

- have in the last couple of years driven by a to shift the products to the US. It is expected to rise higher if the comes leading to higher PET production.
- to increase once new is fully operational in On startup, the would emerge as the largest vertically integrated production site across the globe.
- The demand for polyethylene terephthalate (PET) in remains closely tied to weather patterns, particularly in with warmer weather configurations eliciting greater confidence in regional producers, and distributors.
- petrochemical sector's are hindering its overall competitiveness in the global market.
- China's would mean increased focus on consolidation or closure of less competitive units, additionally they would have to lower

Executive Summary

Paraxylene

Toluene

Orthoxylene

Mixed xylenes

Appendix

Data is available for download here:

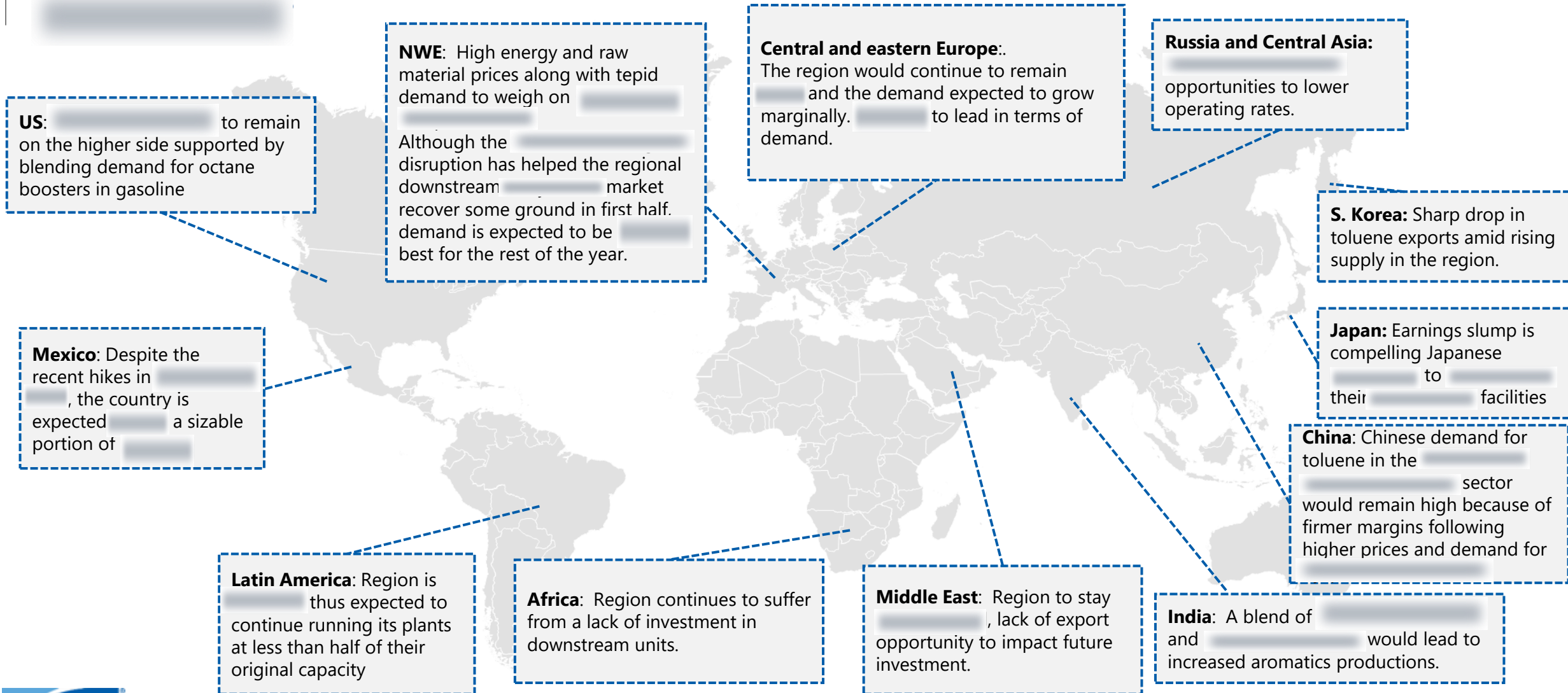
Balances

Company Balances

Capacities

# Toluene: What's changed?

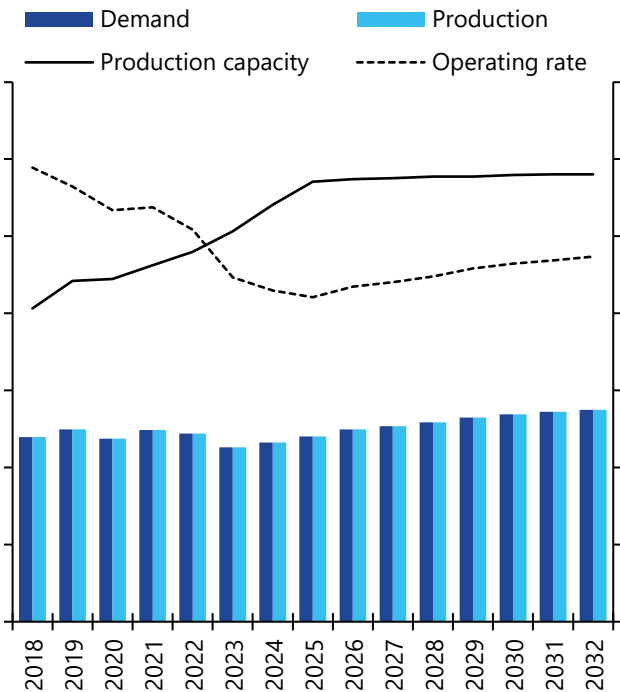
High energy and raw material prices along with tepid demand to weigh on



# Toluene global supply & demand

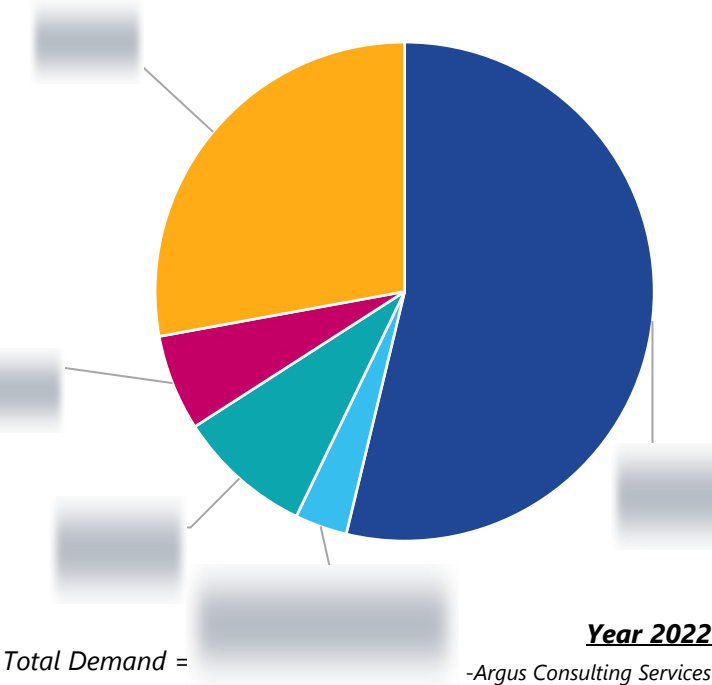
## Europe would continue to persist to be a major toluene supplier for African region

