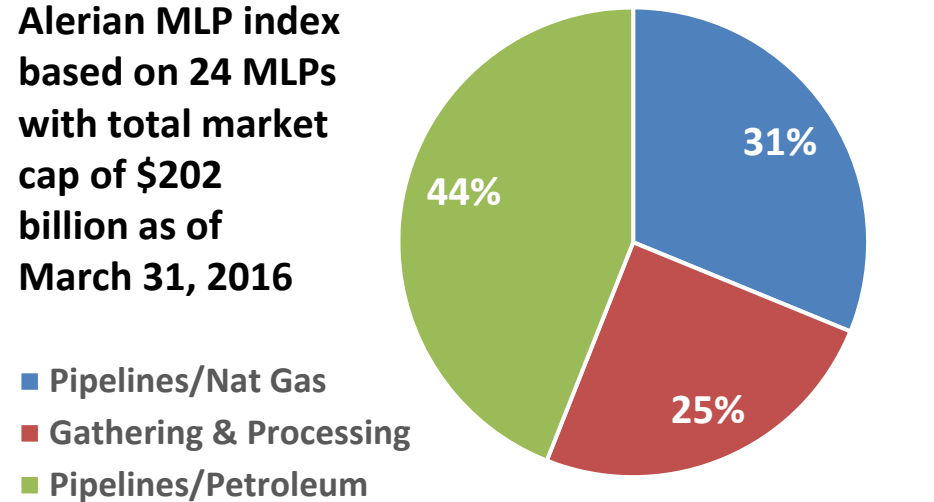


Is the midstream in crisis?

We review our past analysis and update. Events have played out as we expected ([2013 mid-year update](#)):

- Since Q1:14, 22 MLPs **reduced or suspended** distributions (Wells Fargo: Feb 2016)
- **Value dropped ~40%** in 2015 (Bloomberg)
- **Gas processing margins down ~67%**
- 11 **downgrades** as of Oct 2015; 13 companies on **negative watch**
- **Lower midstream outlooks:** capex cuts by E&P companies that supported infrastructure projects and other non-E&P factors
- **MLP activity concentrated in:** Barnett (gas); Eagle Ford (NGLs); Eagle Ford and Permian (oil) (Wells Fargo: Feb 2016)
- **New signals are:** slow down, delay, cancellation of Marcellus-Utica projects, with implications for gas supply, deliverability going forward

Alerian MLP index based on 24 MLPs with total market cap of \$202 billion as of March 31, 2016



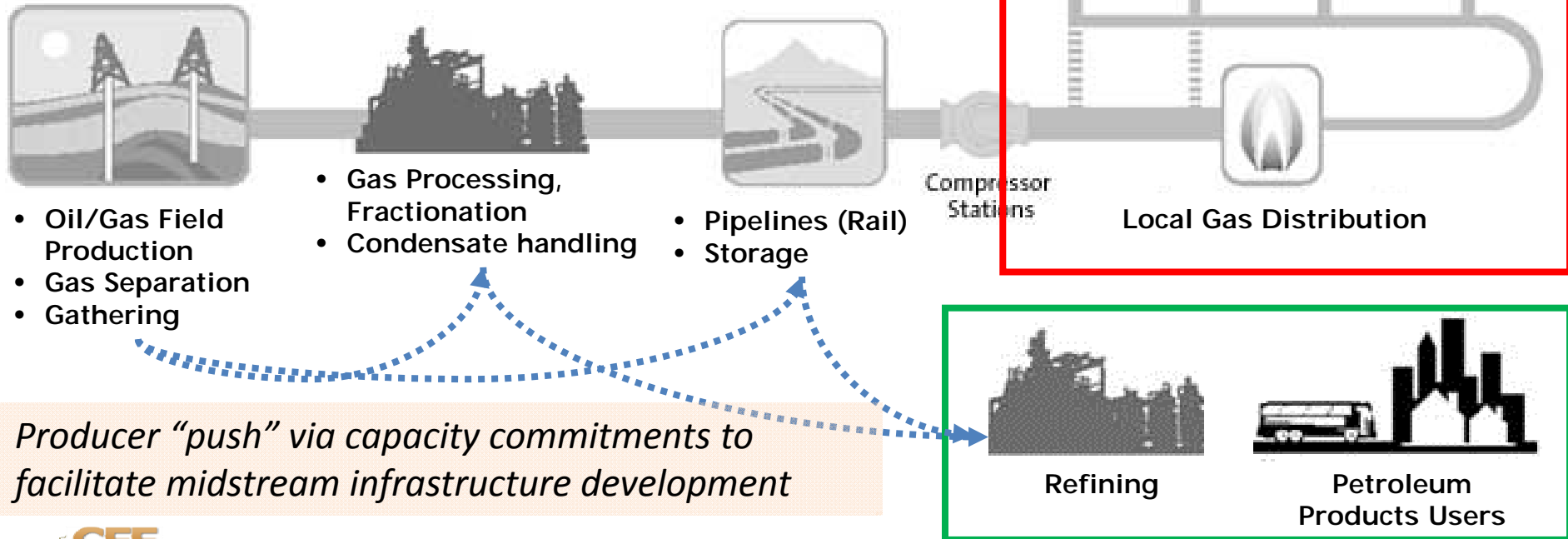
<https://www.alerian.com/>

What is “midstream” and who is the “customer”?

- Is the client relationship misaligned?
- The producer/supplier has been the customer (provider of revenue) instead of downstream/end users

- With the ongoing slump in commodity prices, the E&P sector must find more creative ways to increase margin by taking it from the midstream through price restructurings and contract renegotiations

Evolution of fee-based businesses, producer as purchaser



Producer “push” via capacity commitments to facilitate midstream infrastructure development

Midstream in Crisis: *What's Next?*

Is the midstream in crisis?

- Is the crisis simply an artifact of commodity cycle strains?
- Is the midstream business model of organizing infrastructure assets into MLPs fundamentally challenged?
- Can business structures that require distribution of ever increasing amounts of cash survive?
- What will the midstream business model look like in the future?
- Are there other ways to finance low rate of return but cash flow rich infrastructure development?
- Future production volumes are inherently uncertain – ***could re-integration happen?***

We contemplate three scenarios.

I. Live and let die: will MLPs be driven out of the midstream sector altogether?

- Many analysts have made this prediction.
- Challenges include large incentive distribution rights (IDRs, which may encourage the general partner to grow distributions to limited partners); increasing cost of capital; complex ownership structures
- “Bigness” may not help
- Some MLPs have already exited the MLP model (Kinder Morgan, Targa Resources)

II. Bifurcation: a middle ground?

- Some believe there will be a bifurcation of MLPs into “haves” (larger, better capitalized MLPs) and “have nots” (smaller, more vulnerable ones)
- Could niche-oriented MLPs exist and survive?

III. Cycle of life: a third possibility

- New MLPs continue to be created from spin-offs of assets (preferred exit strategy for private equity or large companies looking to monetize in-house assets)
- Grow larger through drop-downs and acquisitions (if capital is available)
- Ultimately merge into “C” corporations

Each scenario has distinct implications for the midstream sector.