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Energy Independence: Winners and Losers

Paul Astolfi, Partner – Global Energy Group

Mayer Brown LLP

June 6, 2013

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Introduction

- Mayer Brown
- University of Michigan Law School
- Energy Finance

Topic Introduction

The Pursuit of U.S. Energy Independence:
Likely Winners and Losers in the Political Fights over
the Environmental Impact of Fracking in the
Production of Shale Oil and Transporting Oil from
Canadian Tar Sands through the Keystone Pipeline

Winners



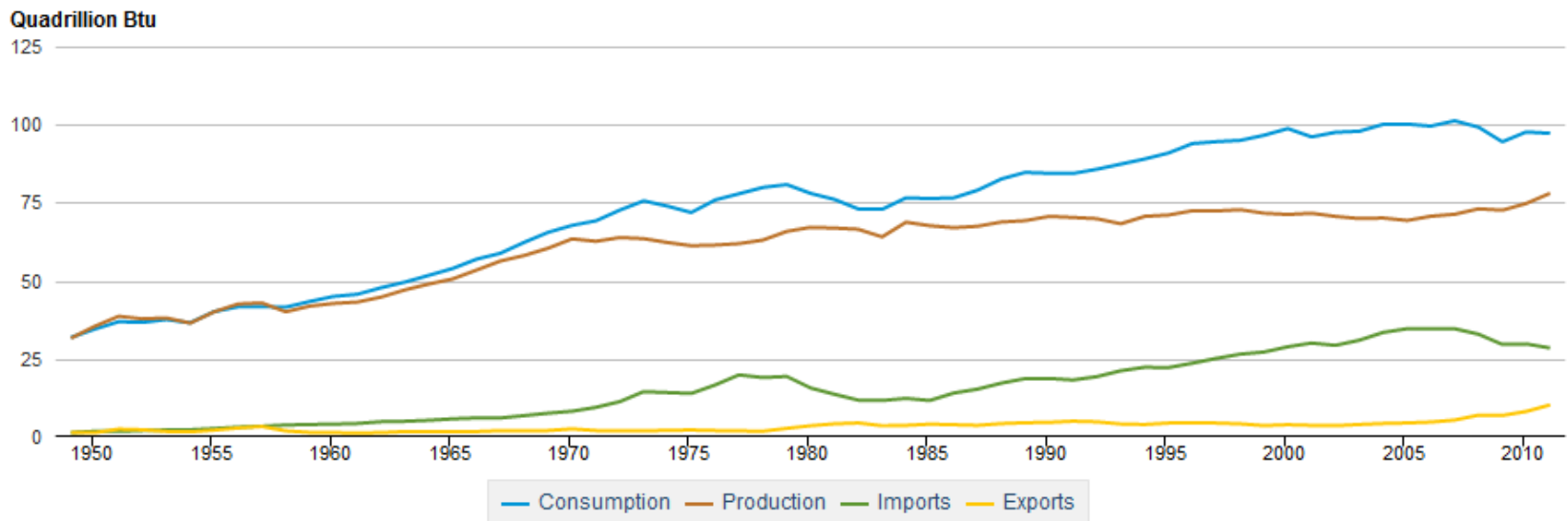
Winners

***“WHERE THERE’S MUCK,
THERE’S BRASS”***