Global Toluene Summary



-Argus Consulting Services

Global Toluene Demand



- Northeast Asia emerged as a net toluene exporter back in 2021. This trend has gotten stronger as the net toluene trade has increased between 2019 and 2022. However, rising crude oil prices could put added pressure on regional net trade.
- In 2024, the refining sector embattled with high costs and heavy labor and regulatory expenses. In spite of this, the region would continue to persist to be a major toluene supplier for Africa.
- In 2024, subdued refinery and subsequent reformer operating rates in 2024 compared to the year prior continued to curtail domestic production of aromatics – International toluene trade in and out of Africa will rely on the regional refining complexes align to tepid growth in gasoline consumption.
- Europe catered to more than half of toluene demand in 2023. It is expected to maintain this ratio till 2032.
- Toluene usage as a solvent to remain near constant in North America while in Europe its use would witness a drop. Other derivatives such as toluene diisocyanate (TDI) could see modest growth supported by increasing demand.
- Latin America are facing a decline in demand as crude barrels have been taken out of the circulation from Europe as well as the US. In its place, the oil cut coming out of the US being used which has a lighter yield, which translates to those higher-octane chemicals being of greater importance to gasoline blenders.

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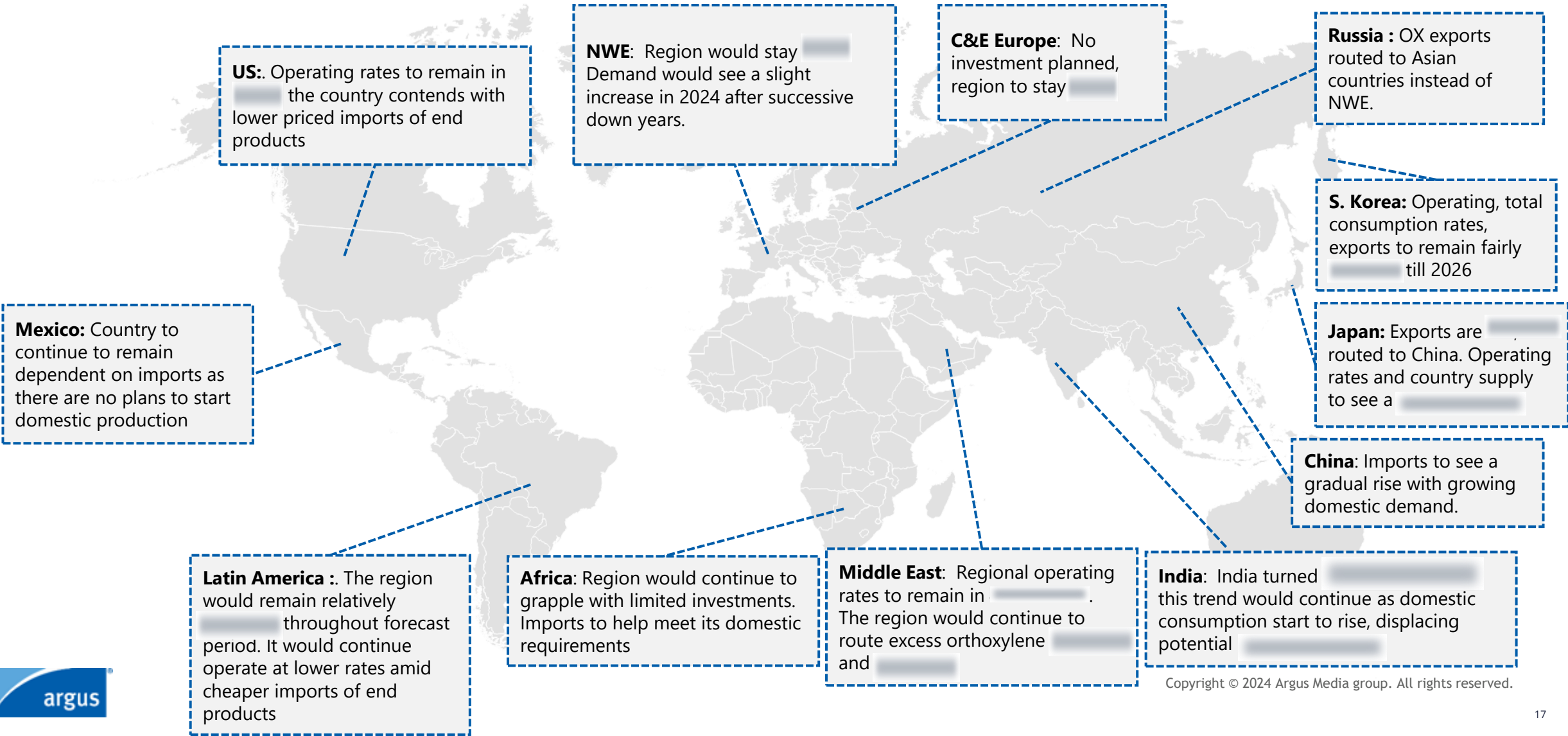
Balances

