



REPORTS & SERVICES OFFERINGS **2023**

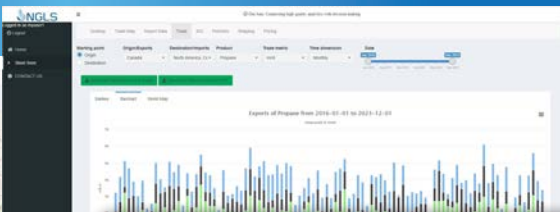
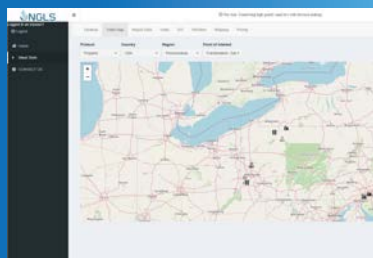
PROPANE BUTANE NGLs PETCHEM FEEDSTOCKS

QUARTERLY, MONTHLY AND ANNUAL REPORTS
PRESENTATIONS & WORKSHOPS
ONLINE DATABASE
CONSULTANCY

NGLStrategy Client Portal

KEY TOPICS

- Supply/demand
- Shipping/Freight
- Seaborne Trade
- Pricing
- Petchem Feedstocks



NEW Interactive Portal
Launched in April 22

Global LPG Outlooks (Propane & Butane)

SHORT TERM



Supply/Demand 12-month Outlook
Quarterly Service



**Supply/Demand Overview with
Two-month Outlook**
Monthly Service

Launched in **January 22**



Access to NGLStrategy Client Portal

LONG TERM



Supply/Demand Outlook to 2035
Quarterly Service



Seaborne Trade Outlook to 2035
Quarterly Service



Access to NGLStrategy Client Portal

NGL And Petchem Outlooks

SHORT TERM



US NGL Market 12-month Outlook
Quarterly Service

LONG TERM



US NGL Market Outlook to 2026
Quarterly Service



Petchem Gas Trade to 2035
Annual Service



**Global Seaborne Ethane Trade
to 2035**
Annual Service

Client Services

- Consulting
- Training / Workshops
- Commercial Advisory
- Market Analytics



Bundled Services

Combine two or more
services to receive retainer
status and access to
our consultants.



SHORT TERM

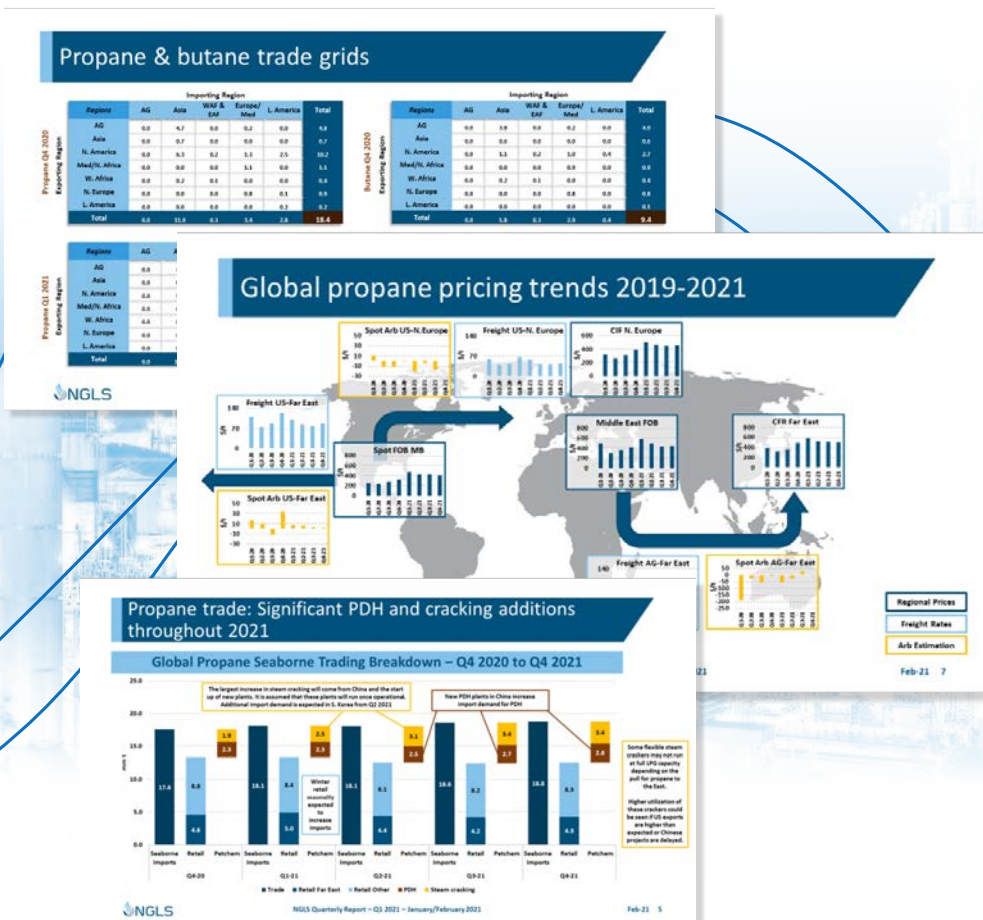
Global Propane and Butane 12-month Supply-Demand Outlook

