



In US natural gas, estimated development breakeven costs (excluding finding costs) have declined by roughly USD0.60/mmBtu in the last year owing to well cost reductions, more extensive use of pad drilling, and increased numbers of wells per pad. Production growth has recovered sharply from freeze-offs in November to average +4.3 bcf/d yoy.

While we expect this growth to slow to only 2.0 bcf/d yoy in 2015, we believe the market would be balanced at only 1.3 bcf/d yoy growth. Therefore we expect storage normalization versus the 10-year average by the end of March, and building surpluses over the remainder of the year prior to Winter 15-16. Consequently we lower our 2015 Henry Hub price forecast to USD3.75/mmBtu.

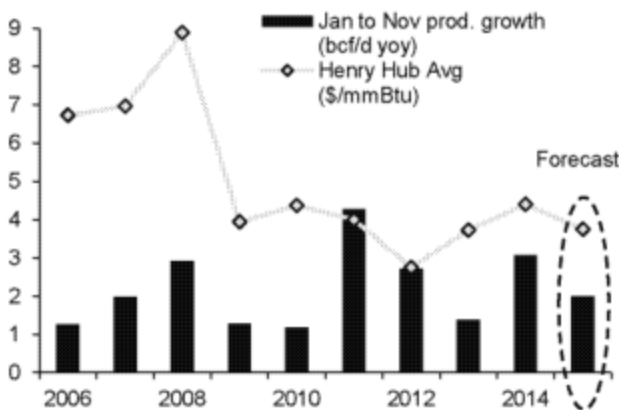
Overview

Production cost declines have characterized both the global thermal coal and US natural gas markets in the past year, with further USD cost declines likely in thermal coal. We expect oversupplied markets to persist over a multi-year period in thermal coal, and over the whole of 2015 in natural gas. Consequently, lower costs of production translate into a lower likelihood of supply curtailments and greater potential downside.

Natural gas supply growth raises oversupply concern

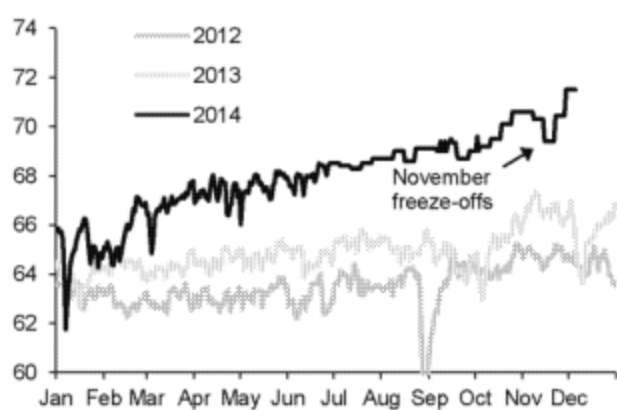
An extremely cold winter in 2013-14 ended with storage gas at the lowest level in both percentage terms and absolute terms since 2003. As in 2003, this was followed by a very strong injection season with 2,770 bcf (59% of working gas capacity) added, as compared with 2,491 bcf (61%) in 2003 when measured from the end of March to the first week in November. This was facilitated by the strongest production growth rate (+3.1 bcf/d) of the last nine years apart from 2011. Of particular note is that production growth accelerated into the end of the year, despite the weakest pricing also occurring in Q4-14.

Figure 35: Dry gas production growth and Henry Hub



Source: Bloomberg Finance LP, Bertek Energy, DB Oil & Gas E&P Equity Research

Figure 36: Dry gas production (bcf/day)



Source: Bertek Energy, Deutsche Bank

Continued strength in production growth poses the greatest risk for pricing in 2015 and we lower our price forecast to USD3.75/mmBtu on expectations that supply will exceed requirements in a normal-weather scenario. A shift towards lower costs has been facilitated by tighter well spacing and longer laterals, while we do not expect reduced drilling for tight oil to detract substantially from associated gas production growth. We expect these costs to remain lower in 2015 versus 2013. However, a continued backlog of takeaway capacity in Northeast Pennsylvania may hold back growth below what it otherwise could be, owing to negative basis relative to Henry Hub.