Company Balances

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# Orthoxylene: What's changed?

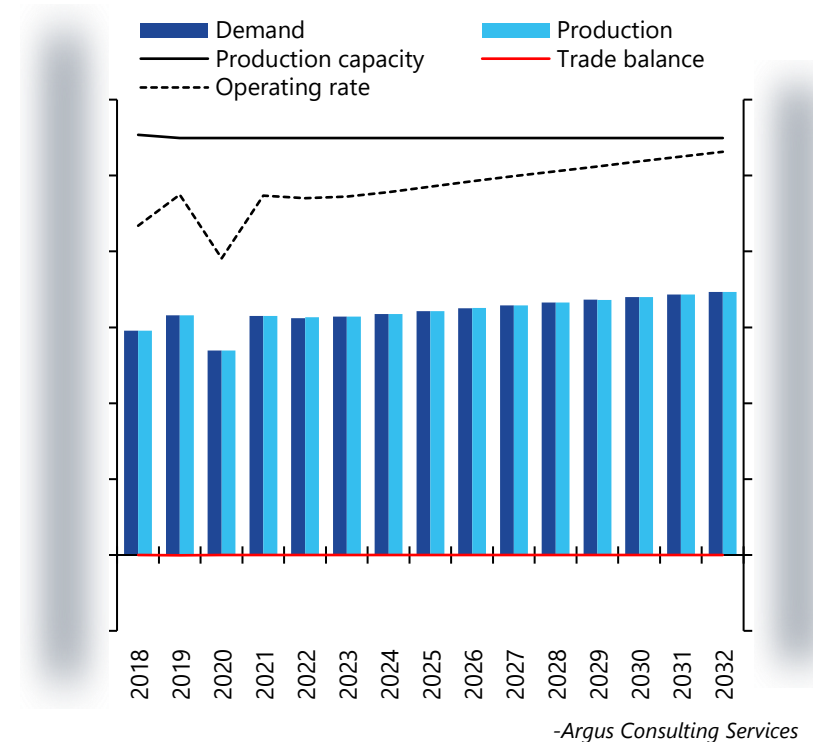
Economically viable arbitrage opportunities would continue to put pressure on the US producer operating rates



