

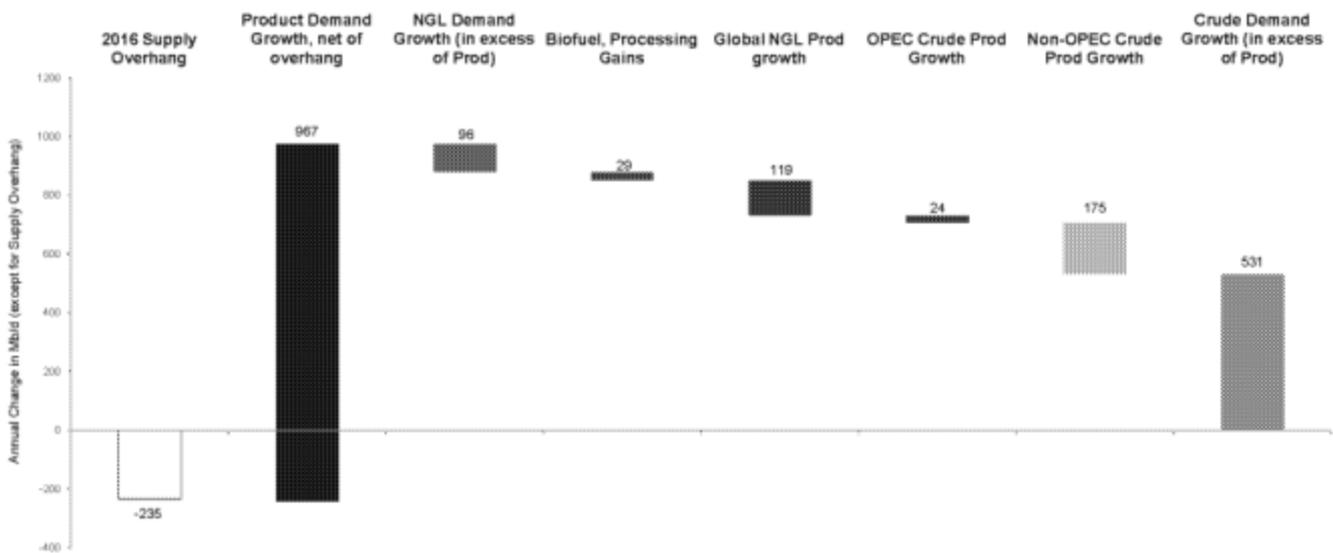


**Methodology:** Our implied call on US onshore crude growth (in the base case) builds on two critical macro assumptions:

- Global product demand is assumed to grow ~1.15 MMb/d in 2015 and 1.2 MMb/d in 2016 with average annual growth of ~1.15 MMb/d from 2017-2020. Our demand growth assumptions are based on IEA estimates and compare to ~650 Mb/d of demand growth in 2014.
- OPEC production (ex Angola) is assumed flat to 2014 levels in our forecast. This assumption is admittedly 'rosier' than would otherwise be implied from recent production levels (~31.6 MMb/d or +1100 Mb/d higher than our assumed base case vs. May 2015 levels) or from a qualitative weighting of both upside and downside risks (with Iran the most visible/pronounced risk). Please see section on OPEC risks on page 33 of the note for brief commentary around OPEC.

Guided by the highlighted assumptions above, our call on US onshore crude growth starts by removing non-crude growth contributions (NGLs, Biofuels, etc.) from assumed global demand growth to obtain a proxy for global crude demand that is then analyzed against our global crude supply build up. In our base case, we assume no pick-up in rig activity in the US L48 in 2016.

Figure 44: Deconstructing the 500 Mb/d Call on US onshore growth in 2017



Source: Deutsche Bank, Wood Mackenzie, IEA, OPEC crude production growth is from Angola which we model out separately unlike the rest of OPEC