The U.S. Petroleum Renaissance: What Does it All Mean?

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Employment Recovery Remains Slow

Source: U.S. Bureau of Labor Statistics

20% is Oil & Gas
Remember to be humble...Projected Imports of LNG vs. Actual

Source: EIA data and forecasts
NGL Production Outlook to 2020

Source: EIA Data, EPRINC forecast. Assumes ethane continues to incrementally increase its share of the NGL pool.
Rig Count and Permits

Source: Photo Baker Hughes Interactive Rig Count Jan 25, 2012
Drilling Efficiencies – Doing more with less...

Drilling Efficiencies Result in 40% More Wells Per Rig

Source: Continental Resources Oct 9th 2012 Investor Presentation
Williston Basin Production Forecasts

Source: Continental Resources, from Platts Midstream Development & Management Conference, May 12, 2011 NDPA
EPRINC’s Forecast for Major U.S. Shale Plays

Adding 4 mm b/d by 2020 with selected plays alone—upside exists in periphery plays and enhanced recovery

Source: HPDI data with EPRINC forecast estimates
Canadian Production

Additional 1 mbd in three years = tightness

Source: CAPP
*Holds all US crude oil and biofuel production constant except for the plays listed in the previous slides. Assumes 1 mm bd of Canadian production growth dispersed evenly over 5 years, and that all incremental Canadian production enters the US. Also assumes US demand remains unchanged from current levels.
The Americas nearly self sufficient by 2020...

Less than 3 mm b/d (2.8 mm b/d) are needed to offset production and consumption for all of the U.S., Canada, and Latin America

Source: US 2012 data from May EIA-forecasts using EPRINC shale additions, Canada forecast from CAPP, Latin America production from BMI with some small estimates for "other latin america countries" from 2017-2012Energy
Typical Global Ethylene Supply Curve
(Petrochemical Production Costs by Country/Region)

Major Positive Shift in US Competitive Position
North Slope Production Scenarios

Source: EIA
Conclusions

• This is a petroleum renaissance. The U.S. is the largest producer of gas in the world and quickly moving into first place in oil production.

• Downstream is Connected to the Upstream – Need Both.

• Regulatory Fix is Critical – Permitting, Permitting, Permitting!!!!

• Federal Access and Alignment of Interests are Essential

• Positive Future is Not Guaranteed without Policy Accomodation to New Reality.