

## PETROCHEMICAL PROFITABILITY =

Build on top  
of the feedstock

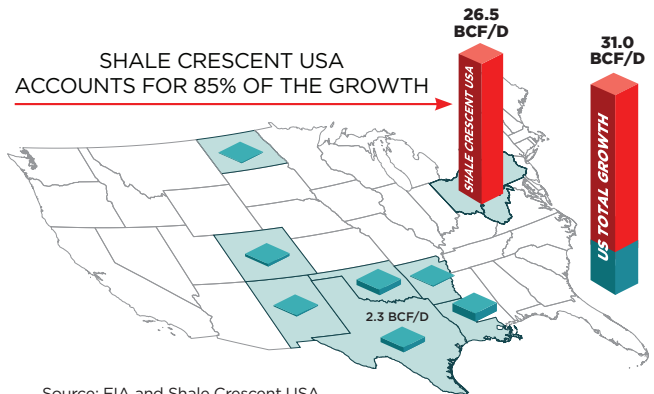
+

Build in the  
center of customers

*Shale* **Crescent** **USA**<sup>™</sup>  
THE OHIO VALLEY ENERGY ADVANTAGE

## GROWTH IN MARKETED NATURAL GAS PRODUCTION 2008-2018

SHALE CRESCENT USA  
ACCOUNTS FOR 85% OF THE GROWTH



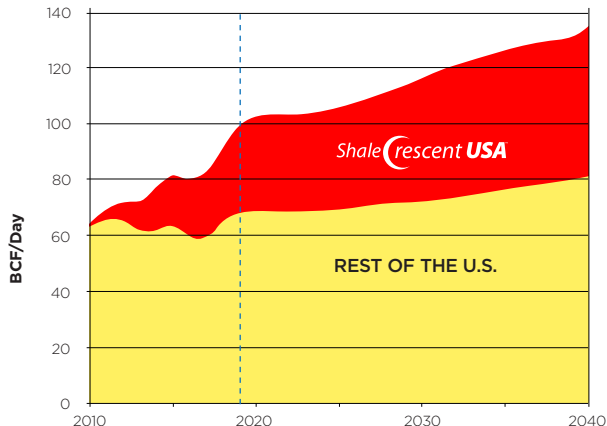
Source: EIA and Shale Crescent USA

### Shale Crescent USA:

- #1 U.S. Natural Gas Producing Basin
- #1 U.S. Natural Gas Producer
- #1 U.S. NGL Producer
- 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 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 U.S. production by 2040\*

\*Source: IHS Markit



**NGL Production 1.17 Million B/D by 2040**

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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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## **POLYETHYLENE COST ADVANTAGE VERSUS U.S. GULF COAST**

**Ethane  
Price**

**32%**   
Lower

**Ethylene  
Cash Cost**

**23%**   
Lower

**Polyethylene  
Cash Cost**

**16%**   
Lower

**Polyethylene  
Delivered Cost**

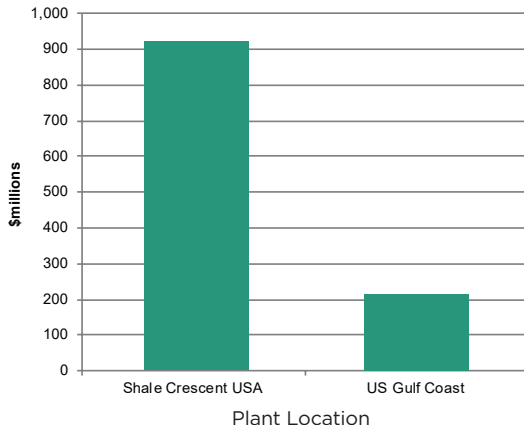
**23%**   
Lower

Source: IHS Markit

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

APPLYING A 15% DISCOUNT RATE



Source: IHS Markit

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**NPV15 is 4x higher** in  
the Shale Crescent USA  
than the Gulf Coast.



IHS Markit®

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*"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.**



**[www.shalecrescentusa.com](http://www.shalecrescentusa.com)  
1.888.529.1650**