

Feedstocks & Petrochemicals India in a Global Context

ICIS Consulting

March 2021

A presentation at India Chem 2021, “India: Global Manufacturing Hub for Chemicals and Petrochemicals”

Today's Agenda

Global Trends in Oil Demand

The Energy Transition and the growing role of petrochemical Feedstocks

Global Refining Capacity

An growing excess is materializing

India Dimensions

The Role of Domestic Refining in supporting petrochemical investments

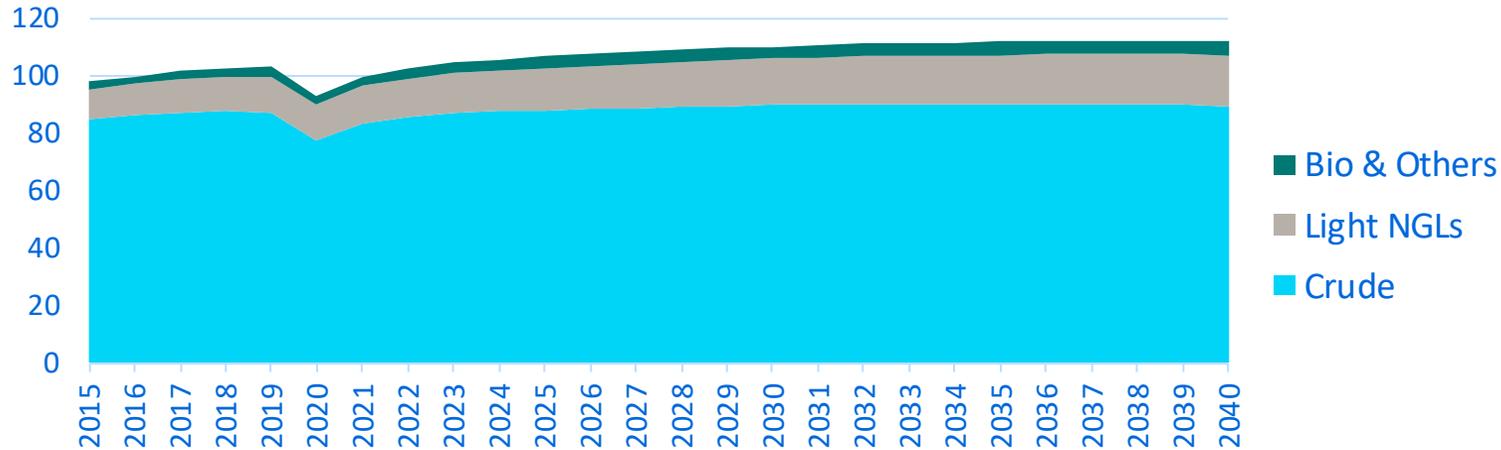
