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Note: M&A activity examined in this report is based on data from Derrick Petroleum Services, Global Mergers & Acquisitions Database as of January 4, 2017. The data represents acquisitions, mergers, and swaps with deal values greater than $10 million, including transactions with no disclosure on reserves and/or production. Our analysis has excluded transactions with no announced value, as well as transactions between affiliated companies, to provide a more accurate picture of M&A activity in the industry.
2016—what a year it was for the oil and gas (O&G) industry! Oil prices dropped to a 13-year low of $26 per barrel, upstream CAPEX fell for the second consecutive year, O&G bankruptcies exceeded Great Recession levels, and, most recently, OPEC finally agreed to reduce its 2017 production by about 1.2 million barrels per day.\textsuperscript{1,2,3,4} However, weak fundamentals failed to dampen O&G mergers and acquisitions (M&A) in 2016—both deal count and deal value were higher than 2015 levels and the industry witnessed significant mega-deals and sectoral swings. In 2016, the industry saw seven deals more than $10 billion in size, the highest ever. Midstream overtook the upstream segment for the first time in terms of deal value, while the 2016 deal value in oilfield services (OFS) and downstream was at record high levels (figure 1).

Opportunities backed by a measured return to cautious optimism seem to have provided the thrust to O&G M&A activity, especially in the second half of 2016. Although upstream transactions remained subdued with no major mega-deal, the overall number of deals increased in the second half of the year, in line with oil and natural gas prices, and buyers showed a stronger appetite for riskier underdeveloped or non-producing assets. Deals in resilient and promising shale plays like the US Permian Basin touched record levels of $58,000 per undeveloped acre, while the privatization and internationalization drive of Russia’s Rosneft kept international activity busy later in the year.\textsuperscript{5}

In OFS, complementary portfolios drove mega-mergers, while midstream followed the typical consolidation rationale of becoming bigger and more diversified to compensate for the dearth of organic growth opportunities. The downstream sector, which often gets negatively affected when oil prices strengthen, saw a movement toward safer and more stable retail & marketing assets with significant cross-border deals between major oil suppliers and fast-growing petroleum products markets.

In all, 2016 turned out to be far better than many expected, and it seems that O&G M&A activity has passed its low point of 2015. With oil prices stabilizing above $50 per barrel, improving credit availability and demand prospects, and expectations of markets balancing earlier than expected due to OPEC/non-OPEC cuts, a continued recovery in M&A activity is expected as the year progresses. That said, 2017 M&A trends are likely to differ by sector and geographic locations. Where upstream takes a lead, OFS responds with a lag, US midstream remains steady with more mid-sized deals, and downstream sees moderate activity led by cross-country deals.

**Figure 1. O&G sector M&A deals by value and count**

<table>
<thead>
<tr>
<th>Year</th>
<th>Upstream</th>
<th>OFS</th>
<th>Midstream</th>
<th>Downstream</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
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<td>21</td>
<td>273</td>
<td>29</td>
<td>24</td>
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</tr>
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<tr>
<td>2016</td>
<td>37</td>
<td>53</td>
<td>130</td>
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<td>320</td>
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</tbody>
</table>

Sources: Derrick Petroleum Services and Deloitte analysis
Signs of stabilization and recovery

More than two-and-a-half years of low and falling oil prices pushed the oil and gas industry into its deepest downturn in decades, leading to more than 225 O&G bankruptcies in North America alone. Oil prices over the period fell from about $110 per barrel to a low of $26 per barrel and then struggled to break through the crucial resistance level of $50 per barrel until the OPEC meeting in November 2016. The influence of oil prices on M&A was apparent in the first quarter of 2016 when both oil prices and O&G M&A activity hit new lows. A closer look at oil prices and O&G M&A not only reinforces a strong relationship between the two but also provides interesting insights into recent M&A activity when seen across the O&G value chain.

In 2013 and the first half of 2014, when oil prices were high at around $100 per barrel, M&A deal count in the upstream sector was the strongest (number of green circles in figure 2). In the second half of 2014, when prices initially started to fall, upstream deal count fell while relatively safer non-upstream sectors...
gained traction. In the first half of 2015, a swift oil price recovery from $40 per barrel to $60 per barrel brought some buyers back to the upstream sector. However, when prices started falling again in the second half of 2015, and most agreed that this is a lower-for-longer downturn, M&A activity across the O&G value chain nearly dried up. Significant mega-buying came across the value chain only when oil prices stabilized in the $45-50 per barrel range during the second half of 2016.

