



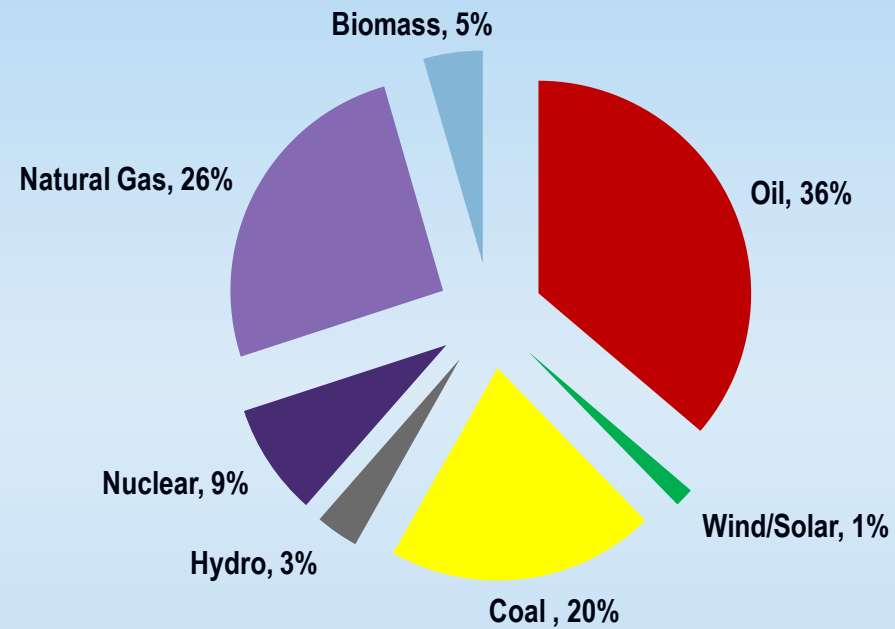
Oil & Natural Gas Production in Kansas Today

**Edward P. Cross, P.G., M.B.A.
President
Kansas Independent
Oil & Gas Association**

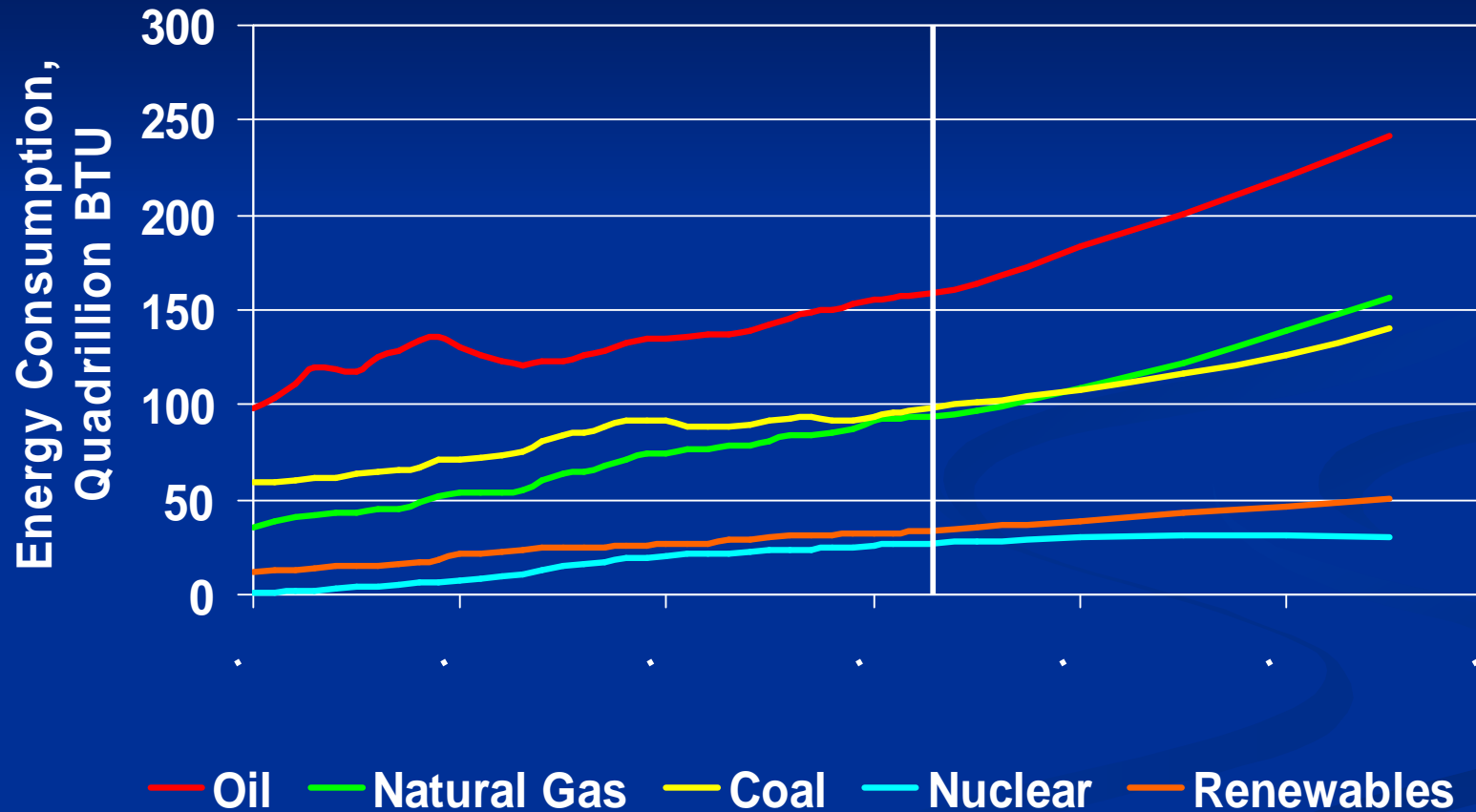
**Kansas House of Representatives
Energy & Environment Committee
Kansas State Capitol
Topeka, Kansas
January 29, 2013**

What Powers the U.S.

U.S. Energy Consumption by Source
Energy Information Administration AEO 2012



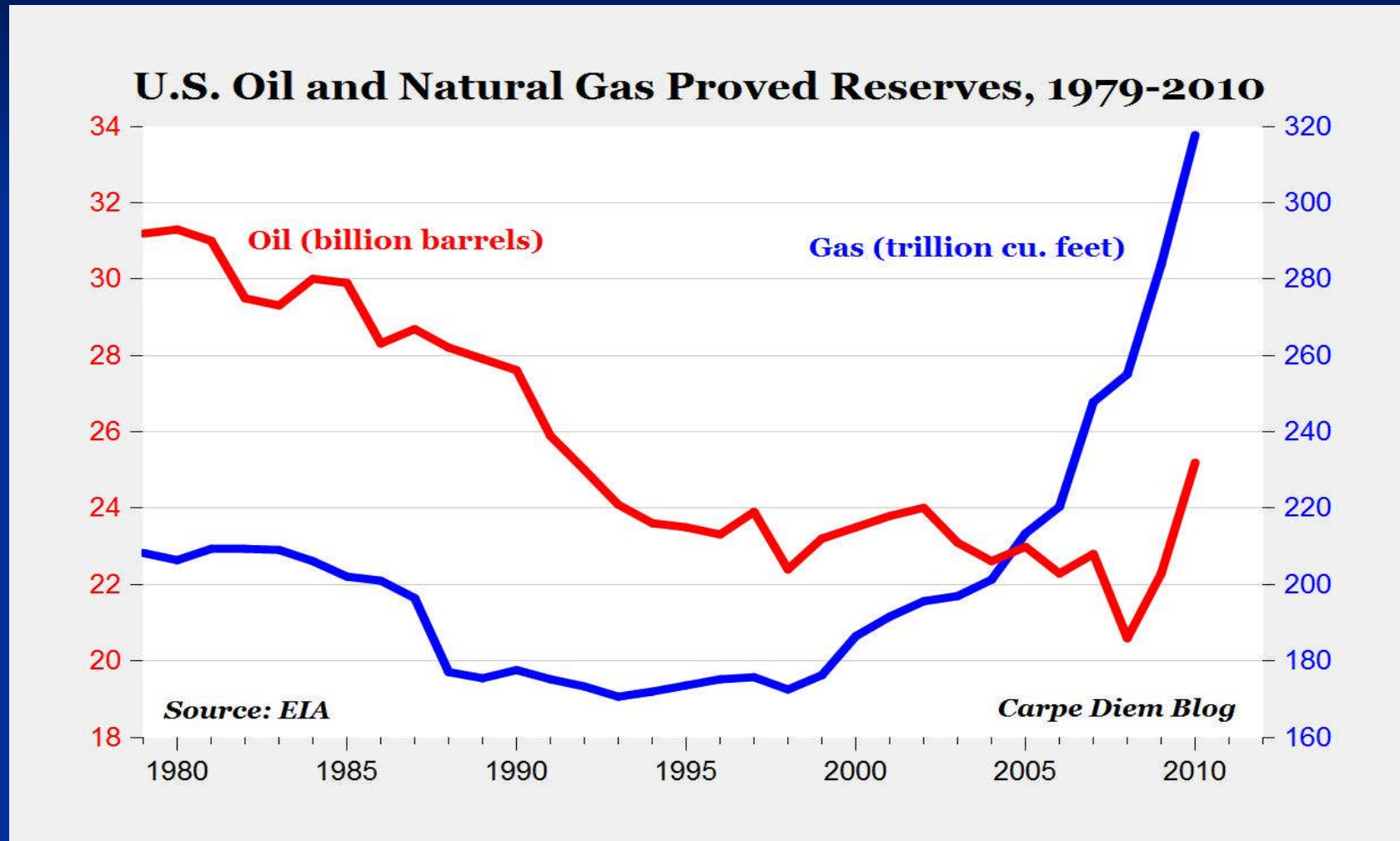
Despite Growth in Renewables, World Consumption of Oil and Gas Will Continue to Increase