Q&A and Conclusion



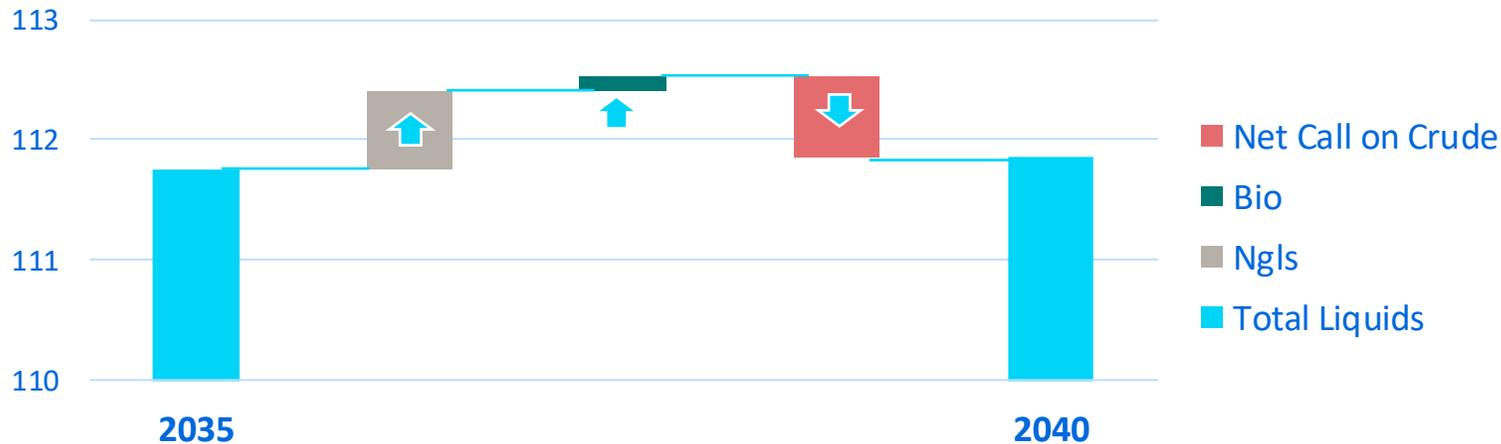


Crude Oil Requirements will peak before Oil Demand

Global Oil Demand, Million b/d



Global Oil Demand: Post 2035 increments, Million b/d



2.5Mb/d

Crude Oil net demand increase from 2019 levels, once other liquids are excluded

2035

Global Oil Refining input requirements for Crude Oil start dwindling

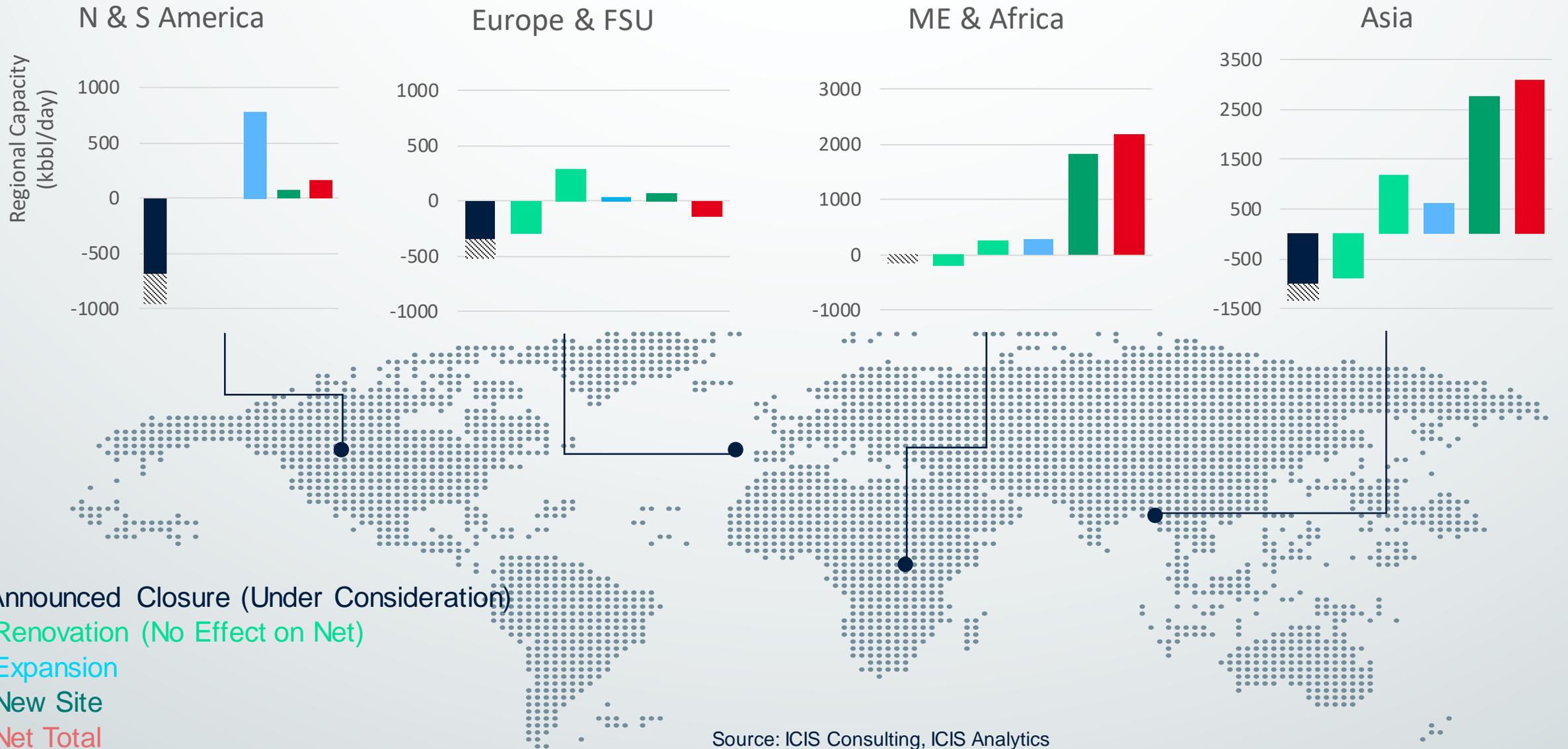
Global Refining Capacity Grows Despite The Energy Transition and Coronavirus