Quarterly Analysis

Find out on a quarterly basis what the next 9 to 12 months hold for propane and butane markets and understand the changes observed in the market to help shape future decisions.

Key topics included in the report:

- Last Quarter Market Review
- Propane & Butane Trade Patterns and Quarterly Forecast
- Global Propane & Butane Supply/Demand Topics, Overview and Outlook
- Propane & Butane Price Trends and Forecasts
- Petrochemical Feedstock Analysis and Outlook for Short-term Consumption per Region
- Shipping Analysis & Market Forecast Including Freight Rate Outlook
- Prospects Key Current Topics Analysis and Perspective



INCLUDES:

- Access to our consultants for questions
- Detailed data tables in excel file
- Two reports of over 60 slides combined in executive style
- This service can be part of our bundled options which provide retainer status and cost optimization

SHORT TERM

Launched
Jan22

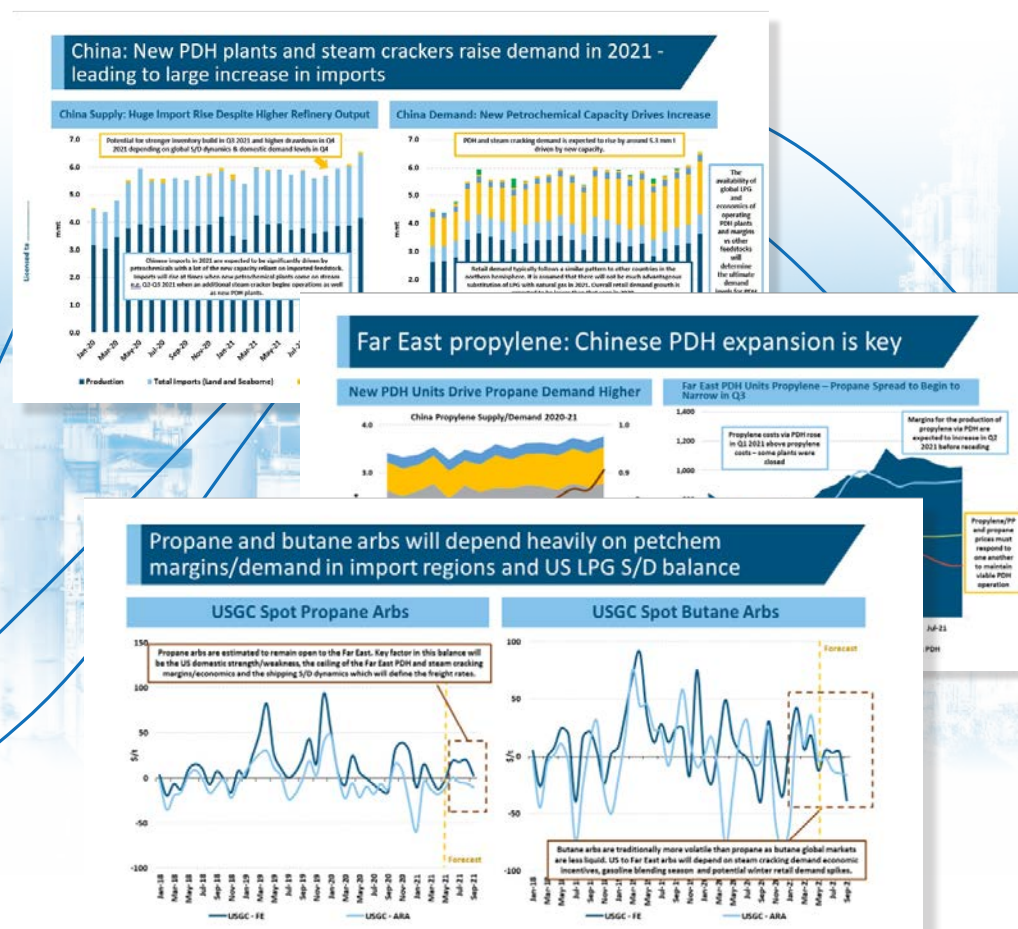
Global Short-term Supply-Demand Overview Outlook