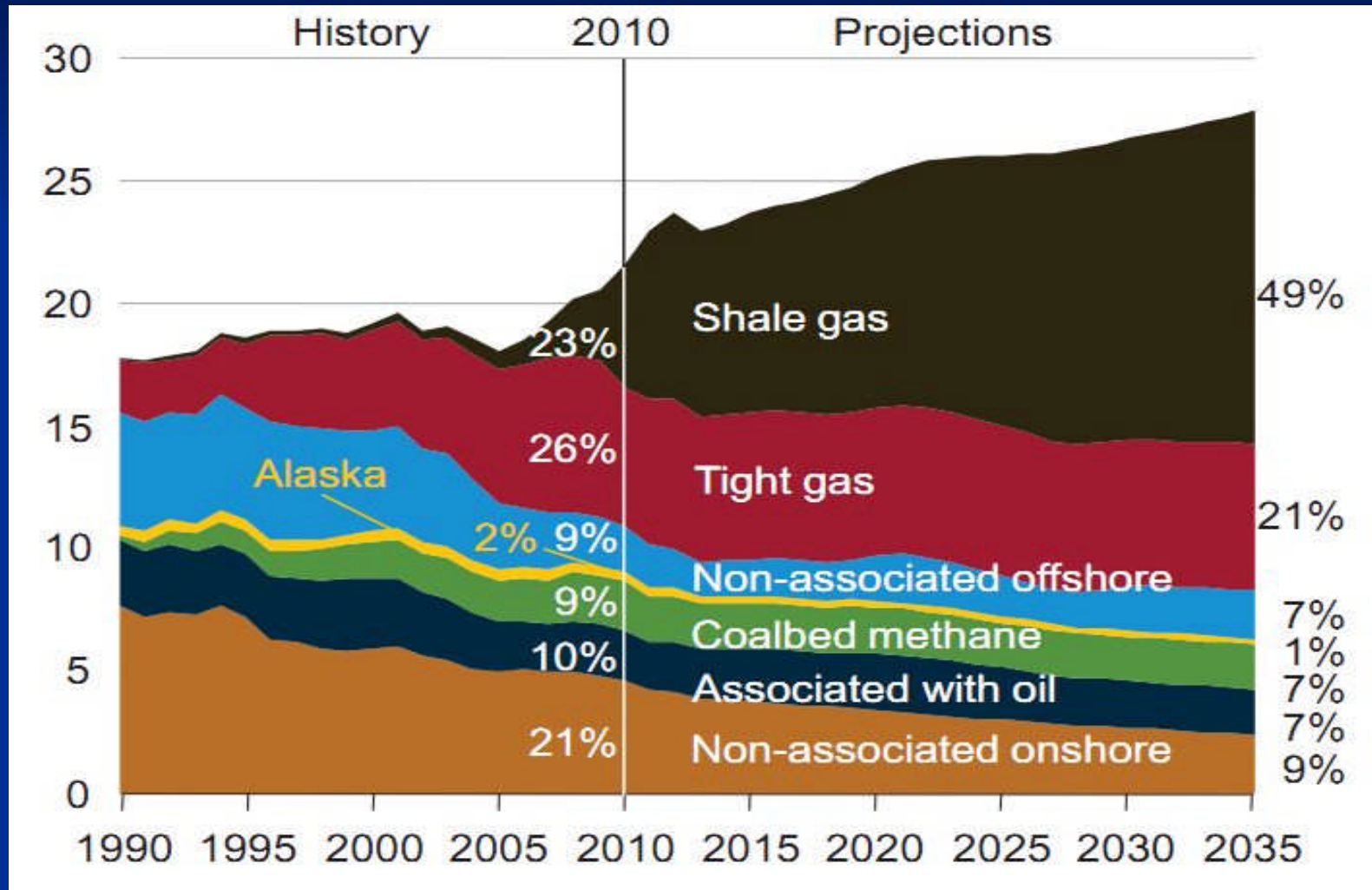
Source: EIA, International Energy Outlook, 2012

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Are we about to enter the age of fossil fuels?