Energy is a dirty business with huge profit potential

Current US Energy Balance

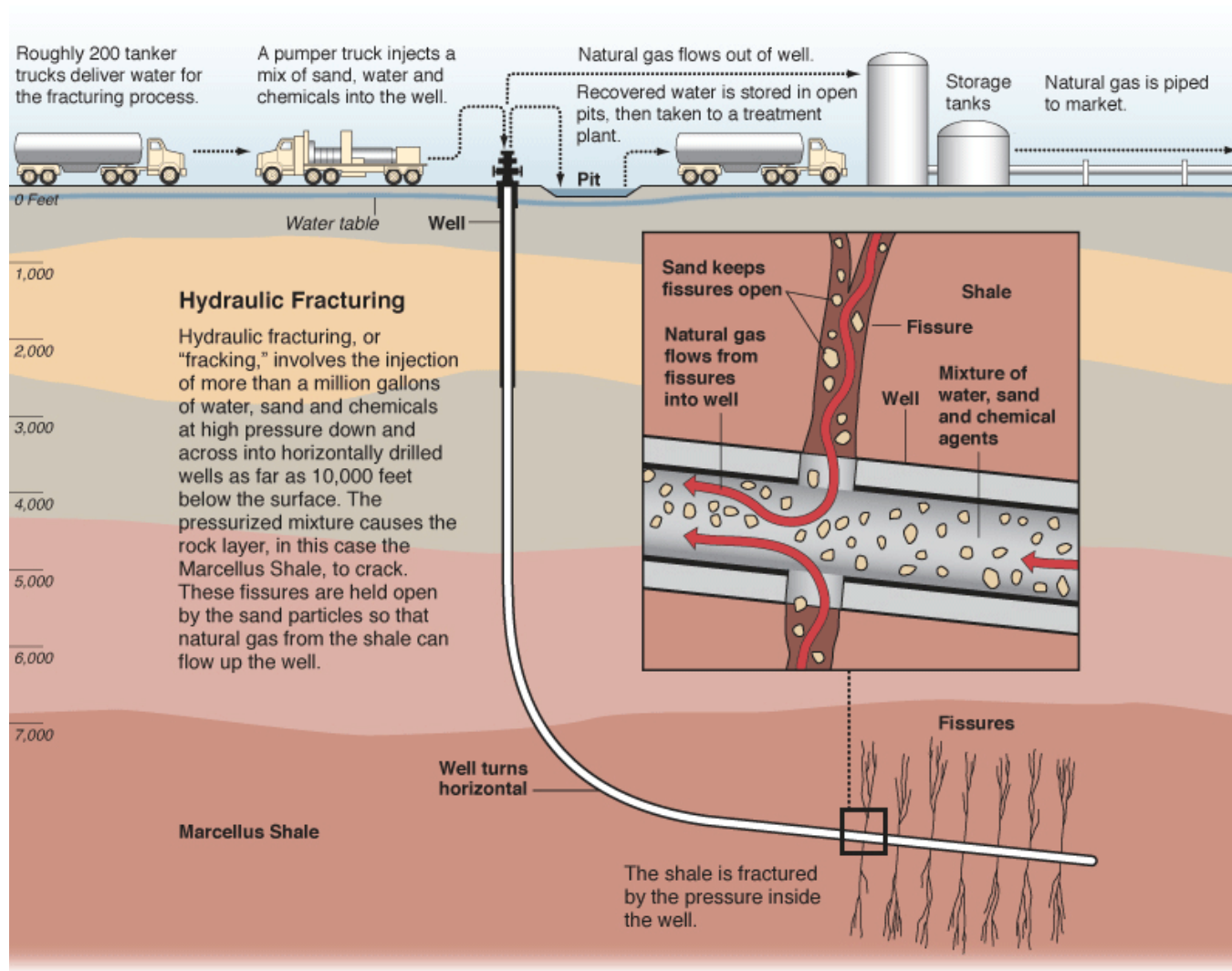
1. U.S. Primary Energy Production, Consumption, Imports, and Exports, 1949-2011



 U.S. Energy Information Administration, *Annual Energy Review*, Table 1.1.

The United States was self-sufficient in energy until the late 1950s when energy consumption began to outpace domestic production. At that point, the Nation began to import more energy to meet its needs. Since 2007, energy imports have declined each year, except for a slight increase in 2010. Most of the imported energy was petroleum. In 2011, net imports (imports minus exports) accounted for 19 percent of all primary energy consumed.