Refining capacity is expected to grow 4.5 Mbbbl/day by 2025, despite the announcement of almost 2 Mbbbl/day closures since 2020. This is unsupported by demand and further closures are expected

ICIS Supply and Demand Database



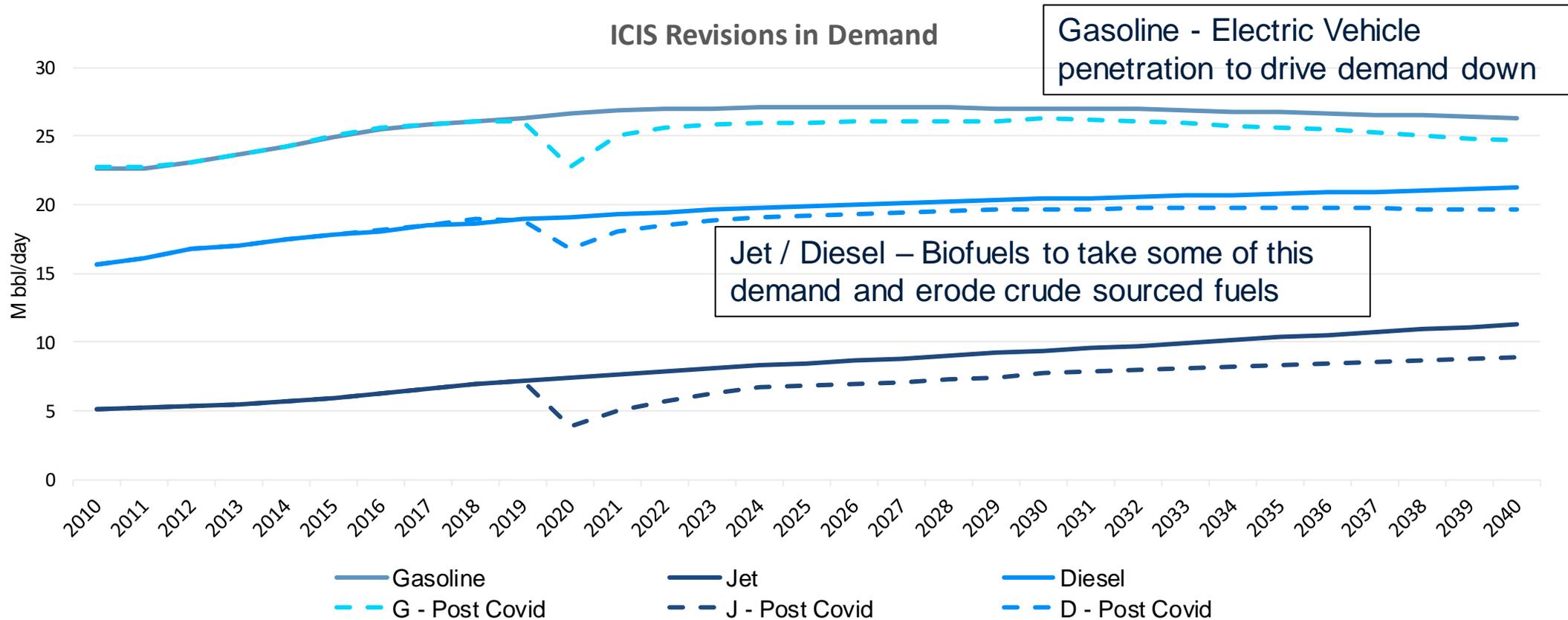
Refinery Capacity Evolution to 2025





COVID-19 has not only affected the short term demand but will impact the long term too

A combination of behavioural change and stimulus packages will help drive the energy transition.