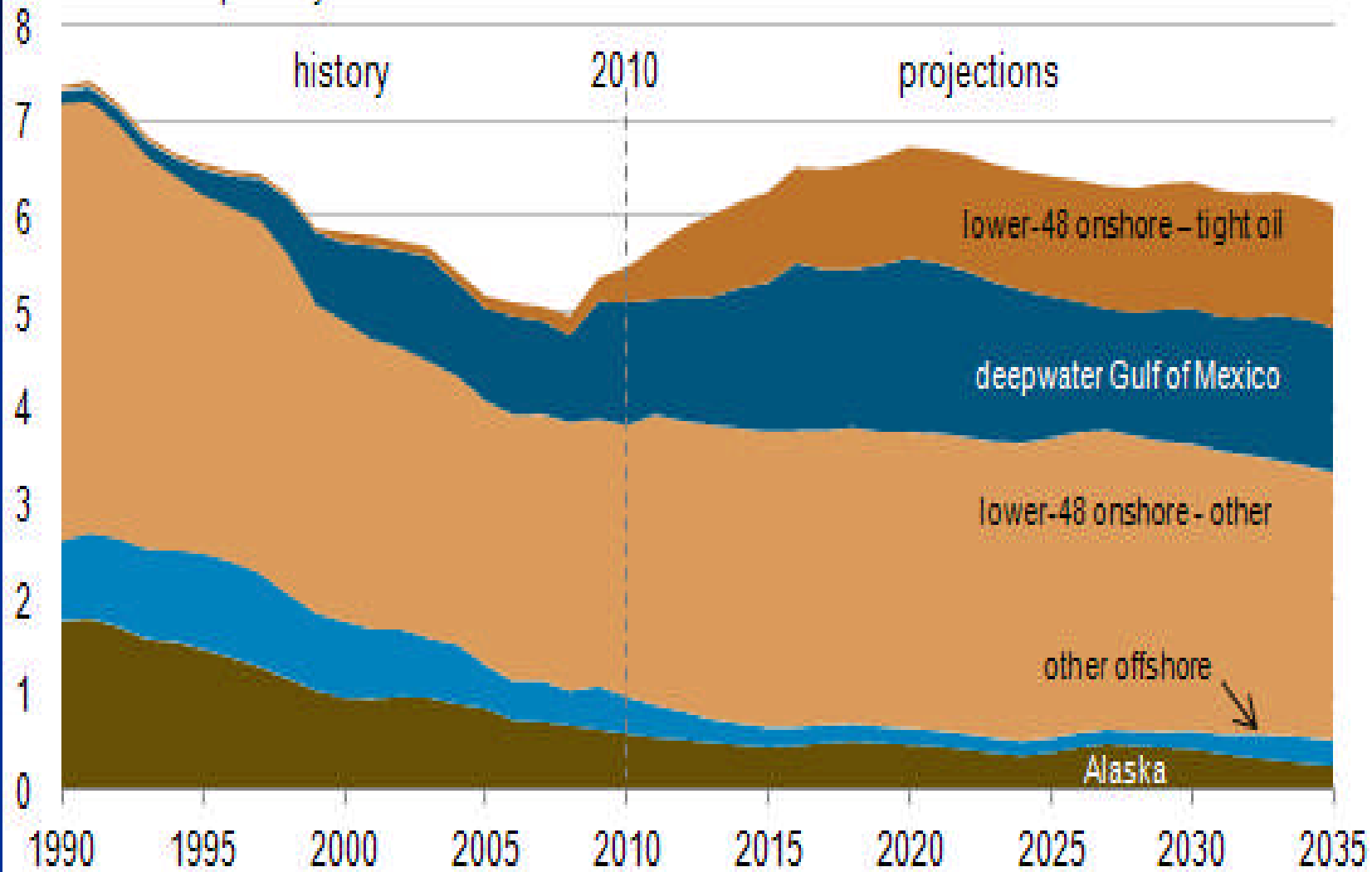


U.S. Natural Gas Production 1990-2035



U.S. crude oil production

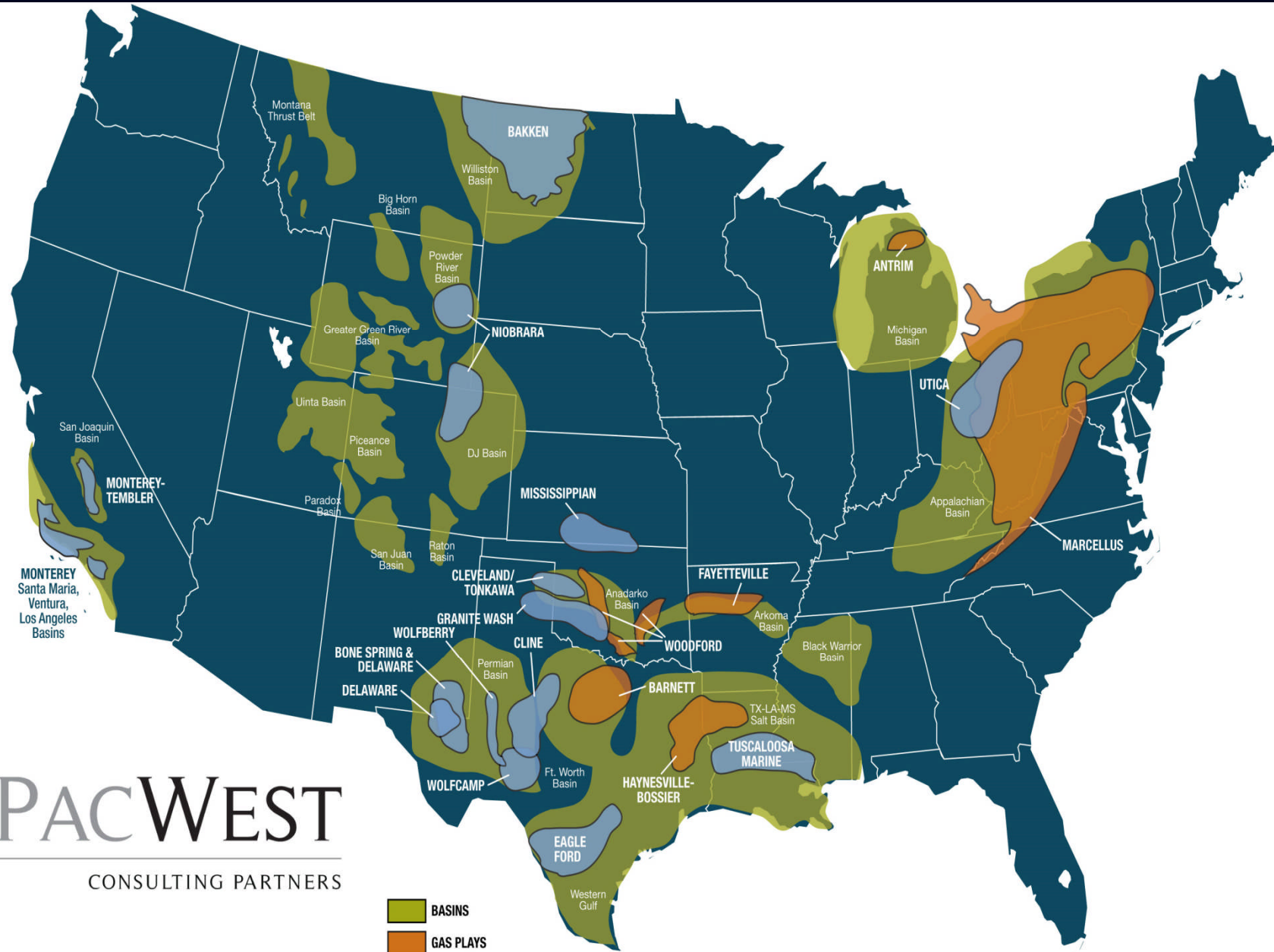
million barrels per day



CRAMER'S *TOP ENERGY PLAYS*



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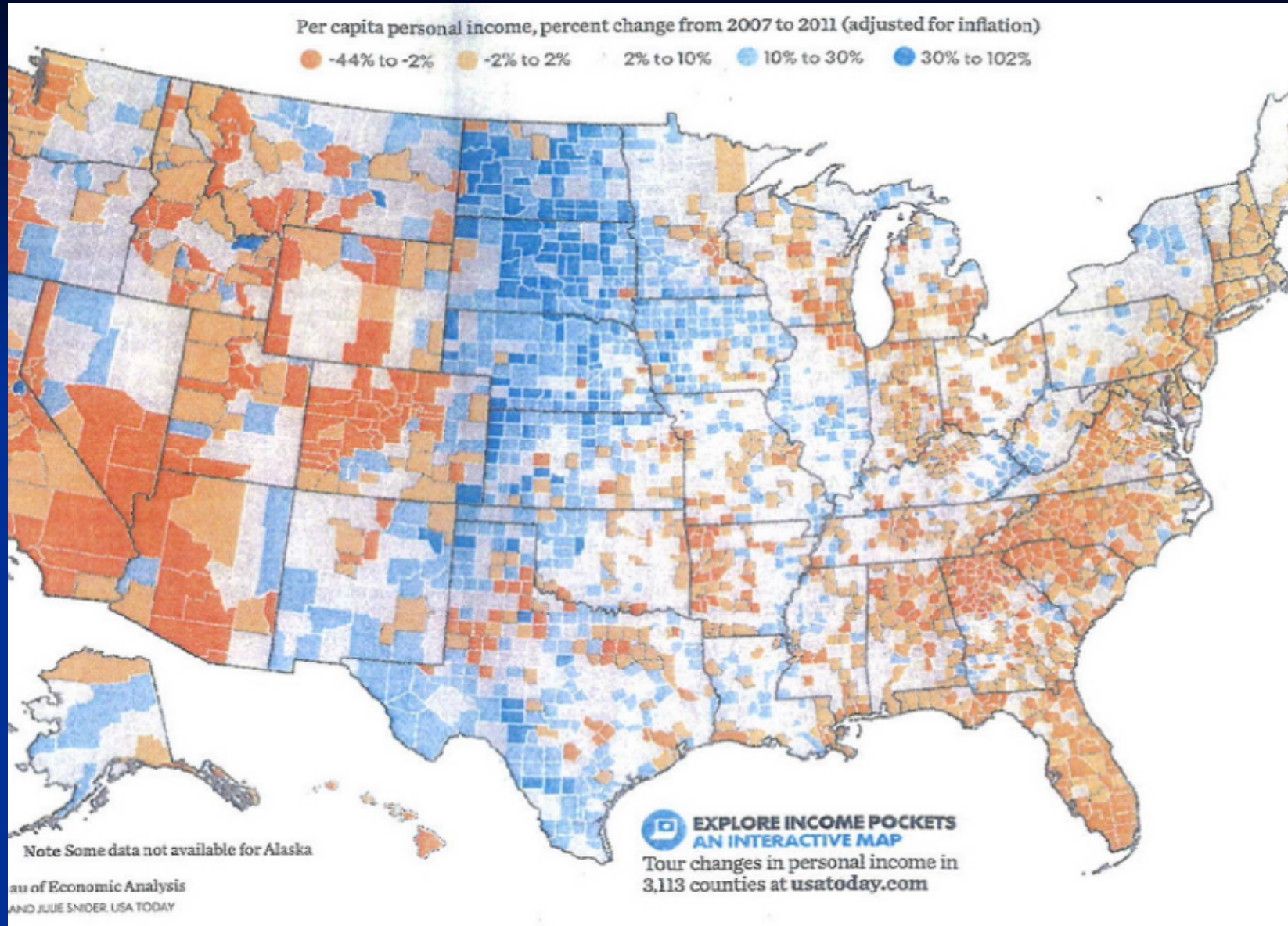
PW PACWEST
CONSULTING PARTNERS

