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This presentation includes “forward-looking statements.” Such forward-looking statements are subject to a number of risks and uncertainties, many of which are not under AR’s control. All statements, except for statements of historical fact, made in this presentation regarding activities, events or developments AR expects, believes or anticipates will or may occur in the future, such as those regarding our strategy, future operations, future commodity prices and future production targets are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All forward-looking statements speak only as of the date of this presentation. Although AR believes that the plans, intentions and expectations reflected in or suggested by the forward-looking statements are reasonable, there is no assurance that these plans, intentions or expectations will be achieved. Therefore, actual outcomes and results could materially differ from what is expressed, implied or forecast in such statements. Except as required by law, AR expressly disclaims any obligation to and does not intend to publicly update or revise any forward-looking statements.

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Antero Resources Corporation is denoted as “AR” in the presentation and Antero Midstream Corporation is denoted as “AM”, which are their respective New York Stock Exchange ticker symbols.
U.S. NGL Outlook

2023

Rig Count Reductions will Moderate Supply
• NGL basins were among the first to see meaningful rig drops

China PDH Buildout Continues
• 150 MBbl/d PDH demand capacity added in 2023, with 240 MBbl/d expected by the end of 2024

Propane Inventory Levels
• 16% above the 5-year average

2024+

LPG Exports at Record Highs
• U.S. exports have grown 20% YOY in 2023, hitting record levels in October

U.S. Supply Increasing to Meet Asian Demand
• The U.S. is the incremental supplier of NGLs to meet increasing international demand

Advantaged NGL Producer
• Marcus Hook advantaged to both Europe and Asia with Panama Canal restrictions
• AR sales at Marcus Hook are based on international index pricing (ARA or FEI)

Antero is well-positioned to benefit from increasing global NGL demand as a top U.S. NGL producer and with over 50% of NGL volumes being exported out of Marcus Hook, PA
Marcus Hook export facility is advantaged to both Europe and Asia versus US Gulf Coast with Panama Canal restrictions

LPG Shipping Routes

- US to Asia Roundtrip via Suez Canal
  - Marcus Hook to Asia via Suez Canal: 80 days
  - Gulf Coast to Asia via Suez Canal: 88 days
  - Marcus Hook Advantage: 8 days

- US to Asia Roundtrip via Cape of Good Hope
  - Marcus Hook to Asia via Cape: 88 days
  - Gulf Coast to Asia via Cape: 92 days
  - Marcus Hook Advantage: 4 days

- Panama Canal severely restricted for LPG ships
Antero Resources: Advantaged NGL Producer

Antero sells export volumes on a spot basis based on ARA and FEI pricing

Antero Advantages

- AR exports the majority of its propane and butane production out of Marcus Hook, Pennsylvania

- Marcus Hook has a transportation advantage of 4-8 days to Asia versus US Gulf Coast without Panama Canal
  - This results in $0.03-$0.05 per gallon lower shipping costs (1)

- Gulf Coast export capacity constraints expected to keep international arbs wide, a benefit to Northeast exporters, like Antero

- AR sales at Marcus Hook are based on international index pricing (ARA or FEI)

1: Based on shipbroker estimates as of 11/21/2023
Despite strong exports, C3+ pricing as a percentage of WTI is near historical lows

AR Monthly Realized C3+ NGL Price

|$35.48/Bbl|

CURRENT AR C3+ NGL SPOT PRICE

44% OF WTI PRICE

Source: Bloomberg actuals through October 2023. Forecasted C3+ pricing based ICE pricing and on Antero C3+ NGL component barrel consisting of 56% C3 (propane), 10% isobutane (Ic4), 17% normal butane (Nc4) and 17% natural gasoline (C5+). Assumes blended sales of 50% domestic and 50% international.
U.S. Exports of Propane Hit Record Highs in 2023

U.S. Exports of Propane/Propylene, Quarterly Average (MMBbl/d)

- **2020 Avg:** 1.15 MMBbl/d
- **2021 Avg:** 1.18 MMBbl/d
- **2022 Avg:** 1.35 MMBbl/d
- **2023 Avg YTD:** 1.61 MMBbl/d