Petrochemicals represent stronger demand growth

The pace of oil product growth in Asia offsets the loss of demand in NAM/Europe, resulting in a net flat position. Incremental growth in petrochemicals add the only growth to the total demand.

ICIS Supply and Demand Database

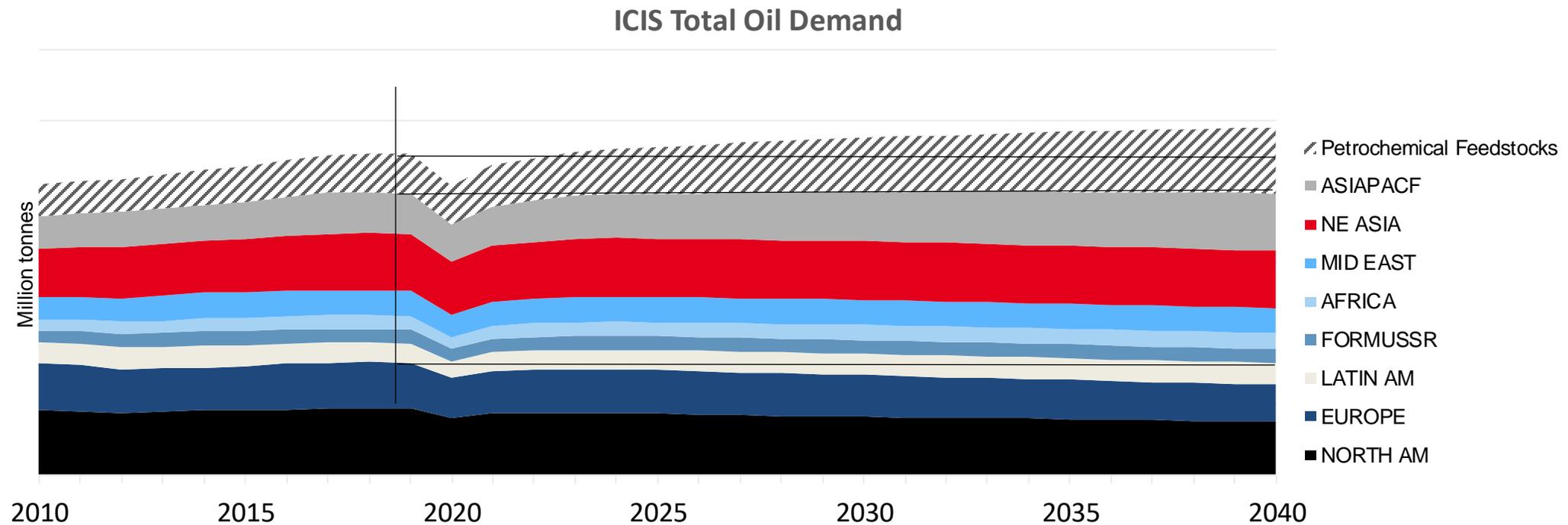




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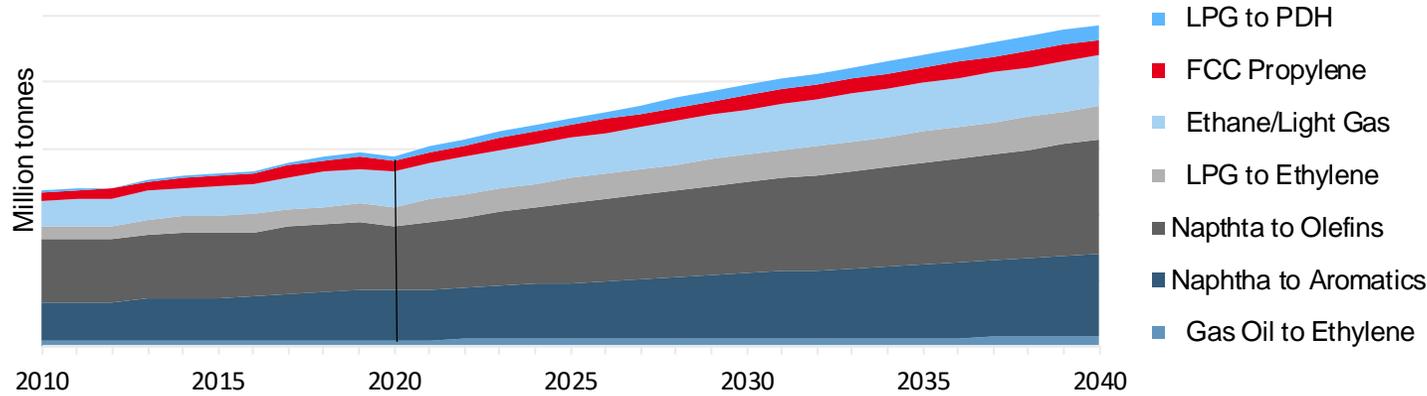
Whilst mature markets are declining, Asia & Pacific, with India at centre stage, will drive most of longer term demand increase