Monthly Analysis

Overview of current market developments and discover on a monthly basis what the next 2-3 months hold for propane and butane markets and understand the changes observed in the market to help shape future decisions.

Key topics included in the report:

- Last month Market Review
- Propane & Butane Trade Patterns and Monthly Forecast
- Global Propane & Butane Supply/Demand Topics, Overview and Outlook
- Propane & Butane Price Trends and Forecasts
- Petrochemical Feedstock Analysis and Outlook
- Shipping Analysis & Market Forecast Including Freight Rate Outlook
- Market Insights and Analytics



INCLUDES:

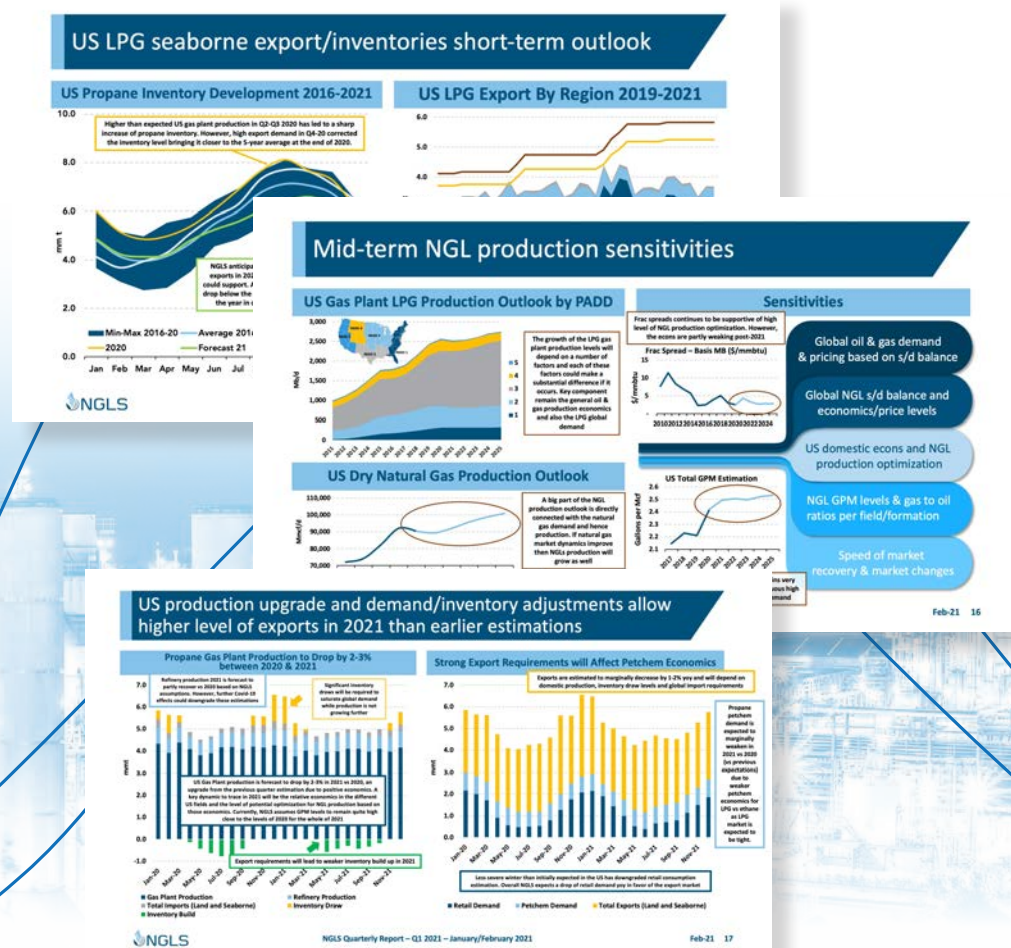
- Access to our consultants for questions
- Detailed data tables in excel file
- An executive style report
- This service can be part of our bundled options which provide retainer status and cost optimization

