

Plastic Commodities: Resin

ISM Panel Discussion
November 10, 2015

Plastics: Resin Commodities

- Why is understanding the resin markets important?
- What are the key drivers which influence resin market prices?
- Current Market conditions
- Forward Outlook.



Plastic is Everywhere!



Resin Market Drivers

- Supply/Demand
- **Shale Gas**
- **Feedstock (Crude Oil/Nat. Gas)**
- Inventory (producer level)
- **International Prices**
- Exports (resin)
- Planned/Unplanned Outages
- Imports (finished goods & resins)
- Global Events
- Natural Disasters
- Secondary Markets
- Margin Expansion
- “Because I can”

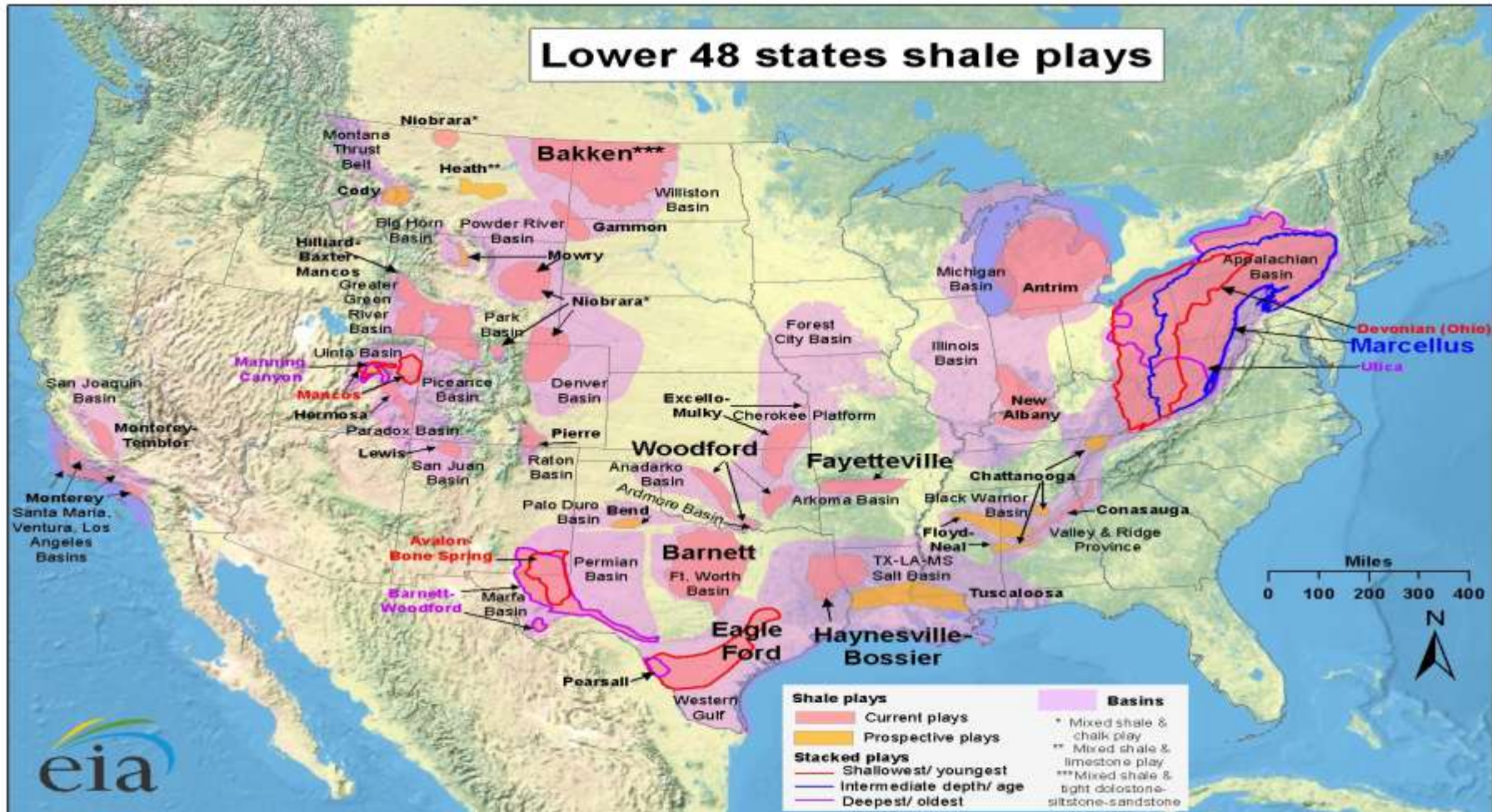


Shale Gas

- *“According to the International Energy Agency, the ‘U.S. will surpass Russia and Saudi Arabia as the world’s top oil producer by 2015 and be close to energy self-sufficiency in the next two decades, amid booming output from shale formations.’”*
- *BCG (Boston Consultancy) predicts US manufacturing will be 2%-3% cheaper than China by 2018 (US is currently 5% higher)*



