Three Futures for U.S. Ethane

EAST DALEY ANALYTICS OUTLOOK

Scenario Planning from the Authority in NGL Intelligence

Ethane has been the backbone of U.S. NGL economics, a low-cost, abundant feedstock that underwrote billions in global petrochemical investment. But the past few months have shattered the assumption that American ethane is insulated from geopolitical risk.

When exports to China were abruptly restricted, it exposed a structural vulnerability: the world has no credible substitute for U.S. ethane at scale. In a market increasingly shaped by trade policy and shifting alliances, optionality and redundancy are no longer nice-to-haves; they are prerequisites.

The question is no longer whether ethane is exposed. The question is which path the market will build into, and how prepared you are to operate in that world.

Over the next decade, U.S. ethane will drive either a rebirth, a plateau, or a structural fracture in NGL economics. These are not short-term fluctuations. They are competing futures.

SCENARIO 1: The Demand Plateau

Global petrochemical investment slows. China accelerates diversification into mixed-feed and LPG crackers. Europe hedges supply risk. U.S. export infrastructure continues to expand but struggles to find utilization, creating chronic overcapacity and sustained margin compression. Ethane remains cheap, but its strategic role erodes.

Second-Order Effects:

- Overbuilt fractionation and pipeline assets dampen returns across the NGL chain
- Domestic steam crackers gain a feedstock cost advantage

Assumptions on Contracts:
Most international buyers maintain long-term contracts, often spanning a decade or more, but new agreements include wider volume tolerance bands and delivery flexibility. Even in oversupply, contract durations remain measured in years, not quarters.

Position For:
If the Demand Plateau emerges, prioritize flexible service models such as storage, blending, and LPG switching. Reassess ethane-centric exposure and lean into assets that can absorb and re-route surplus supply.

SCENARIO 2:
The Treading Water Cycle

Global demand resumes at a moderate pace. Chinese buyers return but insist on diversified sourcing strategies and contingency storage. Asia and Europe gradually expand ethane consumption. The market evolves into a semi-fungible system with more dynamic shipping patterns and infrastructure designed for optionality, while core contracts remain long-term.

Second-Order Effects:

- Regional price spreads emerge as VLECs serve multiple destinations
- Ethane retains a cost advantage but carries an embedded risk premium
- Midstream operators face more variable utilization rates across facilities

Assumptions on Contracts:
Most buyers anchor supply through long-term agreements, typically 10–20 years, with provisions for volume flexibility, multiple delivery points, and contingency clauses to manage geopolitical disruptions.

Position For:
In a Treading Water world, build optionality into commercial agreements. Favor infrastructure investments with multi-feed capability. Prepare for moderate growth and higher variability in loadings and flows.

SCENARIO 3:
The Expansion Cycle

Global demand accelerates. Asia, Europe, and aligned markets invest heavily in new ethane crackers. U.S. ethane is seen as the most competitively priced and geopolitically reliable feedstock. VLECs operate in multi-destination trade patterns. New uses, including power generation and hybrid fuels, absorb surplus volumes. Export terminals and pipelines run near capacity.

Second-Order Effects:

- Mont Belvieu tightens, supporting higher fractionation margins
- Ethane shipping evolves into a more liquid global market with broader trading networks
- U.S. midstream companies secure premium returns on infrastructure investments

Assumptions on Contracts:
Even in rapid expansion, buyers secure multi-decade contracts to underpin capital-intensive investments, with optionality clauses allowing for opportunistic swaps and volume adjustments.

Position For:
If the Expansion Cycle takes hold, treat every new ethane dock as a strategic asset. Secure long-term contracts early. Position for higher utilization and stronger pricing power as demand outpaces supply.