Hydro Fracking Introduction



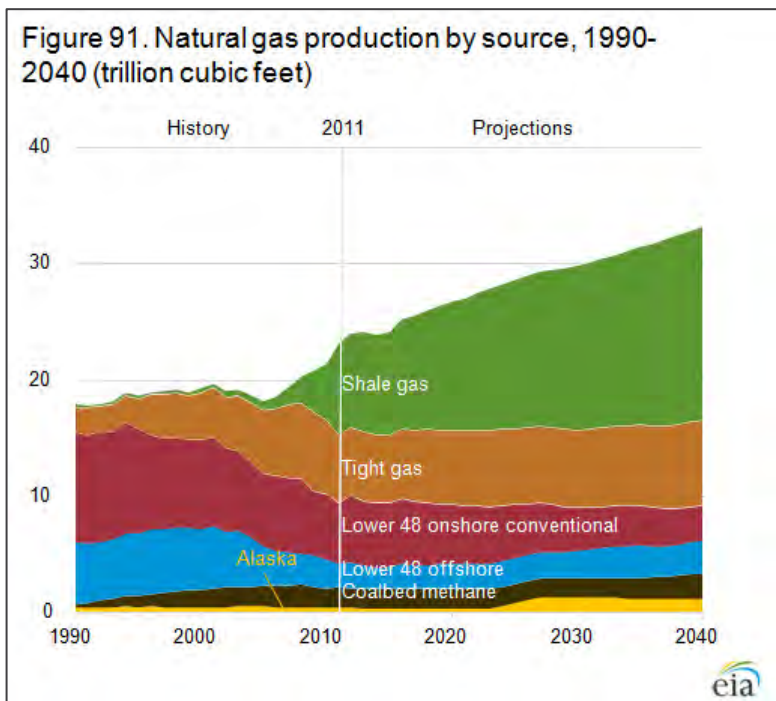
Graphic by Al Granberg

Keystone Pipeline



Impact of Fracking / Keystone Pipeline on US Energy Needs

U.S. Rep. Gene Green for Texas' 29th congressional district states, "The U.S. has consumed approximately 18 million barrels per day of petroleum products per year over the last 10 years. North American oil sands are a vital source of energy for the U.S. It is imperative for the U.S. to diversify its energy sources by exploring alternatives such as the oil sands in Canada."



Shale gas production, which grows by 113 percent from 2011 to 2040, is the greatest contributor to natural gas production growth. Its share of total production increases from 34 percent in 2011 to 50 percent in 2040.

Investment in US Energy Assets

Summary Table of Investments and Markets

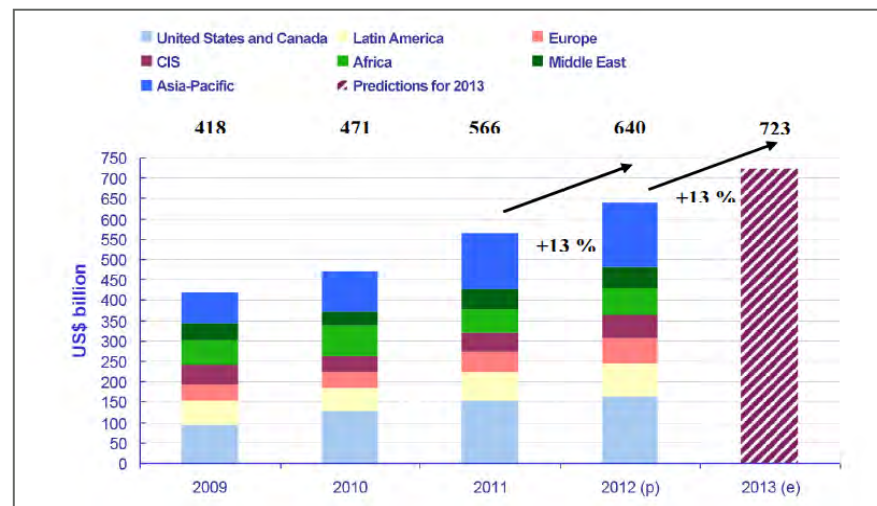
\$ billion	2011	2012
Global investments in E&P	566	640
North America	154	164
Rest of the world	412	476
Upstream markets analysed	271	311
Geophysical market	12	16
Drilling market (*)	210	240
of which		
Onshore drilling	25	28
Offshore drilling	39	44
Offshore construction market	49	55
Refinery investments	68	69
Investment spending	25	25
Maintenance spending	27	28
Catalyst and chemical spending	16	16

(*) Including equipment for servicing the wells

Sources:

- Upstream oil sector: IFPEN from
 - o global investments: Barclay's, DTI, NPD, DEA, figures published by various companies and States, IFPEN forecasts
 - o geophysical market: IHS Energy, First Break, Spears & Associates, IFPEN
 - o drilling market: Baker Hughes, IHS energy, Offshore Rig Locator, Spears & Associates, IFPEN
 - o offshore construction market: IHS energy, Spears & Associates, IFPEN
- Downstream oil sector: IFPEN from HPI Market data, IFPEN forecasts