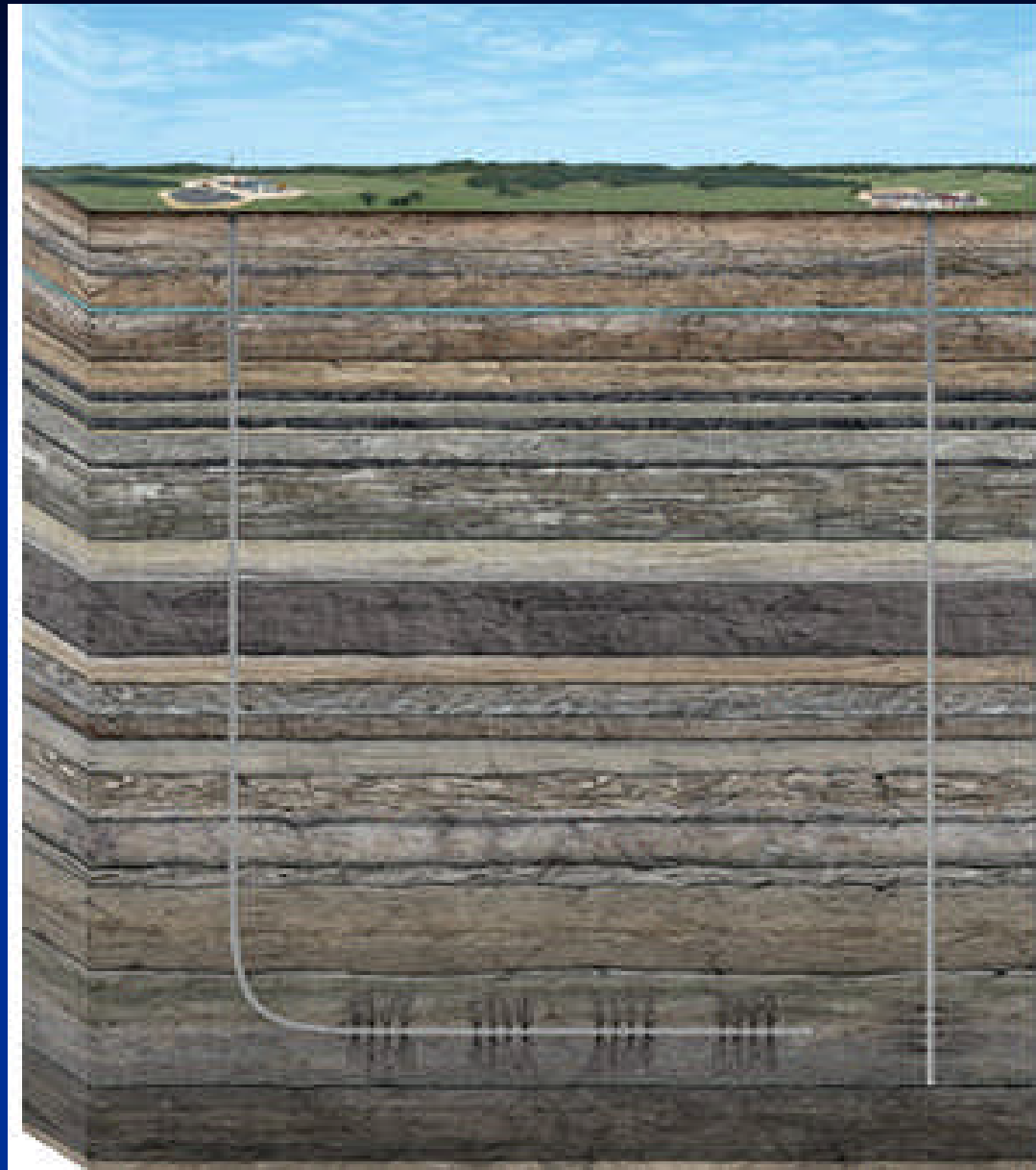
- BASINS
- GAS PLAYS
- OIL/LIQUIDS PLAYS

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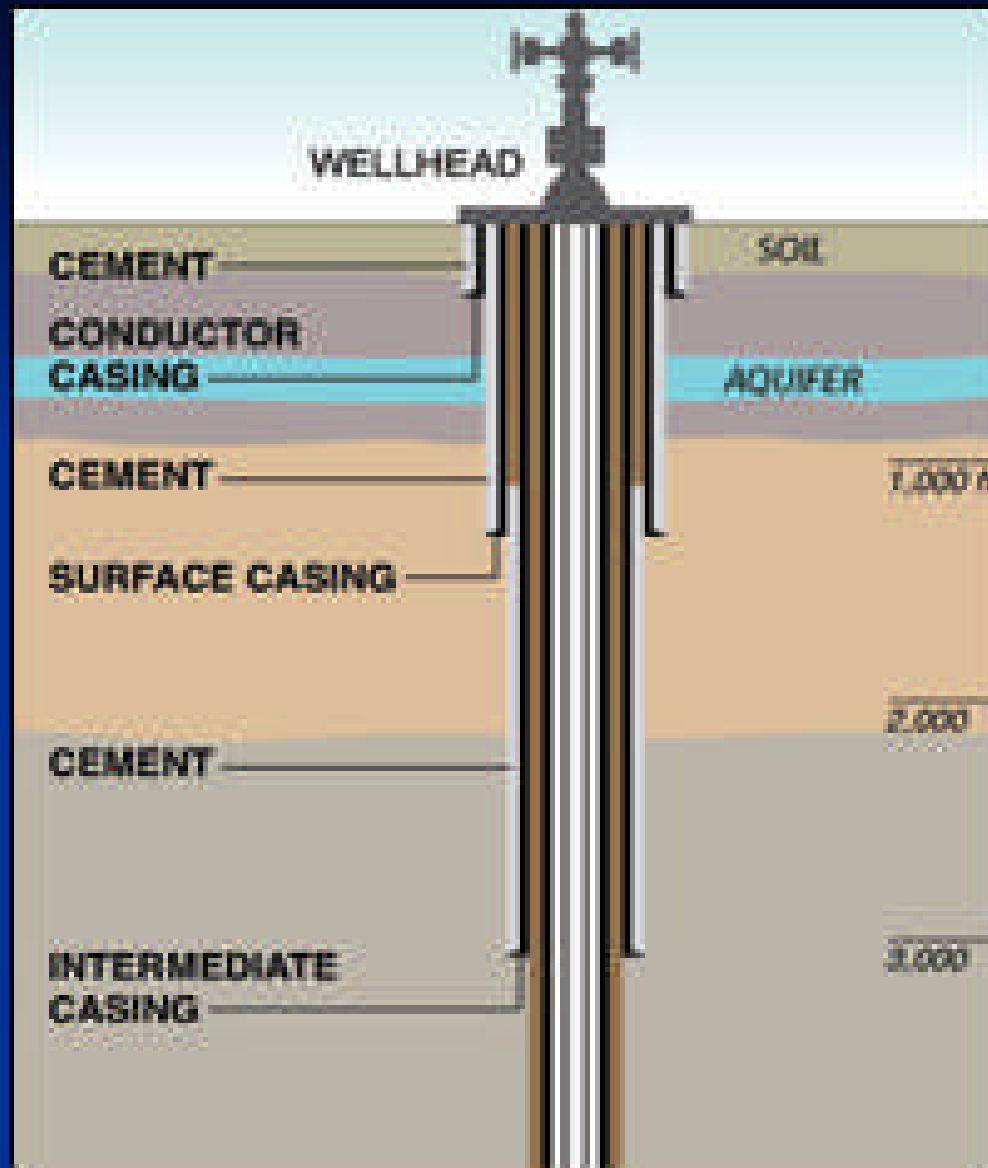
U.S. Oil and Gas Jobs Jan. 1989 to July 2012







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What is Marginal Oil & Gas

- Lower edge of profitability
 - High Cost
 - Low Yield
- 10 barrels of oil per day or less
- 60 thousand cubic feet (Mcf) of natural gas per day or less



Who are Independents?