Knowing the strong relationship between the two, a shared understanding of the future direction of oil prices is essential for assessing prospects for O&G M&A in 2017. As of January 2017, oil prices have recovered and continue to trade above $50 per barrel—a key technical threshold for commodity traders and breakeven level for many US shale producers. How does this recovery phase compare with recovery periods in previous downturns? Could previous downturns provide insights into the strength of the recent recovery?

A comparison of the recovery from the lows of all the downturns—$26.19 per barrel in February 2016, $30.28 per barrel in December 2008, $10.82 per barrel in December 1998, and $10.25 per barrel in March 1986—brings out three things (figure 3). First, prices recover swiftly and remain highly volatile in the first nine months of every recovery (phase I). Second, the period between 9-16 months from the lows (or the first six months of 2017 in the context of the current downturn) is generally more stable or range-bound across the downturns (phase II). Third, prices typically take a new direction or break the range after 16-18 months from the lows (phase III).

Figure 3. Oil price recovery across downturns

Sources: US Energy Information Administration and Deloitte analysis
Experience from these past downturns and our assessment of the current situation indicate that oil prices are entering the stabilization phase ($50-60 per barrel) and could begin to move higher by late 2017 subject to developments in the US shales and OPEC’s actual output. The US Energy Information Administration (EIA) expects Brent prices to average $53 per barrel in 2017, with prices ending the year around $55 per barrel. Although there is not much possibility of oil prices reaching the previous high levels of $100 per barrel in the near future, many analysts and companies are optimistic of prices ranging between $55 and $70 per barrel during 2018 to 2020.  

If the oil price (which reflects the overall health, confidence, and demand-supply balance in the industry) is one big driver of O&G M&A, credit availability is likely another. Several factors point to an improved credit environment in 2017, especially for O&G companies that are investment grade and have unused credit lines and debt maturities after 2020. Factors such as upward revisions of the value of oil and gas reserves due to higher price decks, greater conversion of uncompleted US wells into production, and increased hedging positions of companies are increasingly comforting lenders. Syndicated bank loans (including term loans and revolving credit facilities) to US O&G companies in the second half of 2016 increased by 25 percent to $35 billion.

In summary, an improving price, business, and credit environment is quite likely to revive M&A activity in 2017. To envisage what lies ahead in 2017, it is important to gain a deeper understanding of the events of 2016, the regions and resources that drew the greatest buying interest and for what reason, the asset types in buyers’ sights and the reasons for it, and buyers’ profiles.
Upstream

A slow road back to recovery with growing appetite for riskier assets

With oil prices touching a 13-year low of $26 per barrel and remaining far below $50 per barrel for most of the year, 2016 looked to be one of the weakest years for upstream M&A activity. However, after a weak start in Q1 2016, the quarterly trend turned positive and gained momentum as the year progressed in line with the oil and gas price recovery (figure 4). Thus, the full-year deal count was higher by 2.5 percent year-over-year, and deal value fell by only 12.6 percent year-over-year. Excluding the $81.8 billion Shell-BG deal in 2015, 2016 was better than 2015 in terms of value.

Country-wise, the United States remained the topmost region and saw a 100 percent year-over-year increase in deal value to $60 billion in 2016. Russia made a strong comeback in 2016 after a few years’ hiatus. After acquiring TNK-BP in 2012 for $61.6 billion, Rosneft acquired a majority stake in Bashneft for $10.35 billion and spun out equity participation of 19.5 percent to Glencore and Qatar Investment for $10.96 billion in Q4 2016. Further, in December the company agreed to buy as much as 35 percent of a natural gas project off of Egypt for $1.57 billion, joining Eni and BP in the largest discovery in the Mediterranean Sea. Rosneft’s upstream sales and acquisitions at home and abroad amounted to more than $28 billion in 2016.