Global Petrochemicals & Feedstocks Growth

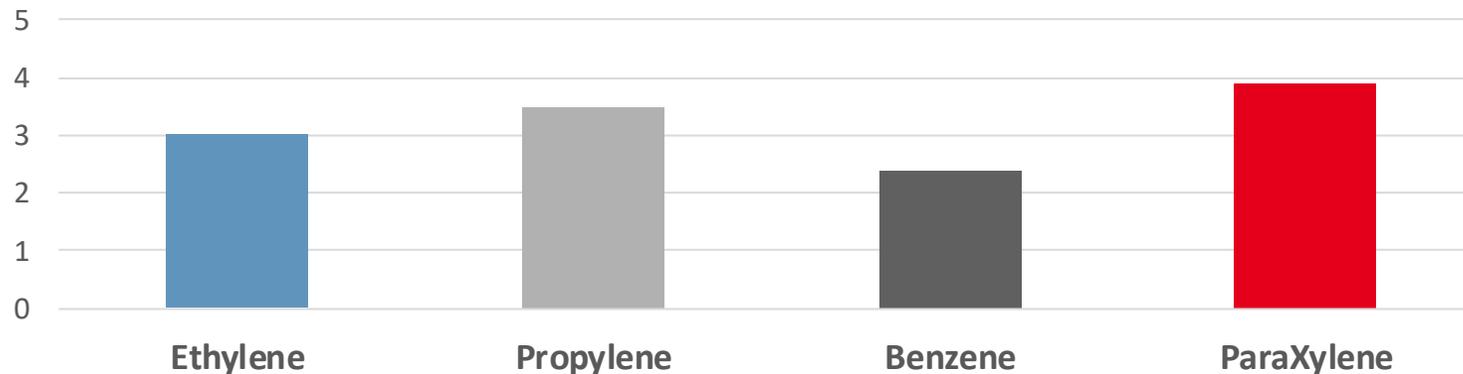


ICIS Petrochemical Feedstock Demand



An across the board increase results in a 66% increase from 2019 levels...

Annual Average Growth %, 2021-2030



Ethylene demand in the long term will be driven primarily by polymers-LLDPE, HDPE, PVC (via EDC-VCM) and Polyester (via Ethylene glycols). Propylene demand in the long term will be driven by PP contributing to over 75%. Other fast-growing derivatives are Polyols, EPDM and Acrylonitrile.

Paraxylene demand is driven by the polymer polyester, textile industry is expected to drive the demand into the future.

Benzene is expected to be the slowest growing building block.

Integrated Feedstocks

New petrochemical additions are increasingly integrated with feedstock source

Ample Hydrocarbons Availability for Petrochemicals...