SHORT/MEDIUM

US NGL Market Outlook Quarterly Analysis

Key topics included in the report:

- Oil & Gas Fundamentals
- US NGL Production Outlook & Analysis by PADD Including Key Sensitivities
- Propane & Butane Price Trends and Forecasts
- Domestic Demand Breakdown Including Both Retail & Petrochemical
- Supply/Demand on a Monthly Basis for the Short-Term and Annually to 2025
- Availability for Exports & Terminal Utilization
- Overview of Key Topics that can Affect Supply/Demand Balance



INCLUDES:

- Access to our consultants for questions
- Detailed data tables in excel file
- An executive style report
- Provides monthly data for next 9-12 months and annual data to 2025
- This service can be part of our bundled options which provide retainer status and cost optimization

LONG TERM

Global Propane and Butane Markets Supply / Demand Outlook to 2035

Quarterly Analysis

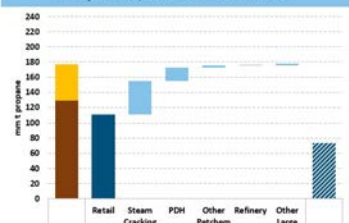
Key topics included in the report:

- Breakdown by Region and by Country of Propane/Butane Supply and Demand by Individual Sectors
- Global Propane & Butane Supply/Demand Topics, Overview and Outlook
- Propane & Butane Price Trends and Forecasts
- Petrochemical Feedstock Analysis and Outlook for Consumption per Region to 2035
- VLGC Supply/Demand Balance Outlook
- Key Current Topics Analysis and Perspective

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	MALAYSIA																			
	Propane figures in mm t																			
			Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Supply	Production	Gas Plant		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx			
		Refinery		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx		
		Total Production		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Land		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx		
		Sea		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx		
Imports																				
	Change																			
Inventory																				
	Total Supply			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Demand	Retail	Residential/ Commercial		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx			
		Industrial/ Commercial		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx			
		Autogas		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx			
		Total Retail		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
		Large Bulk		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx		
	Steam Cracking		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx			
	Petchem		xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx			
															</					

Propane petchem demand increases by 10% to reach over 45% of total demand by 2030