Figure 4. Upstream M&A deals by value and count

Sources: Derrick Petroleum Services and Deloitte analysis
Latin America, where energy reforms are underway or are strongly needed in the wake of mounting debt, saw some uptick in M&A activity. After sales of just $770 million in 2015, deals running up to $8 billion provided some support to cash-strapped national oil companies (NOCs) in the region. Petrobras, in particular, sold $6 billion worth of assets in Brazil and Argentina to Pampa Energia SA, the largest electricity company in Argentina, and to majors like Statoil and Total SA. The majority of the buying in the region was done by Russian, Australian, Canadian, and many European O&G companies, with limited participation from US companies.

This overall optimism across the regions was reinforced by the type of transactions made by buyers starting in Q2 2016. For example, in 2015 and early 2016, the majority of upstream assets that changed hands were “producing” assets rather than “fields under development,” in North America which is a relatively safe and established market (figure 5). In other words, buyers bought assets that provided immediate cash flows and had the lowest geological and political risk in a period of financial stress and uncertainty.

However, starting Q2 2016, buyers started showing interest in buying non-producing assets/fields worldwide when oil prices were showing signs of stabilization around $45-50 per barrel. Statoil’s purchase of an interest in the Carcara discovery from Petrobras for $2.5 billion, Persian Oil and Gas Development jointly developing fields with NIOC for $2.5 billion in Iran, and Rosneft acquiring working interest in undeveloped fields in Egypt for $1.5 billion were some of the prominent international examples.

Figure 5. Global upstream asset deals by transaction type (% share)

![Figure 5](image-url)

Note: Percentages are rounded to the nearest whole number.
Sources: Derrick Petroleum Services and Deloitte analysis
The largest acquisition of undeveloped US assets was Diamondback Energy’s purchase of acreage in the Delaware Basin (part of the bigger oil-heavy Permian Basin) from Brigham Resources for $2.4 billion in December 2016. The oil-heavy Permian Basin drove the overall shift toward non-producing assets, accounting for nearly 50 percent of transactions in this category in the United States.

The Permian Basin also saw robust corporate M&A and many sizeable deals in the producing-asset category, thus remaining the largest M&A contributing basin in the United States with a share of 45 percent in 2016. Its nearest peer, the Eagle Ford Basin, constituted less than five percent of US deal value. However, nearly $3.5 billion deals in early January signal a strong recovery in the basin for 2017. In contrast, buying in gas-heavy basins largely remained flat, with some uptick in the Marcellus and Haynesville Shales as the year came to a close, despite strengthening natural gas prices (figure 6).

Figure 6. US upstream deals trend by major shale plays (monthly volume and value)

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<td>Permian</td>
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<td>Eagle Ford</td>
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<td>Bakken</td>
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<td>Marcellus</td>
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<tr>
<td>SCOOP/STACK</td>
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<td>Utica</td>
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<tr>
<td>Niobrara</td>
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<td>Haynesville</td>
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<td>Barnett</td>
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<tr>
<td>Woodford</td>
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</table>

Number of deals (low to high)

○ Represents deal size

Sources: Derrick Petroleum Services and Deloitte analysis
Deal valuations measured in dollar per acre, reached highs of $58,000 per undeveloped acre in the Permian when QEP acquired Permian assets from RK Petroleum for $600 million in Q2 2016 (figure 7). But this was not the only one big-ticket deal in the Permian. There were five more deals above $40,000 per undeveloped acre in the basin. On the other hand, a number of deals were of smaller value, and deal valuations per acre were highly variable in the Eagle Ford formation. Deals in Eagle Ford ranged from $37,000 per undeveloped acre in Q1 2016 ($199 million buying of AWE’s assets by Carrier Energy) to $4,600 per undeveloped acre in Q4 2016 ($400 million buying of Clayton Williams’ assets by Wildhorse).

Drilling, production, and M&A activity remain buoyant in the Permian as it has multiple pay zones contained in a stratigraphic section that is up to 10 times thicker than other oil basins. Further, the Permian, which is also bounded by higher drill to hold leases, has a large base of conventional output and has relatively lower production volumes of discounted sweet crude and condensates than Eagle Ford.

What is the outlook for 2017? A closer look at the profile of recent buyers and their funding sources could shed light on what lies ahead. Over the past 9-12 months, small- and mid-sized companies (primarily listed), which are often nimble at executing transactions, together with large oil companies, which often take a relatively longer view on the industry, have taken the lead in driving up M&A activity (figure 8).