- Small Businesses
- Drill and produce crude oil and natural gas
- Not integrated
 - Sell crude and natural gas to purchasers
 - Do not generate and market end-products

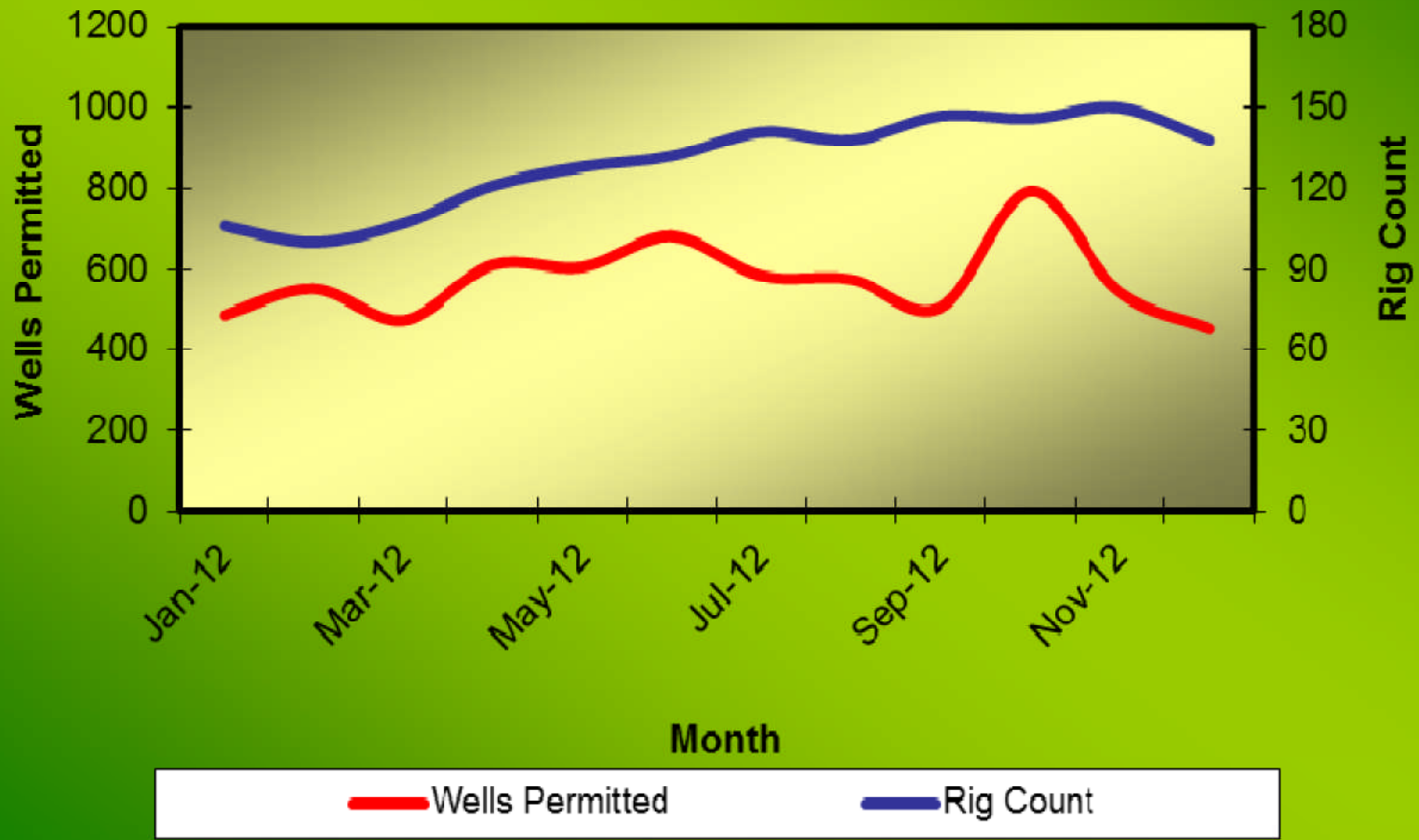


Kansas Oil & Gas Industry Statistics

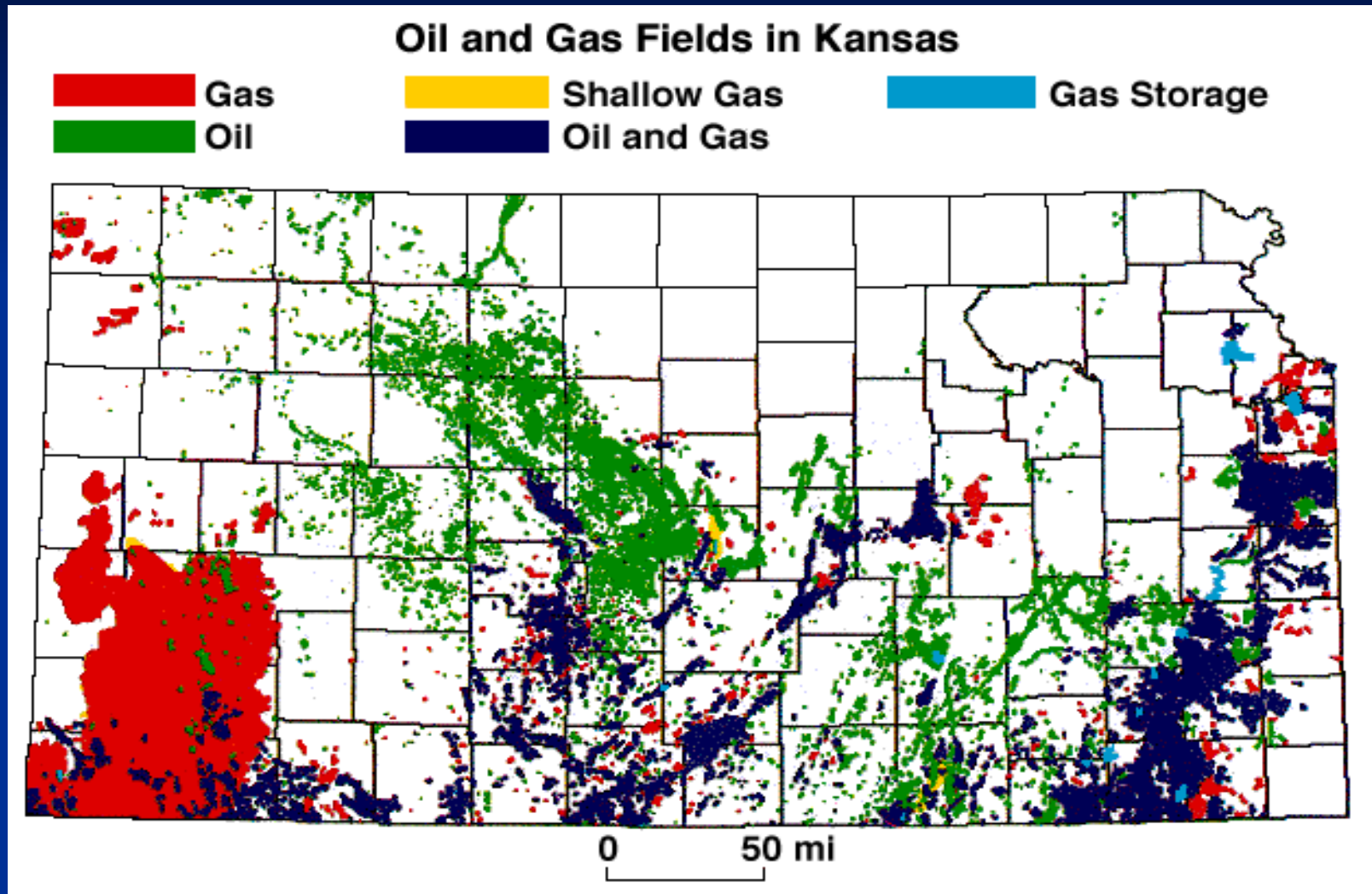
- First Oil Well = 1860
 - Miami County
- First Natural Gas Well = 1873
 - Montgomery County
- Current # of Oil Wells = 40,850
- Current # of Gas Wells = 18,639
- Current # of Injection Wells = 15,428
- Current Total # of Wells = 74,654
- Current # of Operators = 2,113
- Current Oil Production
 - 43.2 Million Barrels Annually
 - 118,000 Barrels per Day
 - Increased 6 of last 7 years
 - Up 4.21% in 2012
 - Ranked 9th Among 31 Oil Producing States
- Current Natural Gas Production
 - 298 Billion Cubic Feet Annually
 - 820 million Cubic Feet per Day
 - Ranked 9th Among the 32 Natural Gas Producing States
- Drilling Permits Issued in 2012 = **6,861**
 - Permits Issued in 2011 = 5,441
- Number of Active Drilling Rigs = 117