Propane S/D Breakdown 2021

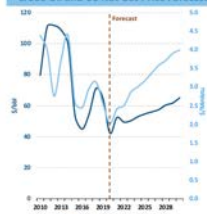


Propane S/D Breakdown 2030



LPG price forecast basis: crude & gas prices

Crude Oil and US Nat Gas Price Forecast



- Brent crude oil prices are forecast to average \$113.5/bbl in 2021, \$109.11/bbl in 2022 and then balance around the level of \$105.5/bbl towards 2023. Beyond 2023, NGLS projects a gradual increase of crude prices to reach the level of mid \$107/MMBtu by 2030.
- US Henry Hub natural gas prices are forecast to average around \$2.42/MMBtu in 2021 and then swing upwards, surpassing the level of \$3.0/MMBtu by 2025. NGLS expects, as in the case of crude oil, a gradual increase through 2025-2028, reaching \$4/MMBtu by 2030.
- Key assumptions:
 - 2020-21: Stronger price than previous forecast, at the 2020 level, as a result of the combination of OPEC crude oil cuts, better demand expectations and the positive effects of the Covid-19 vaccination efforts globally. However, a continuous spread of the coronavirus cases elsewhere is a risk that could dampen the forecast.
 - 2022-23: The period is expected to deal with the aftermath of the coronavirus effects and show a gradual return to normalcy. In NGLS's forecast, we assume a slow demand recovery path, a gradual drop of the crude oil cuts, primarily in the Middle East, but also in the rest of the world, and overall an increased volatility, based on the replacement of the market. Price spread between Brent and Henry Hub is expected to be wider than in the previous period of the market.
 - 2024-30: Crude oil prices are estimated to bounce back during this period, as the market has dealt with the effects of coronavirus and further volumes are required from higher cost producing areas. Based on NGLS's projections, Brent prices should reach the level of \$105.5/bbl in constant dollars in order to incorporate further production developments.
 - 2024-25: Continued growth in demand for natural gas prices in 2021, with weak demand bringing Henry Hub prices down to levels of around the \$2/MMBtu level. Market recovery and a cold winter in 2021 are estimated to reduce Henry Hub prices to \$2.42/MMBtu in 2021-22.
 - 2022-23: The aftermath of coronavirus is expected to be felt in this period as well, with natural gas prices balancing between \$2.5/MMBtu, due to gradually improving demand and economics.
 - 2024-30: The period beyond 2023 is estimated to be a robust growth period for natural gas demand and the requirement for new higher cost sources of supply will lead the price to levels close to \$3.5/MMBtu.

INCLUDES:

- Access to our consultants for questions
- Detailed data breakdown for over 70 key countries and regions in excel file
- A report of over 50 slides in executive style
- This service can be part of our bundled options which provide retainer status and cost optimization

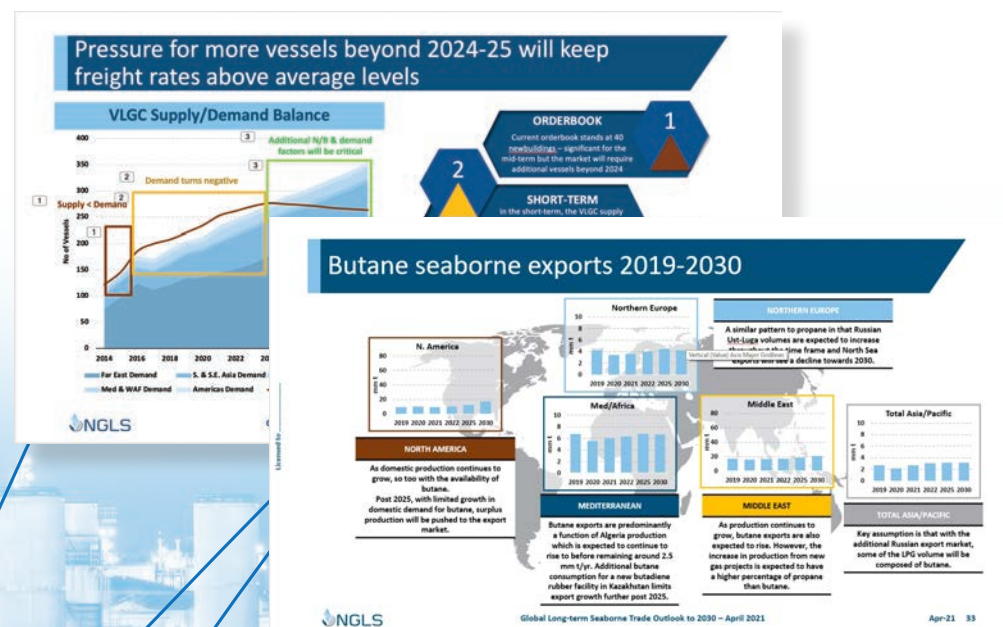
LONG TERM

Global Propane and Butane Seaborne Trade Outlook to 2035

Quarterly Analysis

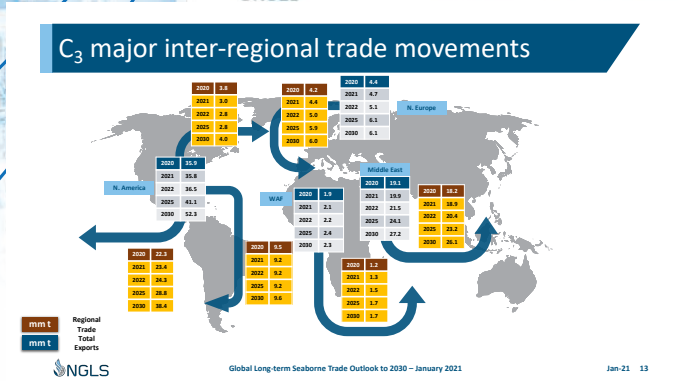
Key topics included in the report:

- Propane & Butane Trade Patterns to 2035
- Propane & Butane Trade Patterns and Quarterly Forecast
- Global Propane & Butane Supply/Demand Topics, Overview and Outlook
- Propane & Butane Price Trends and Forecasts
- Outlook for Propane and Butane Trade-Flows by Major Exporting and Importing Regions, to 2035
- VLGC Shipping Analysis & Market Forecast Including Freight Rate Outlook



INCLUDES:

- Access to our consultants for questions
- Breakdown of propane and butane seaborne trade in excel file by major countries.
- A report of over 30 slides in executive style
- This service can be part of our bundled options which provide retainer status and cost optimization



Petchem Gas Trade to 2035

Annual Study

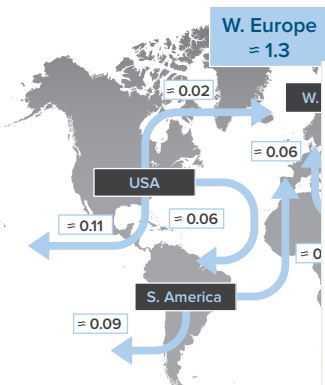
Find out what future petchem gas trade will look like and unravel the possibilities thrown up by new investment in North America and Asia to help shape future decisions

Key topics included in the report:

- Ethylene, Propylene and Butadiene Trade Patterns and Forecast to 2035
- Impact of Feedstocks on Ethylene and Propylene Costs
- Gas Shipping Supply/Demand Analysis and Forecast to 2035
- Infrastructure Analysis & Investment Potential
- Current Market Analysis and Perspective on how Ethylene, Propylene & Butadiene Markets are Shifting

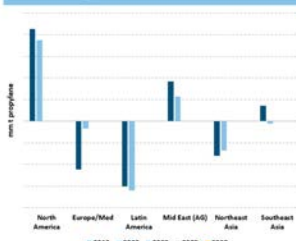
Global Ethylene Seaborne Trade Flows 2019

TOTAL ETHYLENE SEABORNE TRADE 2019: =5.7 MM T

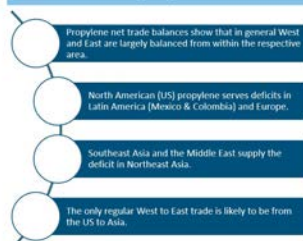


Propylene trade

Regional Trade Net Balances



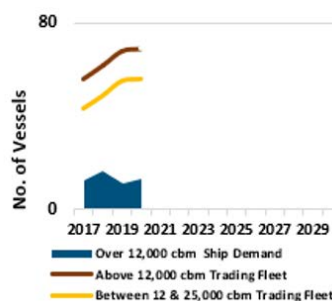
China the Key Player For Growth



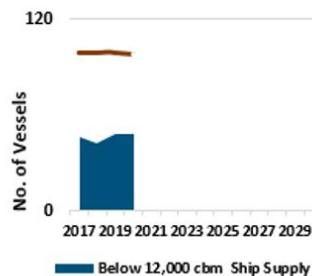
INCLUDES:

- Access to our consultants for questions
- Detailed trade grids for each product
- A detailed report of over 100 pages broken down by product
- This service can be part of our bundled options which provide retainer status and cost optimization