**Figure 7. Deal valuations by US shale plays (highest and weighted average)**

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</tr>
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<td>19</td>
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<td>Eagle Ford</td>
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<td>1</td>
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<td></td>
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<tr>
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<td>2</td>
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<td>7</td>
<td>10</td>
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</tr>
<tr>
<td>SCOOP/STACK</td>
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<td>3</td>
<td>5</td>
<td></td>
<td>6</td>
<td>20</td>
<td>12</td>
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<tr>
<td>Niobrara</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>13</td>
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<td></td>
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</tr>
<tr>
<td>Haynesville</td>
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<td></td>
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</tbody>
</table>

- Values represent highest $/acre paid in a quarter
- Shade of green represents average $/acre from low to high

Note: Deal values are represented in $ thousand/acre and are rounded to the nearest decimal.
Sources: Derrick Petroleum Services and Deloitte analysis
Industry participants seem to be regaining their buying appetite, led by an uptick in oil prices and improving access to capital. The market for both primary and secondary equity issues has been strong in 2016, with total issuances by US upstream companies nearly doubling to approximately $32 billion during the year. Extraction Oil & Gas, for example, successfully raised $633 million in the primary equity market, the highest amount raised in the sector since crude oil prices started to fall in mid-2014. Similarly, high-yield bond sales (yield of more than 6 percent) re-emerged after nearly drying up earlier in the year. There were ten such high-yield sales in the second half of 2016, accounting for more than $5.25 billion.

Although private-equity (PE) and PE-backed firms were involved in a greater number of deals as buyers in 2016, 69 compared to 56 in 2015, they were net sellers of assets in value terms in 2016 ($30 billion of selling compared to $17 billion of buying). The private players reduced their position in the Permian to take advantage of rising prices and valuations. These players appear to be shifting their focus toward new and prospective shale basins in the Oklahoma SCOOP and STACK plays, stacked reservoirs of the Upper Eagle Ford and the Austin Chalk, over-pressured Cotton Valley plays in North Louisiana, and lower valued gas assets in Haynesville and Marcellus.

Signs of a more optimistic turn in sentiment are emerging from all the indicators—prices staying above $50 per barrel, costs remaining in check, the valuation mismatch reducing between buyers and sellers, 2017 CAPEX forecasts increasing, supply-demand balancing earlier than expected after OPEC’s announcement, and capital markets opening up for oil and gas companies. Given the time it could take for confidence to be restored, we expect modest buying activity in early 2017 and a more significant pick-up in activity as the year progresses.

Figure 8. Global upstream deal value share by buyers

Note: Percentages are rounded to the nearest whole number.
Sources: Derrick Petroleum Services and Deloitte analysis
Oilfield services

Scope over scale, the new buying rationale

Oilfield services took the hardest hit among O&G sectors in the current downturn. Consecutive double-digit declines in spending by upstream companies took the US rig count to record low levels in May 2016. This resulted in many service and drilling firms reporting higher losses than in 2008 and 2009, led to layoffs of more than 210,000, and forced 110 North American OFS firms to file for bankruptcy protection.34,35,36 This is reflected in low M&A activity in the first nine months of 2016.

Although the sector saw some uptick in M&A in late 2016, there was lack of depth in the activity throughout the year as two mega-deals (GE-BHI and Technip-FMC) constituted more than 90% of the total transaction value in the sector (figure 9).37 With weak, delayed volume and margin growth expectations, OFS buyers seem to be looking for companies that complement and complete their portfolio of services (or provide a full suite of services) rather than buying firms for economies of scale in an existing segment (the typical capacity-led rationale for consolidation).

Figure 9. OFS M&A deals by value and count

Sources: Derrick Petroleum Services and Deloitte analysis
This change in buying rationale was evident in the top 10 OFS deals in 2015 and 2016—nine of them had little or no direct overlap with top revenue-generating segments of buyers and sellers (figure 10). On the $31.6 billion acquisition of Baker Hughes by GE Oil & Gas, Baker Hughes’ CEO said, “The combination of our complementary assets will create a platform capable of seamless integration while we enhance our ability to deliver optimized and integrated solutions and increase touch points with our customer.” Similarly, on Technip’s purchase of subsea equipment-heavy FMC Technologies for $14.5 billion, Technip’s CEO commented, “We have complementary skills, technologies and capabilities which our customers can access on an integrated basis or separately as they prefer.”

