



PETROCHEMICAL PROFITABILITY =

Build on top
of the feedstock

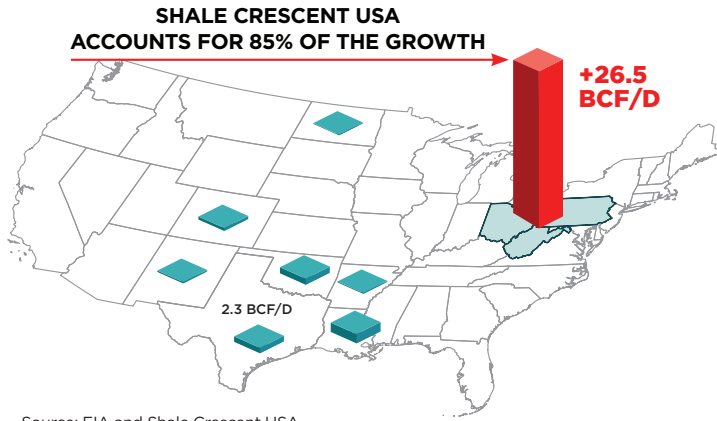


Build in the
center of customers

Shale **Crescent** **USA**[™]
THE OHIO VALLEY ENERGY ADVANTAGE

Petrochemical Profitability = **Build on top of the feedstock** + Build in the center of customers

GROWTH IN MARKETED NATURAL GAS PRODUCTION 2008-2018



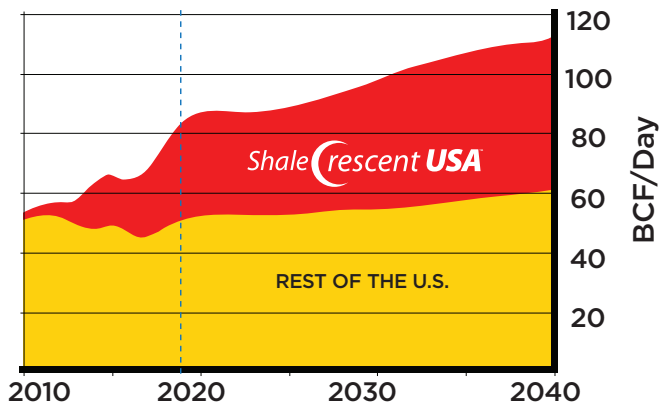
Source: EIA and Shale Crescent USA

Shale Crescent USA:

- **#1** U.S. Natural Gas Producing Basin
- **#1** U.S. Natural Gas Producer
- **#1** U.S. NGL Producer
- **Now** Produces More Natural Gas Than Texas

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NATURAL GAS PRODUCTION



*Source: IHS Markit

PROJECTED U.S. NATURAL GAS GROWTH

Shale Crescent USA:

- Currently accounts for **32%** of total U.S. Natural Gas Production
- Will account for **45%** of total U.S. Natural Gas production by 2040
- If Shale Crescent USA were a country, it would be the **third largest** Natural Gas producing country in the world

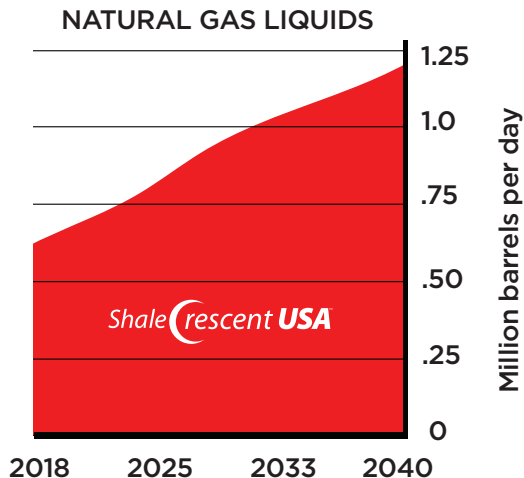
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NATURAL GAS LIQUIDS PRODUCTION

Shale Crescent USA:

- NGL production will increase from **0.60 million barrels per day** in 2018 to **1.17 million b/d** in 2040*
- Is forecasted (by 2040) to produce as much NGLs as the entire U.S. produced in 2008
- Ethane production is forecasted to increase from **0.2 to over 0.7** million b/d, contributing about 25% of the total

*Source: IHS Markit



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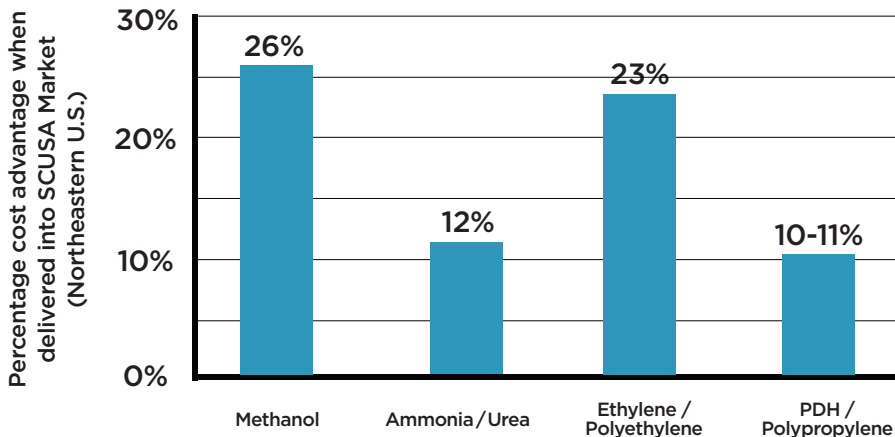
MARKET PROXIMITY

- **50%** of the U.S. Population is within a day's drive
- **70%** of North American Polyethylene demand is within a day's drive*
- **77%** of North American Polypropylene demand is within a day's drive*

*Source: IHS Markit

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SHALE CRESCENT USA COST ADVANTAGE VS. U.S. GULF COAST

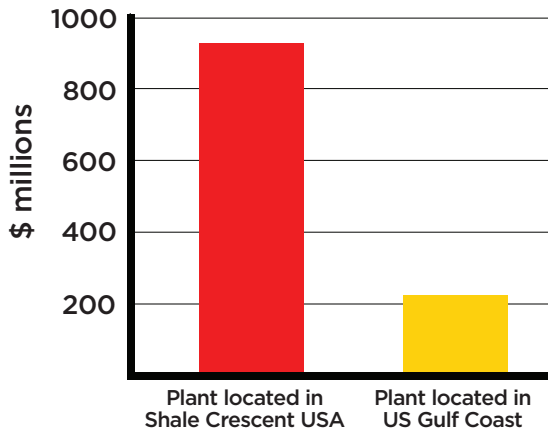


*Source: IHS Markit

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NET PRESENT VALUE IN 2020, SHALE CRESCENT USA VS GULF COAST

APPLYING A 15% DISCOUNT RATE



ETHYLENE/POLYETHYLENE FACILITY

**NPV15 is
4x higher
in the Shale
Crescent USA**



IHS Markit®

*Source: IHS Markit

*"If you want something new,
you have to stop doing something old."*

Peter Drucker

Considering an investment somewhere else? You might want to reconsider.

The world has changed and Shale Crescent USA is now
the most profitable region to build a petrochemical plant.

**Powerful research data to drive profitability and growth.
Interested in learning more? Contact us.**

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