

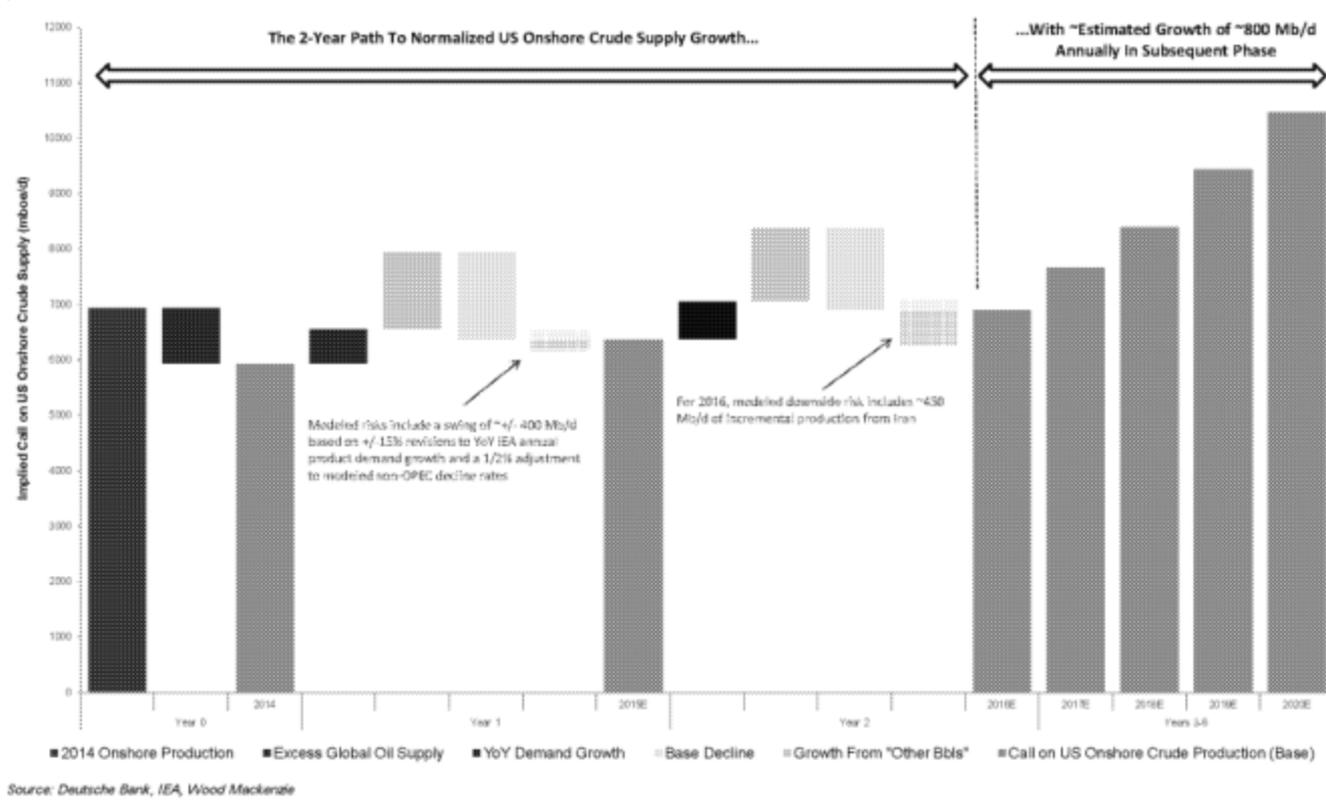


Implied Call on the US

The new, "price driven" swing producer

As we stated earlier, in our view, the three most important questions in the price of crude over the next two years is: 1) Do we need US Lower 48 production to grow?, 2) How much?, and 3) what is the oil price necessary to incentivize that level of growth? Despite our view that global Non-OPEC production is not on the verge of a dramatic, capex driven decline (at least through 2017), we still see insufficient growth outside of the US to fully supply global demand growth. In short, there is a call on US Lower 48 production toward late 2016.

Figure 40: The Long and Winding Road: Normalizing US Onshore Crude Supply Growth



Source: Deutsche Bank, IEA, Wood Mackenzie

Looking for a 500 Mb/d Call on US growth starting late 2016

We define the timing around the call on US onshore growth as the point at which a sustainable need/demand for US onshore production growth is visible. We anticipate material production growth from onshore producers starting late 2016 toward a 2017 call on US onshore growth of ~500 Mb/d rapidly escalating toward late 2017/early 2018. We estimate the YoY demand for US onshore production to increase by ~700 Mb/d in 2018 prior and to average over 1MMb/d in 2019 and 2020 as non-OPEC major project growth tapers off on anticipated spending reductions over the next 2-3 years.