Kansas Oil & Gas Industry Activity

Wells Permitted vs. Kansas Rig Count



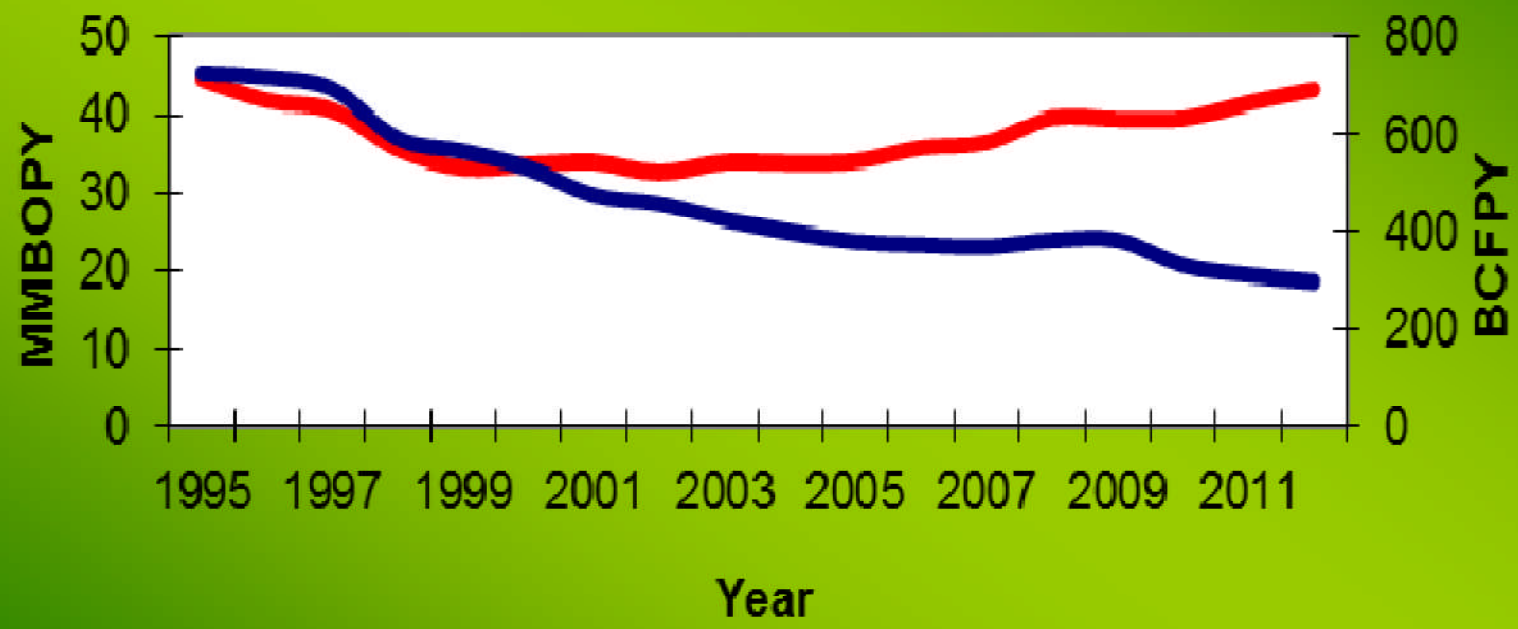
Kansas Oil & Gas Fields



Kansas Oil & Gas Industry Statistics

- Supports 67,000 Kansas Jobs and \$3 billion in family income
- Invests over \$1 billion in rural Kansas annually
- Average Daily Oil Well Production = 2.79 BOPD
 - 72% of Total Kansas Crude Oil Production from Marginal Wells
 - 94% of Total Kansas Oil Wells
- Average Daily Natural Gas Well Production = 46 Mcf/Day
 - 74% of Total Kansas Natural Gas Production from Marginal Wells
 - 81% of Total Kansas Natural Gas Wells

Kansas Oil & Natural Gas Production 1995 - 2012

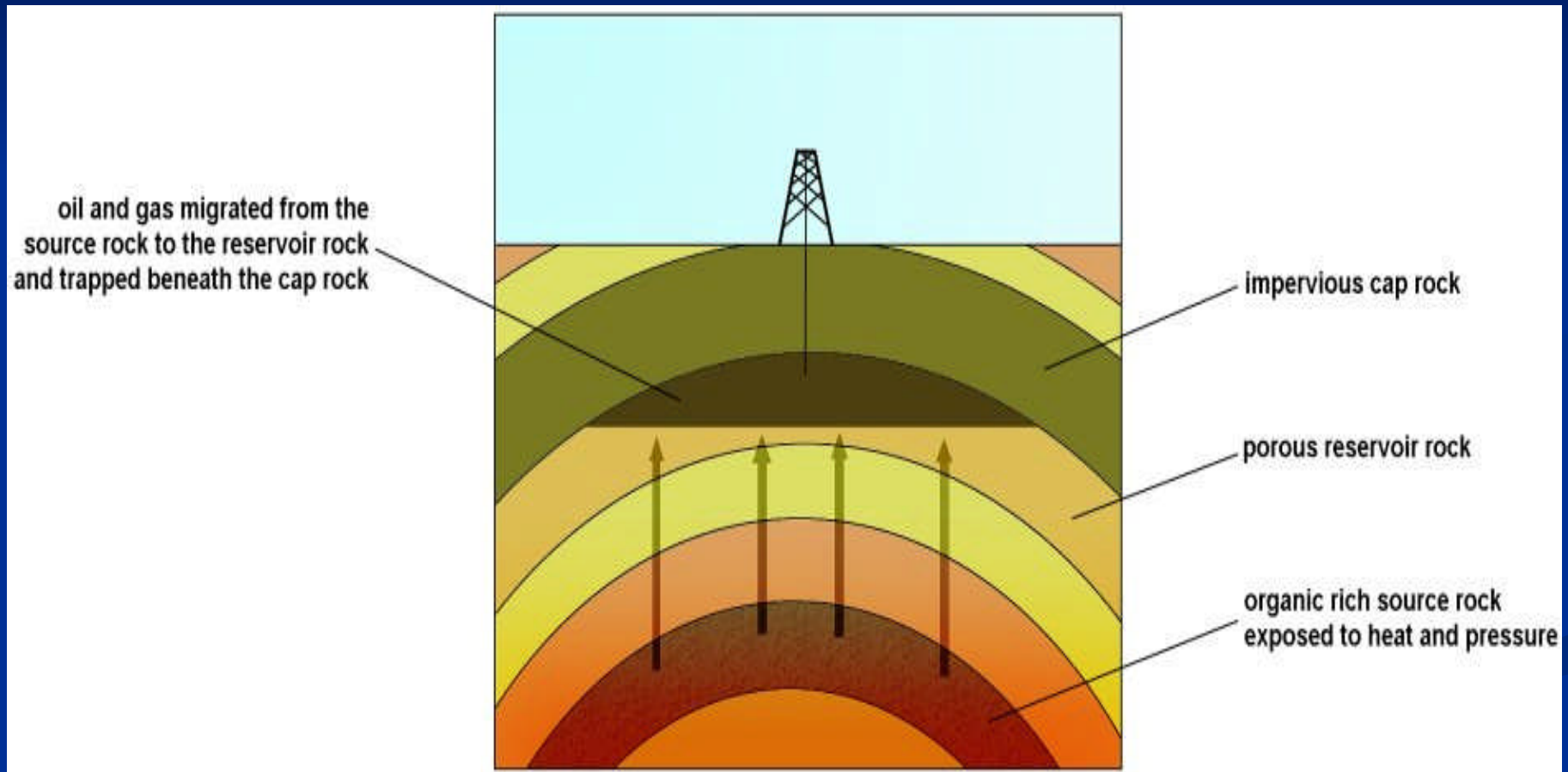


— Crude Oil Production — Natural Gas Production

Kansas Oil & Gas Industry Taxation

- Severance Tax up nearly 146% since 2002
 - Oil tax collections up 211% over last 3 years
- Ad Valorem Tax up 138% since 2002
 - Oil tax collections up 57% over last 3 years
- Average effective tax rate = 13.93%
 - Reduce ROI by 26.5%