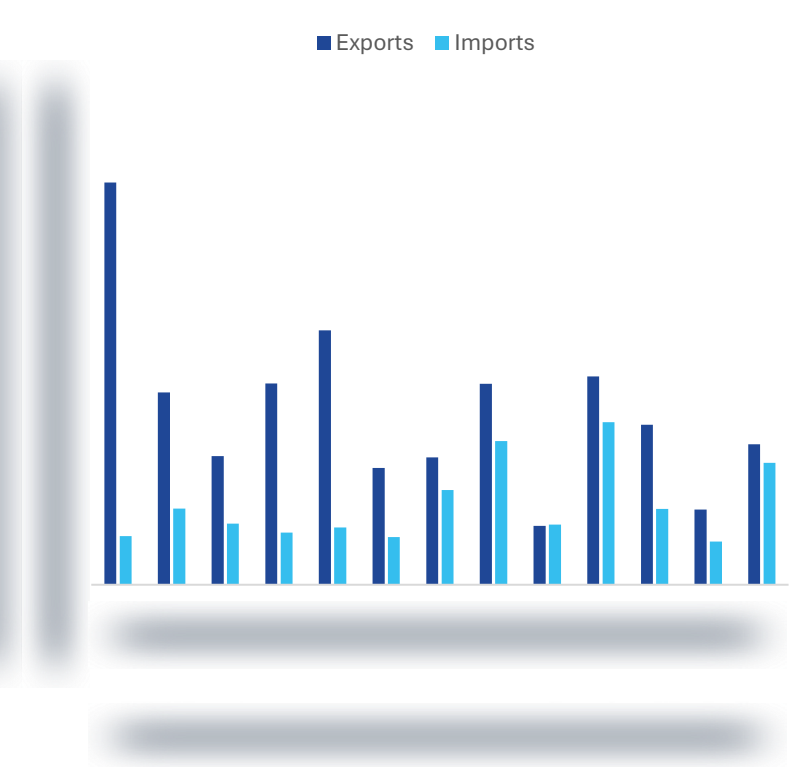
# Orthoxylene global demand

Rising OX prices lowered margins

Global Orthoxylene Summary



US OX Trade Flow, 000t



- OX demand would rise in sync with [redacted] in general. The growth of [redacted] sector, particularly in developing countries, would prop up the demand for orthoxylene as it is utilized in the paints and coatings development.
- A gradual easing of the US Federal Reserve's monetary policy starting late 2024 is expected to stimulate construction spending, resulting in a short-term boost to downstream phthalic anhydride demand
- A [redacted] has contributed to improved OX production in recent years amid lower PX prices in Asia.
- The US production is projected to consolidate over time as producers grapple with poor margins.
- India's [redacted] project includes [redacted] line and is scheduled for commissioning in the second half of financial year 2023-24.
- US OX producers need to meet the supply demand gap in Europe, following reduced availability in Asia, and it is difficult for Russian producers to be able to export to Europe.
- Some European producers struggled as margins are squeezed by increasing OX prices. Total western European PA imports rose to [redacted] earlier. But exports from the region more than halved on the year, falling to [redacted]. Exports to the US started to slow in the second half of 2023 as arbitrage opportunities diminished.