**2023: Western Economies Reopening**

**China Lockdowns**

**Initial COVID Onset**

**COVID ‘Normal’**

**Weekly Record High Set on October 6, 2023 of 2.129 MMBbl/d**

**Source:** EIA
Rig Count Declines Have Accelerated in Key Producing Basins

Total U.S. 161 Rigs

- Bakken
  YTD: 9 Rigs ↓
- SCOOP/STACK
  YTD: 21 Rigs ↓
- Appalachia
  YTD: 14 Rigs ↓
- Permian
  YTD: 43 Rigs ↓
- Haynesville
  YTD: 34 Rigs ↓
- Eagle Ford
  YTD: 21 Rigs ↓

Source: S&P Global Commodity Insights, RigData, as of 11/17/2023
Although China PDH utilization may flatten out, outright China PDH propane demand is expected to increase 55% from 2022 to 2024 from new PDH capacity additions.

Source: S&P Global Commodity Insights as of October 2023
China PDH Buildout Continues

China added 150 MBbl/d of new China PDH demand capacity in 2023. Another ~250 MBbl/d of new PDH demand capacity is expected by the end of 2025.

Globally Planned PDH Units

- **China**
- Middle East
- Rest of Asia
- Europe
- Africa

Source: Argus, Energy Aspects

China’s Planned 2024 PDH Units:
- Shandong Zhonghai Jingxi
- Shandong Zhenhua Chemical
- Sinochem Ruiheng Xuyu
- Fujian Soft Packaging Meide
- Lihuai Weiyuan Chemical
- Qingdao Jinneng No 2
- Formosa Ningbo
- Ningbo Jinfu No 2
- Quanzhou Guoheng Chemical

*2025 China capacity includes uncertain startup dates

In Service PDH Unit – Guangdong Province

Source: Argus, Energy Aspects
World C2+ NGL Production

The U.S. is the Prominent Incremental LPG Supplier

The U.S. is the incremental supplier and exporter of NGLs for growing global demand

**Recent OPEC+ additional oil output cuts to decline OPEC+ LPG supply by 8% from May 2023 through at least Dec 2023**

Source: S&P Global Commodity Insights data as of October 2023

*Note: Includes recovered ethane only.*
Export capacity constraints out of the Gulf Coast are expected into 2025, resulting in wide international arbs. Antero is well positioned to capture premium prices through sufficient export capacity at Marcus Hook, PA. Antero export capacity not tied to near-term USGC capacity limitations

U.S. Gulf Coast LPG Export Capacity Expected to be Constrained in 2024

"VLGC" Shipping Buildout Faces Panama Canal Delays

- Very Large Gas Carriers ("VLGC") transport LPG (propane and butane)

Ship additions in 2024 and 2025 have increased as shipowners order more newbuilds

**Global VLGC Fleet**

- **Total Ship Fleet** (Right Axis)
- **VLGC Ships Delivered**
- **VLGC Ships Scrapped**

**45 New Ships in 2023** (31 delivered through October)

**Baltic VLGC Futures**

Panama Canal Delays Have Increased Baltic VLGC Futures Despite Shipping Buildout

The Baltic Rate is the USD Per Metric Ton Rate for the LPG Freight Route from Ras Tanura, Saudi Arabia to Chiba, Japan for Cargoes of 44,000 Metric Tons.

Source: Poten

Source: CME
U.S. Propane Stocks and Propane Days of Supply

**Propane Inventories Above 5-Year Historical Range driven by lack of winter weather in 2022-2023**

- **Current High Inventories Due To:**
  - Lack of Winter 2022-2023 Weather
  - U.S. PDH Outages

- **Current 2023 Inventories:** +15 MMBbls (+17%) Above 5-Year Average

- **Now Offset by:**
  - Strong U.S. Exports Driven by Demand from China Reopening

**Despite High Absolute Propane Stocks, Days of Supply Overall Remains Within 5-Year Range**

- **Consistent Domestic Demand and Growing Exports Require Higher Propane Stocks**

- **2023: <3 Days Above 5-Year Average**


Days of Supply = Total Propane Stocks / (Domestic Demand + Exports)
The Impact of the U.S. Shale Revolution

The Shale Revolution dramatically changed the NGL landscape, turning the U.S. into a net exporter after decades of importing NGL products.