Within the OFS value chain, the strategic combination of equipment- and production-centric businesses with drilling and completion (D&C) segments could help the combined entities to provide integrated services and lend more visibility and stability to overall revenues and margins. Equipment- and production-centric OFS businesses, such as artificial lifting, subsea equipment, etc., track maintenance CAPEX of upstream companies, which largely remains stable and contracted. On the other hand, the D&C segment provides high but variable growth and returns. However, the key is attaining a balance between high-margin service businesses and asset-heavy equipment business lines.

**Figure 10. Segmental overlap between buyers and sellers (top 10 OFS deals in 2015 and 2016)**

<table>
<thead>
<tr>
<th>Buyer</th>
<th>Deal size ($ billion)</th>
<th>Seller</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE Oil &amp; Gas</td>
<td>32</td>
<td>Baker Hughes</td>
</tr>
<tr>
<td>Schlumberger</td>
<td>14.8</td>
<td>Cameron</td>
</tr>
<tr>
<td>Technip</td>
<td>14.5</td>
<td>FMC Technologies</td>
</tr>
<tr>
<td>Standard Chartered</td>
<td>3</td>
<td>Petrobras</td>
</tr>
<tr>
<td>Undisclosed buyer</td>
<td>2.2</td>
<td>Eurasia Drilling</td>
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<tr>
<td>Patterson-UTI Energy</td>
<td>1.8</td>
<td>Seventy Seven Energy</td>
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<tr>
<td>Chiyoda Corp</td>
<td>0.6</td>
<td>Ezra Holdings</td>
</tr>
<tr>
<td>3i Infrastructure</td>
<td>0.6</td>
<td>AP Moller-Maersk</td>
</tr>
<tr>
<td>AP Moller-Maersk</td>
<td>0.5</td>
<td>Eni SpA</td>
</tr>
<tr>
<td>MISC Bhd</td>
<td>0.4</td>
<td>Petronas (GKL)</td>
</tr>
</tbody>
</table>

Revenue overlap between top business units of buyers and sellers
- Low
- Minor
- High

Sources: Derrick Petroleum Services, Company press releases, Spears & Associates, and Deloitte analysis
What is the OFS business environment and M&A outlook for 2017? The recent recovery in oil prices is positive for OFS players serving the US market, reflected in the 63 percent recovery in US rotary rig count activity from the lows seen in May 2016. However, improved asset/rig utilization may not easily translate into higher margins, considering the intense competition for regaining market share and the re-establishment of supply chains.

The international OFS business, however, could take more time to respond considering it lags the North American market by six to nine months. For example, the United States registered rig count gains in the second half of 2016, but Latin America, Africa, and the Middle East continued to see a fall until late 2016. Keeping in mind the lag effect and the fact that the budget resetting exercise of NOCs happens in April and May, international OFS players would have to wait until the middle of the year to see significant recovery in their business. As Halliburton said in its Q3 2016 earnings call, “Expect consistent with our outlook that middle of next year is where we start to see that repairing for international business.”

Private equity firms could take advantage of this lag in the realization of recovery through opportunistic buying in the first half of 2017, including cherry-picking assets of North American bankrupt OFS companies at a steep discount. Growth-focused small-to-mid cap OFS participants may resume buying after a series of mega deals in the industry. It will be interesting to see how service majors respond in 2017, especially those that did not participate—will they buy at a higher price to build a more integrated services offering or remain focused on the organic expansion of existing capabilities?
Midstream

Mega-mergers for scale and renewed focus on energy infrastructure

Although midstream had a steady year in terms of deal activity, it toppled upstream for the first time to become the largest O&G sector by deal value with transactions crossing $140 billion in 2016 (figure 11). Sunoco Logistics’ $51 billion announced acquisition of Energy Transfer Partners and Enbridge’s $46.5 billion announced acquisition of Spectra Energy highlight that size remains one of the biggest selling points in midstream transactions across the downturns.44

Apart from simplifying infrastructure, diversifying businesses, and realizing commercial cost savings, a merger of two corporate entities can lower the cost of capital of the combined US midstream master limited partnerships (MLPs). Because MLPs are required to pay out nearly all of their earnings to unit holders, lower borrowing costs can help them to keep growing distributions through acquisitions. The combined entity of Enbridge-Spectra expects a 15 percent annualized dividend increase, compared to the 7-8 percent growth rate Spectra was targeting as a stand-alone pipeline operator.45