Executive Summary

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Toluene

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Mixed xylenes

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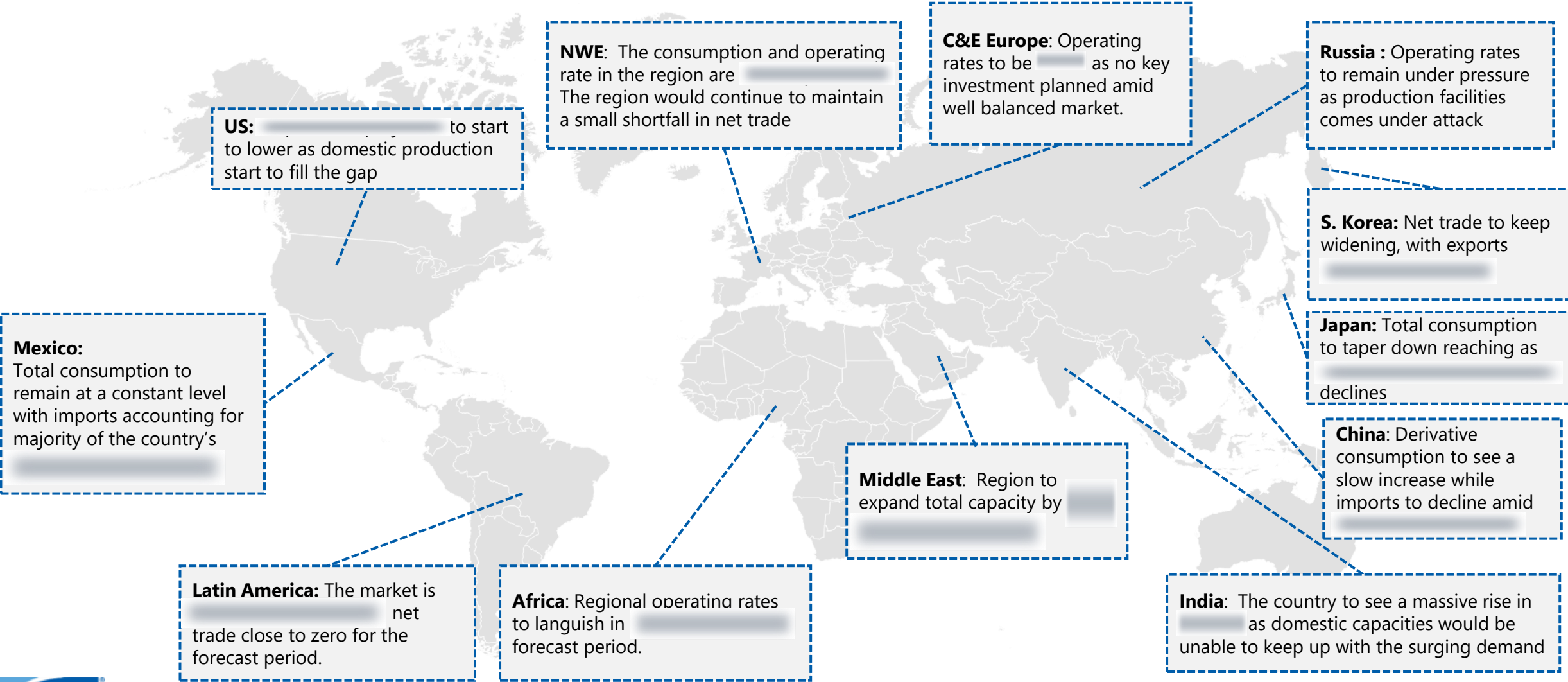
Balances

Company Balances

Capacities

# Mixed xylenes: What's changed?

Middle east to expand total capacity by [redacted]

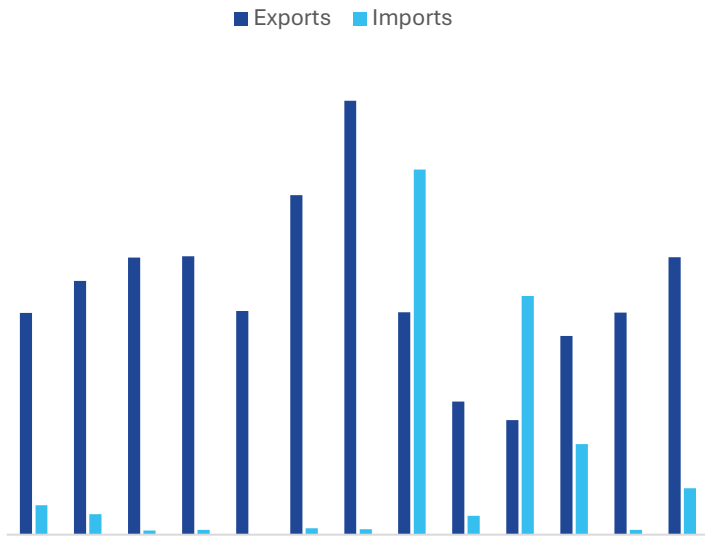
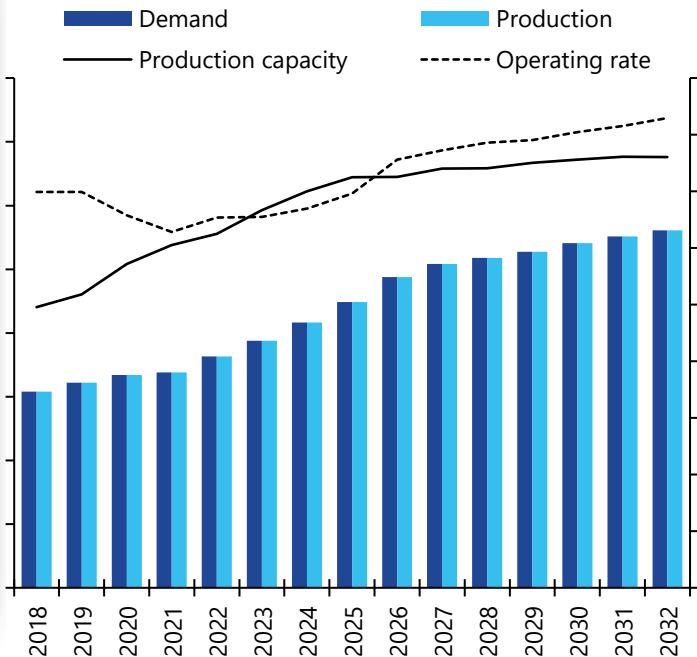