Conventional Oil & Gas Development



Conventional Well Drilling

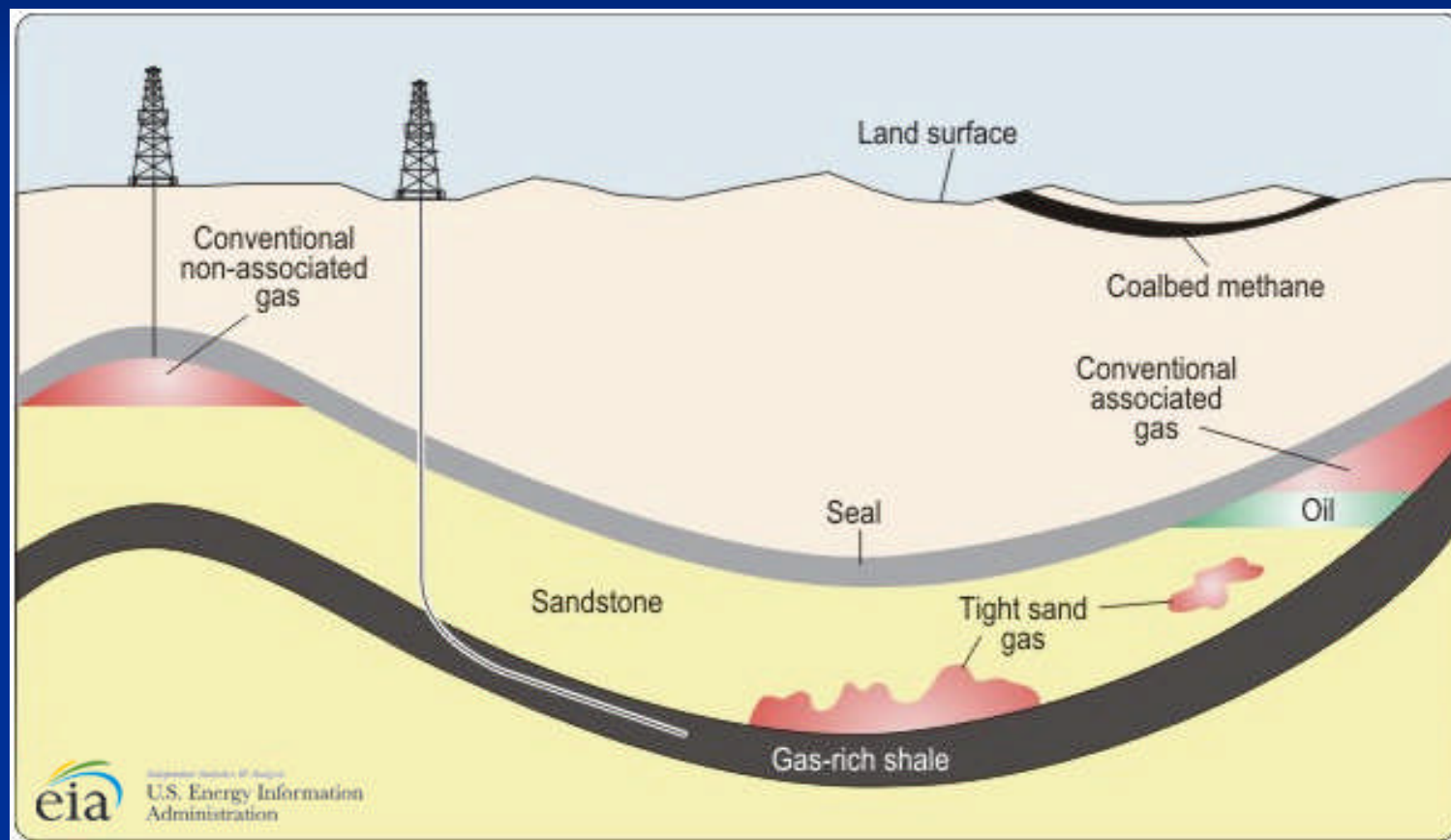
Hodgeman County, Kansas October 17, 2012



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Unconventional Plays

- Reservoir - seal - and source rock are all one in the same



Unconventional Well Drilling

Dunn County, North Dakota, October 11, 2012



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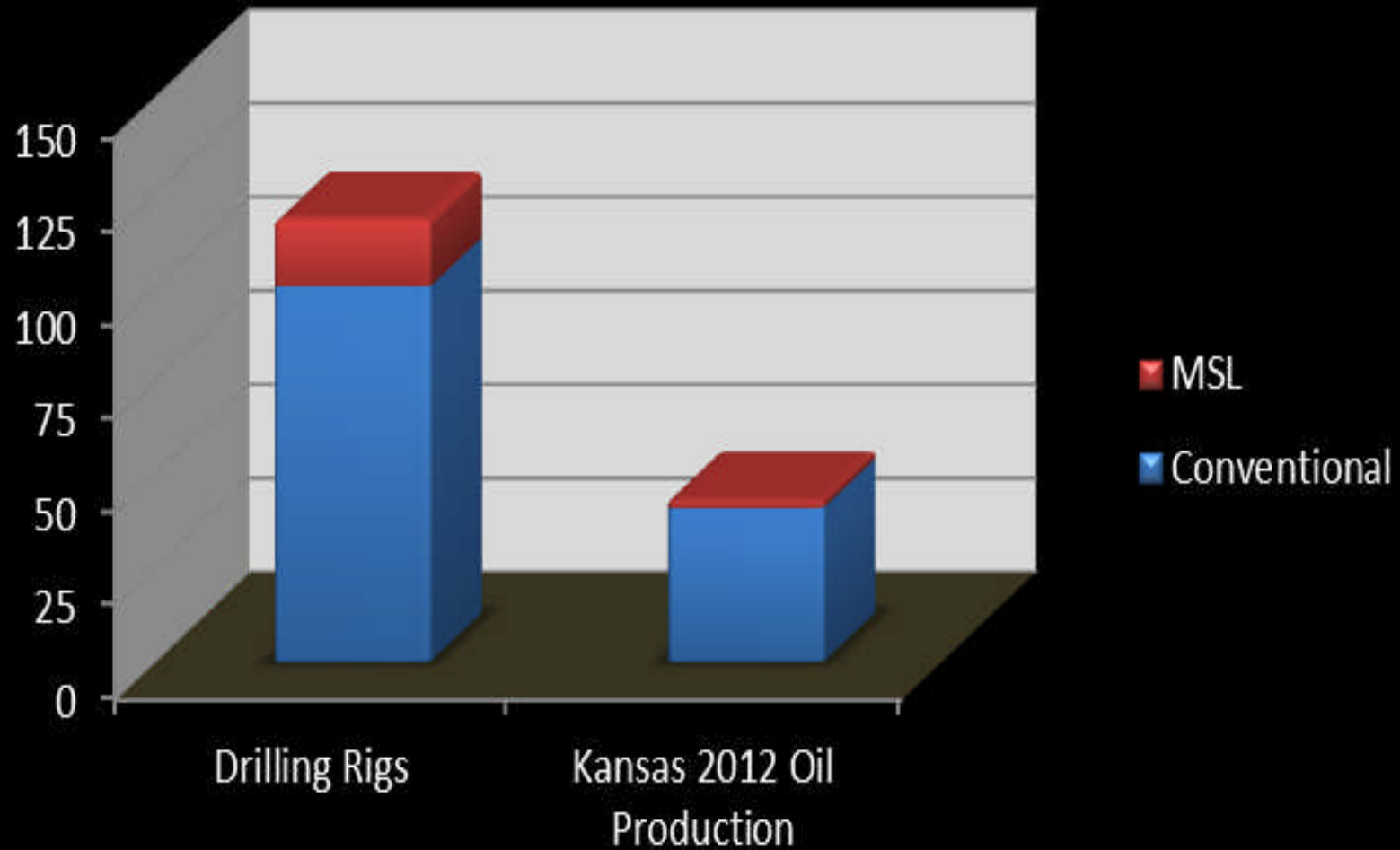
Mississippian Limestone Play