Ethylene seaborne inter-regional supply/demand balance 2017-2030



Ethylene seaborne intra-regional supply/demand balance 2017-2030



LONG TERM

Report
Q3-23
Expected

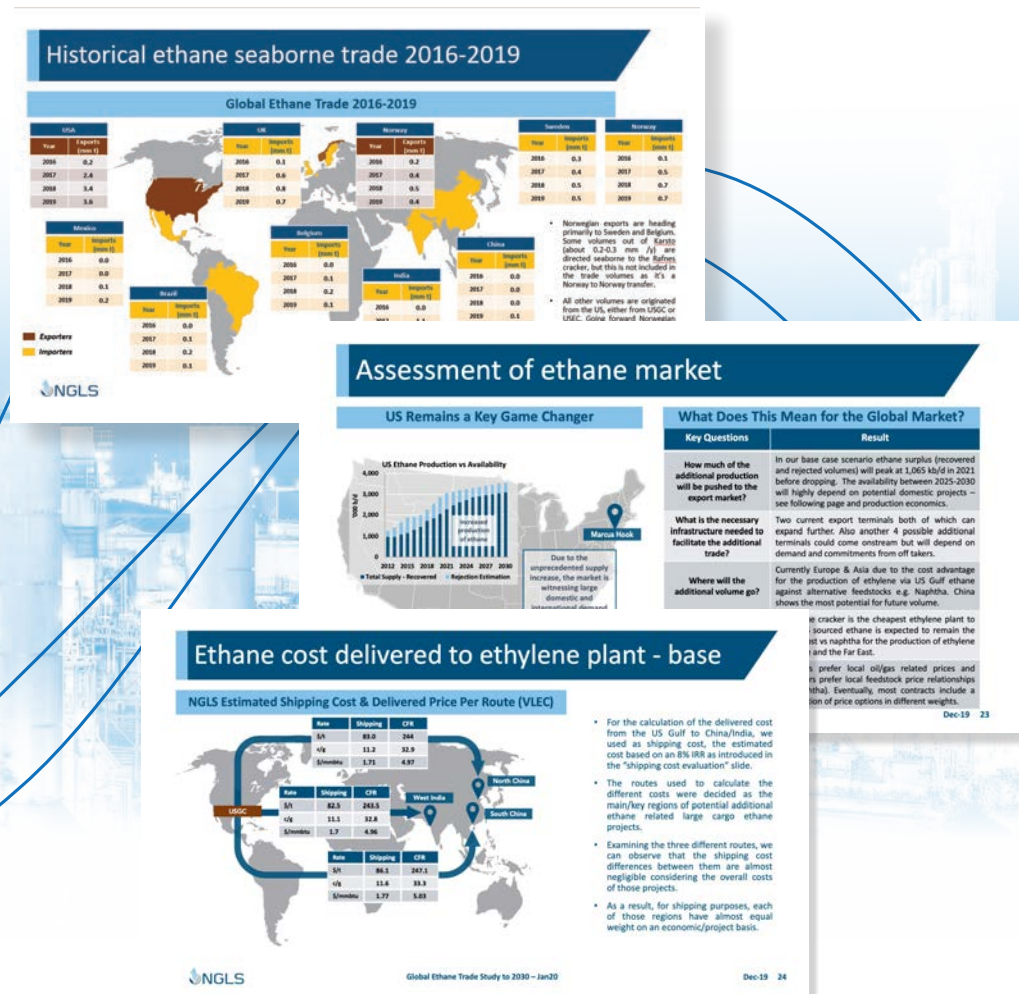
Global Seaborne Ethane Trade to 2035

Annual Study

Explore the N. America domestic ethane market and potential new projects internationally to understand how global seaborne trade can be affected and shape future decisions.

Key topics included in the report:

- US Ethane Supply and Forecast to 2035 Including Scenarios
- Domestic Ethane Consumption and Outlook for Seaborne Availability
- Infrastructure Analysis and Expectations for Future Developments
- Ethane Price Trends and Forecasts
- Analysis & Forecast for Key Potential Importers of US Ethane
- Shipping Analysis & Market Forecast
- Global Delivered Ethane Economics/Cost Comparison with Regional Competing Feedstock



INCLUDES:

- Access to our consultants for questions
- Detailed data tables in excel file
- An executive style report
- This service can be part of our bundled options which provide retainer status and cost optimization