Shale Gas: Game Changer



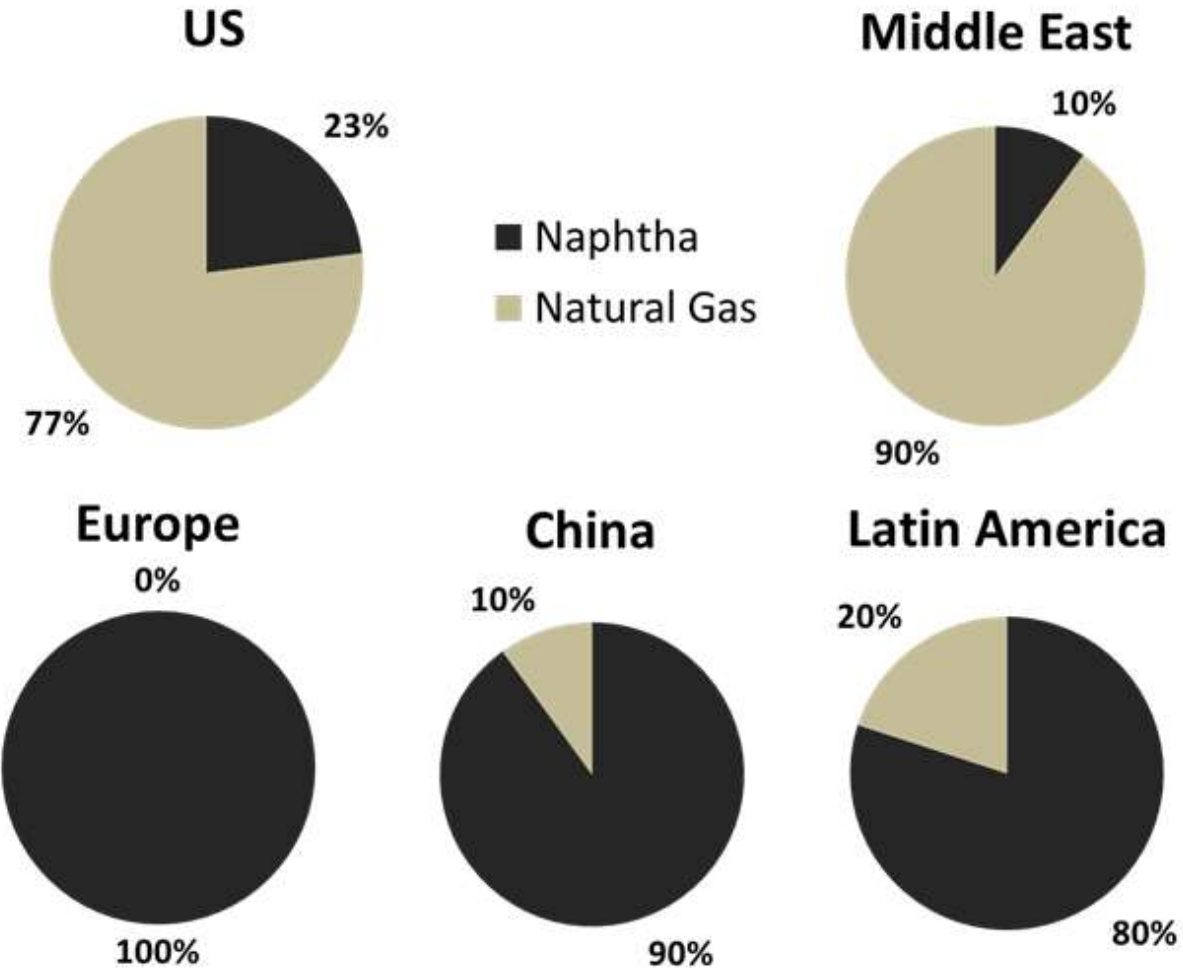
Shale Gas: Global Phenomenon

Figure 1. Map of basins with assessed shale oil and shale gas formations, as of May 2013

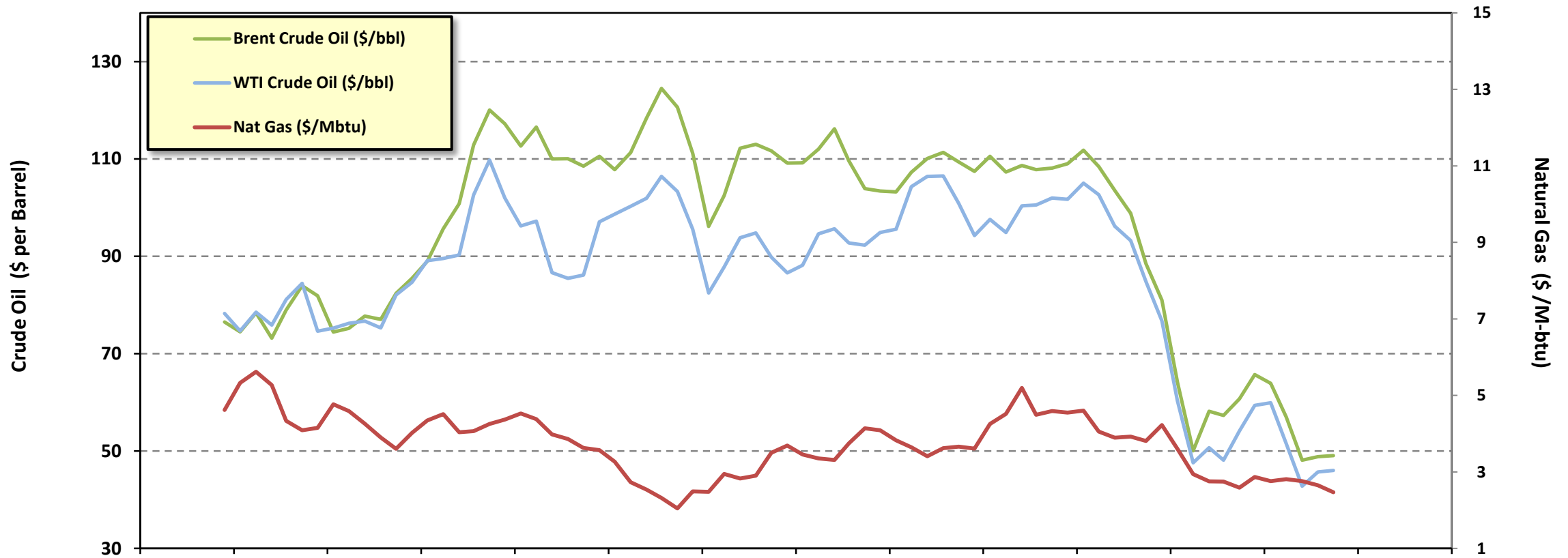


Source: United States basins from U.S. Energy Information Administration and United States Geological Survey; other basins from ARI based on data from various published studies.

Percentage of Heavy/Light Feeds



Crude Oil & Natural Gas



Forward Outlook

- Price stability for most resins over the next several months.
 - Polypropylene is the exception, producers still pushing margin expansions.
- Upward Price pressure if:
 - Strong demand
 - Supplies become tight (planned/unplanned outages)
 - Higher crude oil prices