- One of newest oil plays in U.S.
- Emerging Play
 - Northern OK and southern KS
 - \$1.2 - \$1.5 billion Capex plans
 - 270-500 BOE per day in first 30 days
 - \$3 - \$3.5 million drilling & completion costs
 - 4,500 feet vertical and 4,500 feet lateral

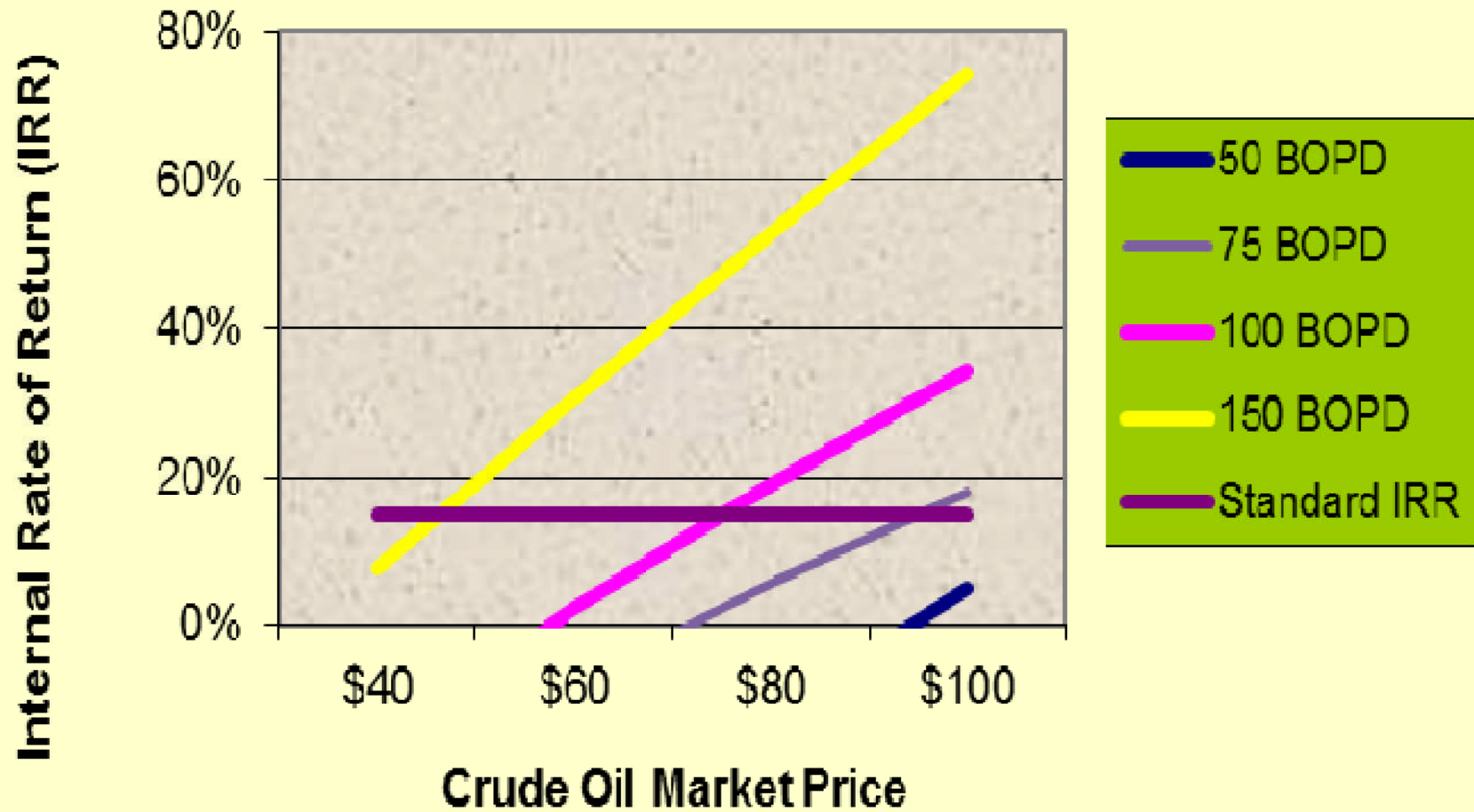
Mississippian Limestone Play

- 292 MSL Permits issued in 2012
 - 69 producing
 - 54 drilled
 - 95 spudded
- 124 MSL horizontal wells drilled and producing in 2011-2012
- Accounted for nearly 4% of state's total 2012 oil production

Kansas 2012 Oil & Gas Activity



MSL Production Valuation



Key Challenges Facing the Kansas Oil & Gas Industry

- Federal Tax Provisions are Critical
 - Repealing oil & gas tax provisions would result in \$3.9 billion negative impact on the Kansas economy
 - Reduces Kansas jobs
 - Increases dependence on foreign energy supplies
- Regulatory Over-reach
 - Hydraulic fracturing
 - 65-year old technology
 - Aply and aggressively regulated by States
 - Industry under siege from numerous federal regulatory agencies
 - EPA ~ OSHA ~ USFWS ~ Others

Key Challenges for MSL Development

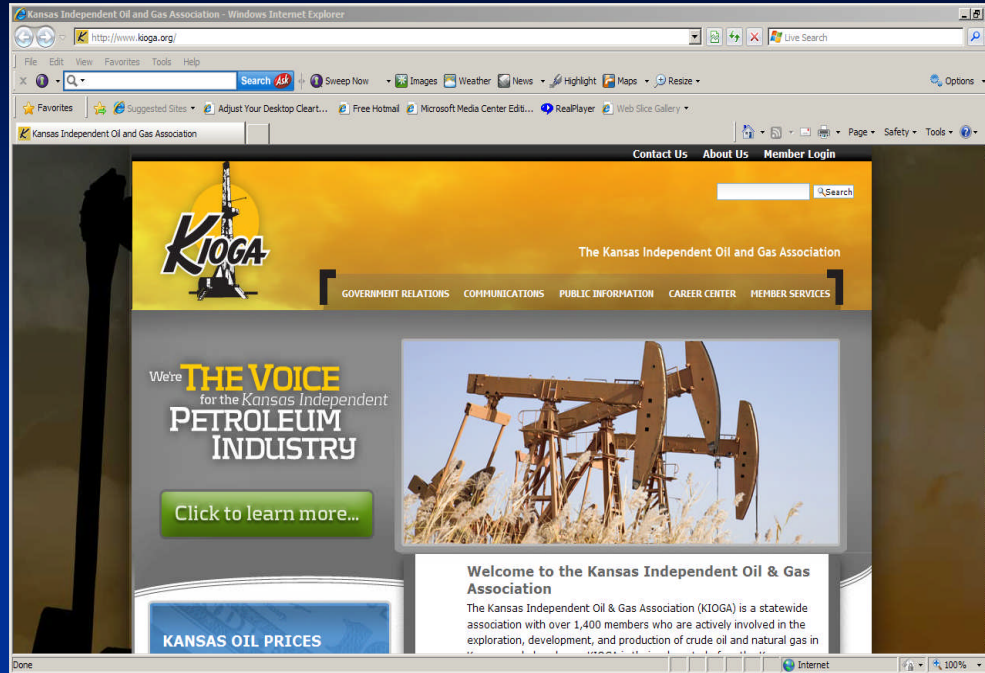
- Geology
- Water
- Electricity
- Oil Prices

Energy for the Future



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Thank You



www.kioga.org

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