LONG/SHORT TERM

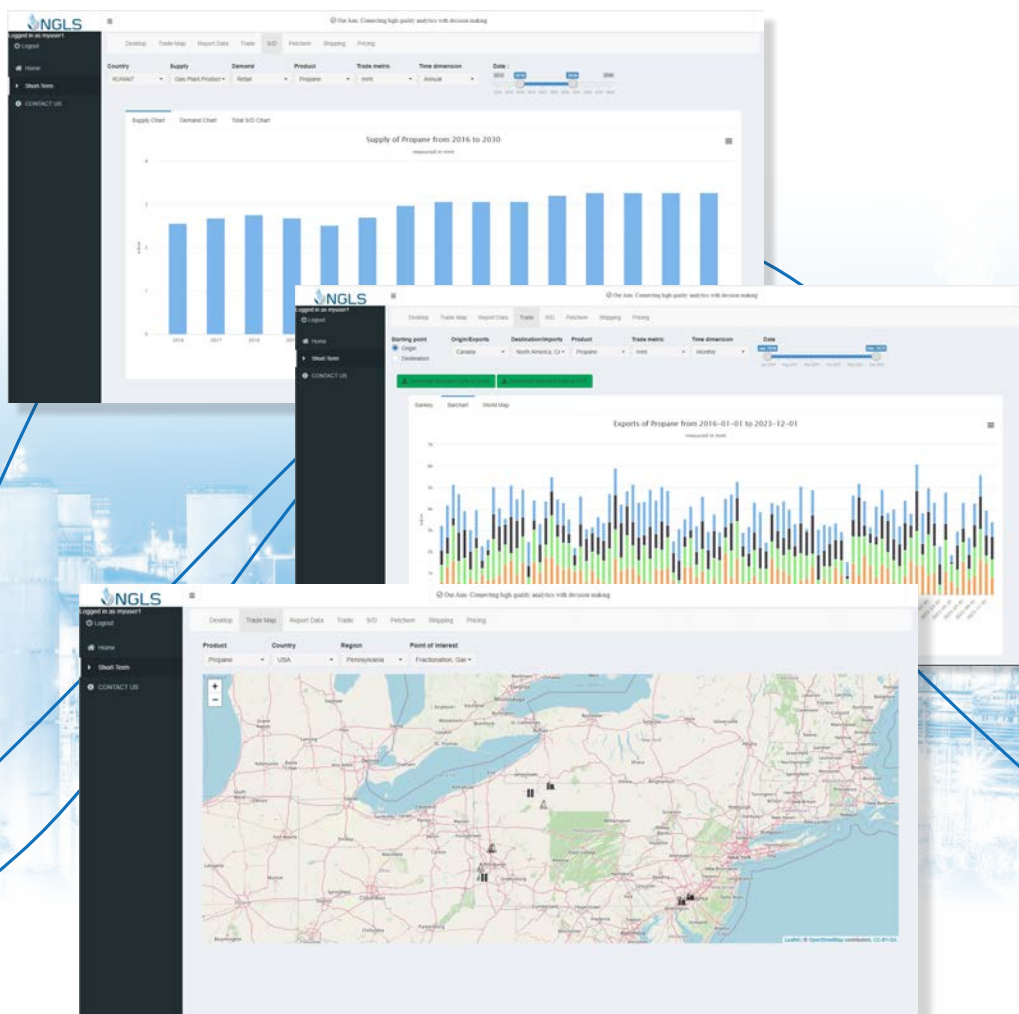
Launched
April 22

Short & Long Term Online Services

NGLSTRATEGY CLIENT PORTAL

Key topics included in the NGLStrategy Client Portal:

- Client Customized Desktop
- Infrastructure Map including key LPG related infrastructure assets
- Download current and historical NGLS reports and files
- Global Trade historical and forecast data
- Global Supply/Demand historical and forecast data
- Global Petrochemical historical and forecast data
- Global Shipping historical and forecast data
- Global Pricing historical and forecast data



INCLUDES:

- Access to the LPG short and long-term services
- Options to download NGLS current and historical reports
- Availability to download all data in excel or pdf format
- This service can be part of our bundled options which provide retainer status and cost optimization



P.O. Box 37209, Houston TX, USA 77237 | Tel: +1 281 436 9565 | info@nglstrategy.com | www.nglstrategy.com