About 80 percent of midstream deals by count were asset-based, with three out of the top five deals occurring outside North America and three out of the top five deals in North America involving utilities as buyers. A Brookfield-led consortium’s purchase of 1,700 miles of Petrobras’ gas pipelines in Brazil for $5.2 billion was the largest asset deal, followed by China Life Insurance’s buying of a 50 percent stake in Sinopec’s Sichuan-East China gas pipeline for $3.3 billion. North American utilities like Southern Company, DTE Energy, and Consolidated Edison are buying into midstream so as to expand their natural gas pipeline and gathering footprint in Pennsylvania, Texas, and other key natural gas basins.46

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Figure 11. Midstream M&A deals by value and count

Sources: Derrick Petroleum Services and Deloitte analysis
A lot of the US midstream growth is driven by a need to enhance connectivity out of new and prolific basins by building a strong gathering and processing network. This trend is reflected in M&A activity as well, where gathering and processing constitute more than 40 percent of the total asset deal value (figure 12). However, a year-over-year comparison of gathering deals suggests that buying switched heavily toward natural gas gathering, compression, and processing infrastructure in 2016, probably a consequence of oil drilling cuts in most major basins by upstream producers (only two out of 12 gathering deals in 2016 were specifically for crude oil).

Similarly, there was an uptick in deals for long-haul natural gas pipelines in 2016. Continued natural gas price differentials across basins, the ever-growing need for producers to connect producing wells with major interconnections and transmission lines, and the newly-available export opportunity of linking producing centers with export terminals (two new ethane export terminals started operations in Pennsylvania and Texas) gained buyers’ interest in 2016, including that of utilities. In terms of storage assets, Sunoco’s acquisition of Vitol’s Permian Basin crude oil system for $760 million was the largest deal in the storage business in 2016, after Enterprise acquired Oil Tanking Partners for $6.1 billion in 2014.47

Figure 12. US midstream asset deals share by segments

![Figure 12: US midstream asset deals share by segments](image_url)

Note: Percentages are rounded to the nearest whole number. Sources: Derrick Petroleum Services and Deloitte analysis
The future prospects of the US midstream industry are closely tied to upstream drilling, which is most recently concentrated in the promising Delaware and Midland Basins in the Permian and the STACK and SCOOP plays in Oklahoma. A recovering upstream environment, continuing regulatory approval and environmental clearance issues associated with new midstream projects, and a growing imbalance in infrastructure in select basins seems to set favorable conditions for consolidation of midstream assets worldwide.

This imbalance is rising in the Permian as the current midstream infrastructure could handle 2.5 million barrels per day of production (rising to 3.1 million barrels per day by the end of 2018), much higher than the actual production levels of 2 million barrels per day. In contrast, the STACK and SCOOP plays, which are in the early stages of production growth and infrastructure build, would most likely see more organic growth and/or joint ventures between producers, consumers, and midstream players (e.g., STACK pipeline joint venture between Plains All American Pipeline and Phillips 66 in August 2016).

Outside core industry fundamentals, two key developments may also influence the growth trajectory of the US midstream sector. Renewed focus on energy infrastructure and domestic energy development of the new US administration is positive, while the US Federal Reserve’s rate hike could lower the yield attractiveness of the industry and put pressure on its distributions rate. Nonetheless, at an overall level, we expect steady and continued M&A activity in 2017, with more mid-size deals as smaller MLPs use the improving business environment to grow in size and narrow the size gap with big players that have become even larger due to recent mega-deals.
Security and stability driving cross-border investments

The downstream sector saw flat deal activity in 2016, but deal value rose more than 50 percent year over year to reach $36.5 billion. Surprisingly, more than 85 percent of transactions by deal value happened in the second half of 2016 when oil prices strengthened, global refining crack spreads fell by $1-2.5 per barrel, and the cost of ethanol fuel credits rose significantly in the United States. A closer look at the deals by region, asset, and buyer and seller type unearths some contributing factors.