Strategic Implications

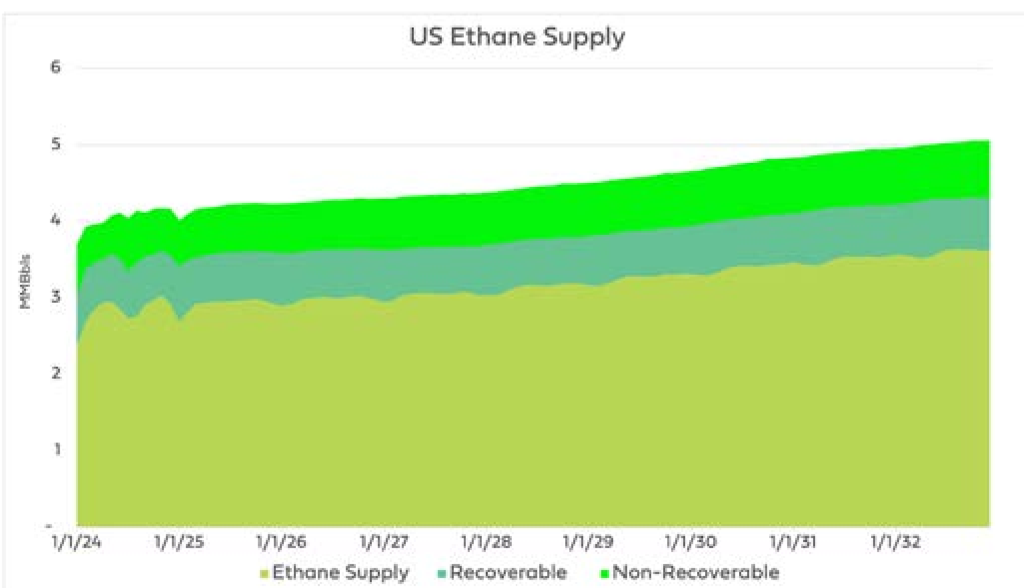
Ethane has crossed a threshold. Once treated as a stable byproduct, it now stands exposed to the crosscurrents of global trade, infrastructure imbalance, and long-cycle demand risk.

This shift demands more than adaptation; it requires redesign.

Midstream operators must rethink project structures around flexibility and redundancy. Petrochemical buyers must harden their feedstock strategies against geopolitical uncertainty. And investors must recalibrate risk models that once treated ethane infrastructure as insulated from global volatility.

The next era of ethane belongs to those who prepare for the unexpected and invest with conviction.

	Demand Plateau	Treading Water	Expansion Cycle
Demand	Low Growth	Balanced	High Growth
Supply	Oversupply	Flexible	Undersupply
Contracts	Long-term, optionality	Long-term, multiple delivery points	Multiple, core contracts remain long-term
Shipping Structure	Point to Point	Mixed	Fluid market, regional prices
US Existing Infrastructure	Underutilized	Mixed, variability	High utilization



East Daley Is the Authority on NGL Markets

No one understands U.S. ethane and NGL dynamics like East Daley Analytics.

We don't just model production—we map the infrastructure realities that move molecules and drive pricing, flow, and risk across the midstream value chain.

Where others offer forecasts, we deliver positioning intelligence: infrastructure-based insights that redefine how traders, investors, and operators make strategic decisions.

Why East Daley Sets the Standard

- **Infrastructure-First Modeling**
  Every projection is grounded in real-world terminals, pipelines, and contract flows—not assumptions.
- **Scenario Clarity**
  We simulate real-world constraints, trade disruptions, and pricing shocks—so you see the risk before it's priced.
- **Proven Accuracy**
  From anticipating 2024's gas volatility to mapping export-driven price lifts, our calls are trusted by the most sophisticated desks in the market.
- **Trusted by the Industry**
  When NGL markets shift, investors and operators check East Daley first. Our infrastructure-based lens is now the industry benchmark.

This Isn't Just Analysis. It's Strategic Advantage.

Whether you're pricing multi-year contracts, managing midstream exposure, or trading around export volatility—our models provide the edge.

Explore East Daley's NGL Suite. Own the data.
See the risk before it's priced. Request a demo here ▶

Ethane is no longer a byproduct of the energy market. And neither are your insights.