U.S. NGL Production

U.S. NGL Exports / (Imports)

Driven primarily by shale oil development with high oil prices

\(+205\%\) from 2010-2023


Net importer of NGLs
LPG Exports: U.S. versus Middle East

Recently announced OPEC+ cuts could limit OPEC LPG production and exports even further

The U.S. is the incremental supplier for growing world demand.

Supply from Middle East nations flat, OPEC policies limit growth potential

Source: S&P Global Commodity Insights
Notes: Propane and Butane exports only. U.S. Exports do not include exports via land to Canada and Mexico. As of 09/30/2023.
US NGL Demand

US NGL demand growth driven primarily by exports of LPG (propane/butane)

U.S. C3+ Demand by Sector

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Export 2022-2024 Change: +12%

Estimated U.S. C3+ Demand – 2024

- Exports: 56%
- Petrochemicals: 14%
- Refining/Blending: 18%
- Residential/Commercial: 11%

9% Demand Growth (2022-24)

China LPG Demand

China’s LPG demand growth driven by the petrochemical industry, fueled by PDH and steam cracker buildout

China LPG Demand by Sector (MMBbl/d)

- Petrochemical 2022-2024 Change: +38%
- Own Use (Refinery) 2022-2024 Change: +8%
- Industrial 2022-2024 Change: +6%
- Res/Comm 2022-2024 Change: +9%
- Transport 2022-2024 Change: +1%

Forecast China LPG Demand – 2024

- Petrochemical: 46%
- Res/Comm: 37%
- Industrial: 7%
- Own Use (Refinery): 9%
- Transport: 1%

20% Demand Growth (2022-24)

Source: S&P Global Commodity Insights as of 9/27/2023
U.S. NGL Supply Growth Expected to Peak by 2030

U.S. shale crude and condensate growth is expected to decline after 2030

US Shale Crude and Condensate Production Forecast to 2050

Year on Year Growth by Basin

Source: S&P Global Commodity Insights
NGL Demand Growth Expected Through 2050

Demand for NGLs will continue to grow to meet the needs of the energy transition and growth in global petrochemical demand.

### Change in Demand by Liquids Product

- **Oil Demand Peaking**
- **LPG demand up 2.5 MMBbl/d by 2030 from 2020**
- **Gaining Petrochemical and Res/Comm Demand Increases NGL Demand**

### Change in Market Share

- **NGL share increases**
- **Crude and Condensate share decreases**
- **LPG demand up 2.5 MMBbl/d by 2030 from 2020**

**Source:** S&P Global Commodity Insights, Nov 2022 Ref. Case.
As the sixth largest U.S. natural gas producer and the fourth largest U.S. NGL producer, Antero Resources is supplying a portion of the energy needed to improve the health, safety and livelihood for people living in energy poverty.

Antero Resources explores, produces and develops natural gas, oil and NGLs. Antero Midstream supports Antero Resources with pipeline infrastructure, allowing product to travel to U.S. shipping ports for sale. Once at the port, LNG and LPG volumes supplied by Antero Resources are ultimately shipped to countries around the world.

Antero Resources 2022 LNG and LPG Cargo Destinations

Source: Antero 2022 ESG Report

Export destinations pulled from EIA PADD 1 (LNG and LPG) and EIA PADD 3 (LNG) data
Antero’s C3+ blended differential to Mont Belvieu has improved with Mariner East 2 export takeaway and ability to access international markets.

Northeast C3+ NGL Supply

Northeast C3+ NGL Takeaway

Mariner East 2, placed in service at YE 2018 and fully completed in 2022, provides baseload demand and access to international LPG markets.