North America led the downstream deal value, accounting for a 46 percent share in 2016 (figure 13). The deals in the region were primarily aimed at the relatively stable retail and marketing business rather than the buying of light oil-centric distillation and export-oriented storage and terminal assets (a trend that was prevalent in 2015). Tesoro's announced acquisition of Western Refining (strong refining, midstream, and retail presence) for $6.4 billion was the biggest transaction, followed by Alimentation Couche-Tard Inc.’s buying of CST Brands (fuel retailer and convenience store operator) for $4.4 billion and Imperial Oil's assets (retail assets in Canada) for $2.1 billion.

Like the United States, Asia also saw a marked change in downstream transactions. Rosneft and Trafigura’s purchase of India’s second-largest private refiner, Essar Oil, for $12.9 billion was not just to buy into the fastest growing petroleum products market but to also secure upstream supplies of Rosneft and provide new trading opportunities to Trafigura. The acquisition was the biggest foreign acquisition ever in India and Russia’s largest outbound deal. In total, outbound investment reached one of the highest levels of more than $22 billion in the downstream sector in 2016.

Looking forward into 2017, gasoline and diesel demand growth in the United States and Asia, crude price differentials, refining crack spreads, capacity additions in Asia, ethanol credit prices in the United States, and valuations of the linked midstream and retail businesses will help determine the downstream M&A activity. Although expected downward pressure on refining margins due to the strengthening of oil prices, and thus valuation of assets, could depress M&A activity in 2017, we expect the sector to continue to see steady activity due to its stable business model.
Figure 13. Downstream deal value (% share) in 2016 versus 2015

- **Region**
  - 2016: 46% North America, 42% Asia, 7% Latin America, 4% Europe, 1% Africa
  - 2015: 30% North America, 50% Asia, 17% Latin America, 2% Europe

- **Asset**
  - 2016: 62% Multiple, 31% Service stations, 4% Terminals/storage, 2% ADU/VDU/cracking
  - 2015: 65% Multiple, 21% Service stations, 9% Terminals/storage, 5% ADU/VDU/cracking

- **Buyer**
  - 2016: 44% Pure-play downstream, 12% PE/financiers, 18% NOCs, 4% IOC, 23% Others
  - 2015: 28% Pure-play downstream, 25% PE/financiers, 48% NOCs, 48% IOC

- **Seller**
  - 2016: 84% Pure-play downstream, 4% NOCs, 3% IOC, 8% Others
  - 2015: 39% Pure-play downstream, 12% NOCs, 36% IOC, 15% Others

- **Investment**
  - 2016: 37% Inbound, 63% Outbound
  - 2015: 75% Inbound, 25% Outbound

Note: Percentages are rounded to the nearest whole number.
Sources: Derrick Petroleum Services and Deloitte analysis
2016 was a roller-coaster year for oil markets, with prices hitting lows in the mid-$20s early in the year, and recovering to over $50 by year-end. This market environment was clearly not conducive to a resurgence in M&A transactions across the oil and gas sector. It was a year when heightened uncertainty about price outlooks translated into low probabilities of reaching consensus about underlying asset or business valuations. Financial distress remained pervasive across much of the sector, and new capital was scarce to finance deals. Confidence in future investment remained challenged as the industry entered the third year of the downturn. Yet despite these headwinds, by year-end overall oil and gas transaction value had recovered to exceed 2014 levels.

Much of this recovery was influenced by a small number of mega-deals, multi-billion dollar combinations of large corporations, each of which has a strong strategic logic and is therefore less dependent on where the industry is in its price cycle. Such large deals were particularly prevalent in the oilfield services and midstream segments.

In total, the midstream segment in 2016 became the sub-sector with highest deal activity in terms of dollar value of transactions. This was a segment in which organic growth opportunities were becoming scarcer with the slowdown in upstream activity, so acquisitions became the dominant driver for growth.

Toward the end of 2016, rising oil and gas prices and the increasing prominence of high-potential plays like the Permian Basin in west Texas stimulated the beginning of renewed interest in M&A deals in the upstream. In 2017 we expect this trend to continue as transaction barriers such as commodity price uncertainty, confidence, and financial constraints begin to fall away, prompting companies to take substantive steps to position their portfolios for the recovery and take a more active role in the M&A market.

2017 could herald a new day in oil and gas consolidation and restructuring, as the industry emerges from two and a half years of doom, gloom, and uncertainty.
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