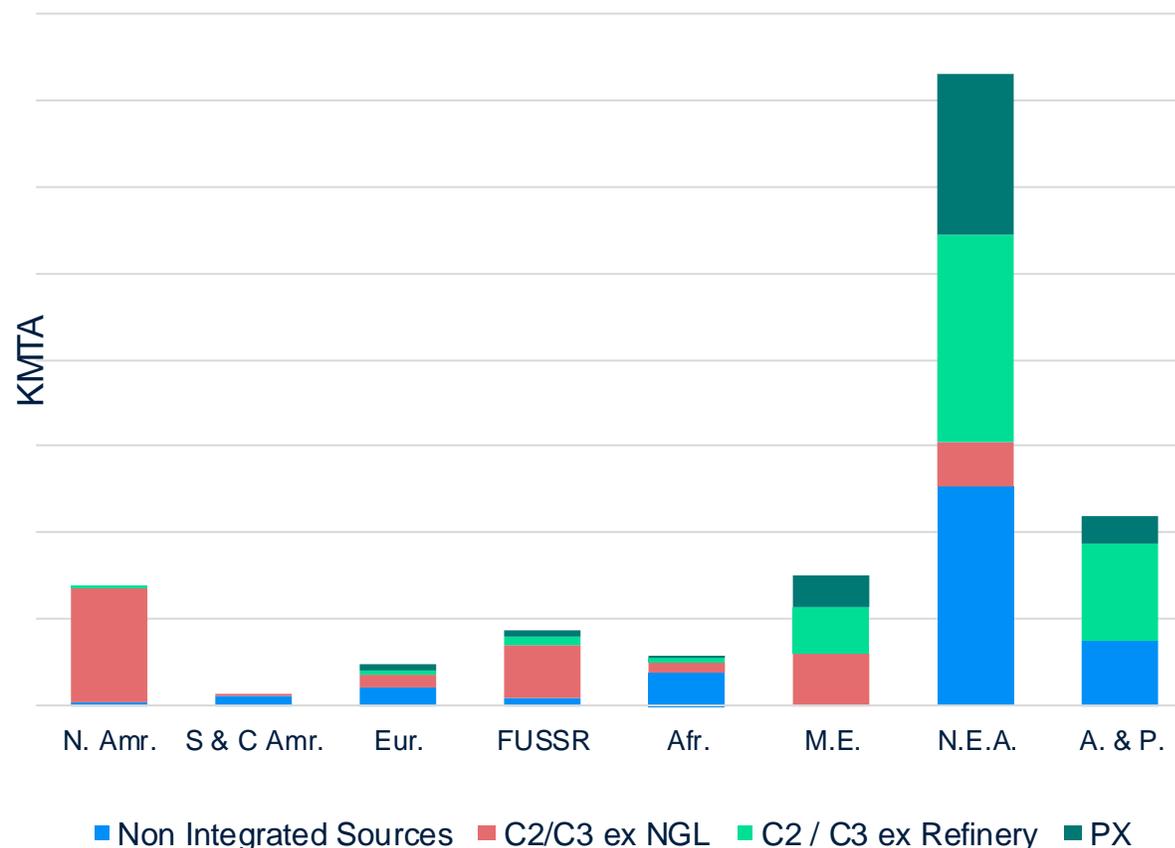
Petrochemicals are still a **growth area**, despite the downside risk of recycling, and provide some alternative for the crude sourced markets being eroded.

75% of the **feedstock** to **new petrochemicals projects** are **integrated** with the feedstock source (either refinery or NGL field). The majority of the remaining standalone units are naphtha crackers in Asia.

A refiner can't just look to switch from transportation fuels to petrochemical feedstocks as a growth market, because the feedstock for $\frac{3}{4}$ of new capacity is already tied up. A refiner needs to directly participate to take advantage of petrochemicals relative growth.

The Energy Transition is also pushing refiners towards more renewables...

Refiner Involvement in New Petrochemical Capacity Additions



India Petrochemical Feedstocks Picture: A Scenario Maximizing Integrated Ethylene & Propylene



Domestic Refineries will have great opportunities to release feedstocks for integrated Olefins production, in alternative to a Higher Import Scenario



Source: ICIS Consulting, ICIS Analytics

Conclusions



- Globally, oil products demand is flat at best, whilst petrochemical feedstock demand is the only growth driver in oil demand in the long term. By contrast, India still has the potential for a more prolonged fuel demand, on top of fast growing petrochemical requirements.
- The Oil refining business is turning increasingly competitive. Refining capacity is shifting into Asia / ME where there are advantages, driving closures in other parts of the world. New and existing refineries in India will also need to increase integrated petrochemical production.
- Focusing on Olefins, the opportunity to leverage on domestic Refineries does not exclude options for accessing incremental light NGLs when competitively priced. A competitive positioning will secure feedstocks to domestic petrochemicals, and open opportunities for selected incremental exports.

Get in touch with us...



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