# Global mixed xylene supply & demand

to lead in terms of capacity addition, with the country looking to bridge the import gap.

Global Xylenes Summary

US mixed Xylene Trade Flow, 000t



- Global xylenes production in 2023 was estimated at 10 mn t with global nameplate capacity estimated at 12 mn t during the same year.
- More than 80% of xylenes globally came from refineries via extraction from reformat, 10% acted from co-product pygas at ethylene steam crackers. The remainder of xylenes produced comes from coal and xylenes byproduct.
- China is contributing the most in terms of capacity addition, with notable xylenes capacity additions in the next five years as it looks to lower its xylenes trade deficit.
- US imports in first quarter of this year is same as last year, However, US imports of MX declined sharply in 2023. The decline of MX imports can be explained in part due to the PX length globally, with little need for feed stock MX into PX production.
- Premium component blend value has supported the demand for gasoline blending, favoring imports of mixed xylene from the global market.
- The largest xylene consuming segment is to produce paraxylene. The paraxylene segment accounts for more than 50% of xylene demand and this demand share is expected to marginally increase in the next 5 to 10 years.

# We hope you found this sample report for Toluene and Xylenes Analytics valuable.

The Argus Toluene and Xylenes Analytics service is for anyone engaged in the toluene and xylenes market and seeking insight into the fundamentals driving key trends, including global supply, demand growth, trade, operating rates, etc.

If you want to learn more about becoming an Argus subscriber and receiving full PDF reports complete with accompanying Excel data files twice a year, click below:

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# Appendix: T/X Analytics Methodology

## Period presented

The annual period for this study is the historical years 2018 through 2022, and forecast data for 2023 through 2032, inclusive.

## Analysis and forecasting

The Analytics service contains detailed information such as capacities, production, demand and trade for most producing and consuming countries in the world. Demand forecasts are based on relationships to derivative and end-use consumption trends and expected country-by-country economic growth projections. Argus uses data, market opinions and views on market trends to develop the medium-term supply and demand and corresponding price and margin forecasts. When appropriate, Argus makes adjustments to published data, for example trade data reported by countries or government-reported statistics. Although data gathering is essential to understanding the ethylene market's history and potential future trends, Argus believes the interpretation of this data is the most valuable part of this analysis.

## Weights, currencies and percentages

Unless explicitly stated, all weights are given in metric tonnes and all references to dollars are to US dollars. Currency conversions have been made either at a current or relevant historical exchange rate, as required by the context. Numbers may be rounded. This means that table totals may differ from the sum of the individual figures, and percentages may sometimes appear not to total exactly 100pc.

## Your feedback is welcome

Argus thanks our valuable clients and contacts for sharing opinions and expertise during the compilation process. Data verification is the cornerstone of the quality of the analysis, and the input received from global market participants is critical to arriving at logical and realistic conclusions. It is important that this product meets client's expectations, and we encourage feedback to ensure continuous improvement. If additional company-specific or more detailed long-term analysis is desired regarding ethylene or other petrochemicals, please contact the Argus team.

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