Increased Global Investment in E&P

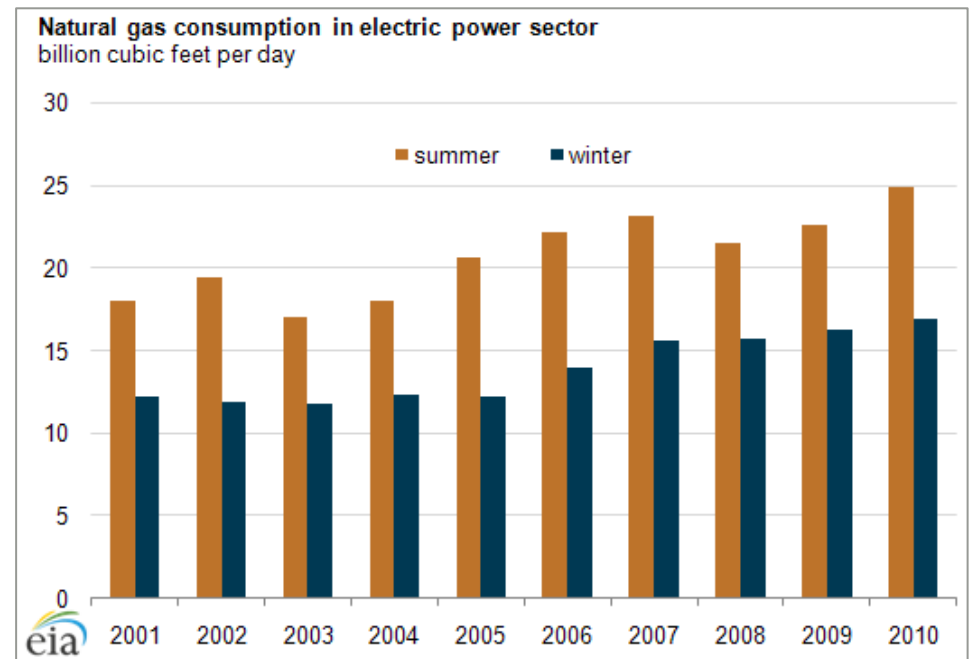
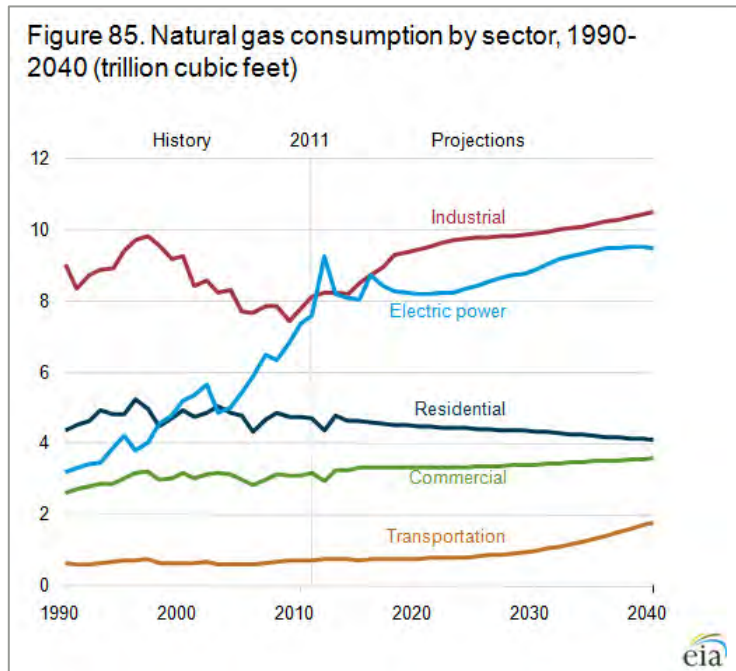


Impact on Pricing

Where are prices going?

Impact on Power Producers

Low natural gas prices have a tangible impact on power production, driving many producers of electricity away from coal and renewable resources and towards natural gas.



Winners and Losers

- Winner – midstream processors who need to handle the increase in production
- Losers – environmentalists (so long as there's no catastrophe)