- Resulted in 44% of production consumed locally
- Remainder moved primarily by rail and exported

~200 MBbl/d of Northeast C3+ demand vs.
~450 MBbl/d of Northeast supply in 2021

Differentials to Mont Belvieu tightened in 2019 with Mariner East 2 coming online

Antero’s ethane has a natural gas value pricing floor; pricing improvements from additional petrochemical and takeaway demand is all “Upside”

~140 MBbl/d of ethane current rejected in Northeast (~25% of potentially recoverable ethane)

Antero is an anchor supplier to Shell’s cracker which began operations in 2022

Antero ethane firm sales contracts ~50% gas-linked and ~50% Mont Belvieu-linked

Northeast Ethane Takeaway and Capacities

Northeast Ethane Supply (MBbl/d)
Natural Gas Liquids “NGLs” are contained in the rich natural gas stream, but after processing, condense into liquid form for storage, shipping, and consumption.

- **Wellhead Gas**
  - Rich Gas (>1100 Btu)
  - Dry Gas (<1100 Btu)
- **Processing**
  - De-ethanization
  - Fractionation
- **Y-Grade**
- **Ethane**
- **Purity Products**
  - Ethane*
  - Propane*
  - Butane*
  - Isobutane
  - Pentane
- **C3+ Raw NGLs**
  - LNG and Pipeline Export Markets
    - Domestic Consumption
    - Export Markets

*Primary NGL export products are propane, butane, and ethane*
# Natural Gas Liquids Primer

NGLs play an essential role in the domestic and international industrial, residential, commercial and transportation industries.

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<th>Gas Linked Pricing</th>
<th>Crude Linked Pricing</th>
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<tr>
<td>Methane</td>
<td>Ethane</td>
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<td>Natural Gas</td>
<td>C2</td>
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### Primary Sectors
- **Primary Sectors**
  - **All**
  - Chemical Industrial
  - Industrial Residential Commercial, Chemical
  - Industrial Transportation
  - Industrial
  - Transportation

### Primary Uses
- **Primary Uses**
  - **Power**
  - Ethylene Production (For plastics)
  - Heating, Crop drying, Commercial, Propylene
  - Winter Gasoline Blending
  - Alkylate feed to produce gasoline
  - Gasoline blend and diluent

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**Higher Heating Value**

| 1000 Btu | 4000 Btu |

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Antero Resources (NYSE: AR)
Appendix and Supporting Information

This material is intended for benchmark pricing estimates only and does not reflect Antero actual contracted prices

Key Terms and Definitions:

• ARA – “Amsterdam-Rotterdam-Antwerp.” ARA is a port and refining area in the Belgian-Dutch region of Europe.
• CIF - “Cost, Insurance, Freight.” CIF means that the seller delivers the goods on board the vessel orprocures the goods already so delivered. Note that the CIF ARA LPG prices represent a delivered cargo into Europe.
• FEI – “Far East Index.” The Argus Far East Index is the average of the Argus Japan CFR propane quotation and the Argus South China CFR propane quotation. Note that the FEI LPG prices represent a delivered cargo into Asia.
• CFR - “Cost and Freight.” CFR means that the seller delivers the goods on board the vessel or procures the goods already so delivered.
• Baltic LPG Index - The Baltic LPG Index is a shipping cost estimate based on a voyage from Ras Tanura, Saudi Arabia to Chiba, Japan round trip, laden (full) on the outbound journey and ballast (empty) on the return trip, carrying a fully refrigerated cargo of 44,000 MT (+/- 5%) propane, butane, or a mixture. The index is published by the Baltic Exchange.

Intercontinental Exchange (ICE) provides the benchmark pricing Information used in this presentation. For more information, visit https://www.theice.com/energy/natural-gas-liquids

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Relevant Conversions:

• Propane = 521 gallons per metric ton
• Butane = 453 gallons per metric ton

Antero Internal Shipping Estimates are derived by Antero using several sources, including Baltic LPG Index Futures and broker estimates.

• Rates are adjusted based on travel time from Marcus Hook, PA to Northwest Europe (Amsterdam-Rotterdam-Antwerp Region) and Marcus Hook, PA to Asia (Chiba, Japan).
• Antero’s actual shipping rates may differ from these estimates.