

STATE OF THE OIL & GAS INDUSTRY

DYNAMIC CHALLENGES FACING KANSAS OIL & GAS INDUSTRY

Edward Cross, P.G., M.B.A.

President

Kansas Independent Oil & Gas Association

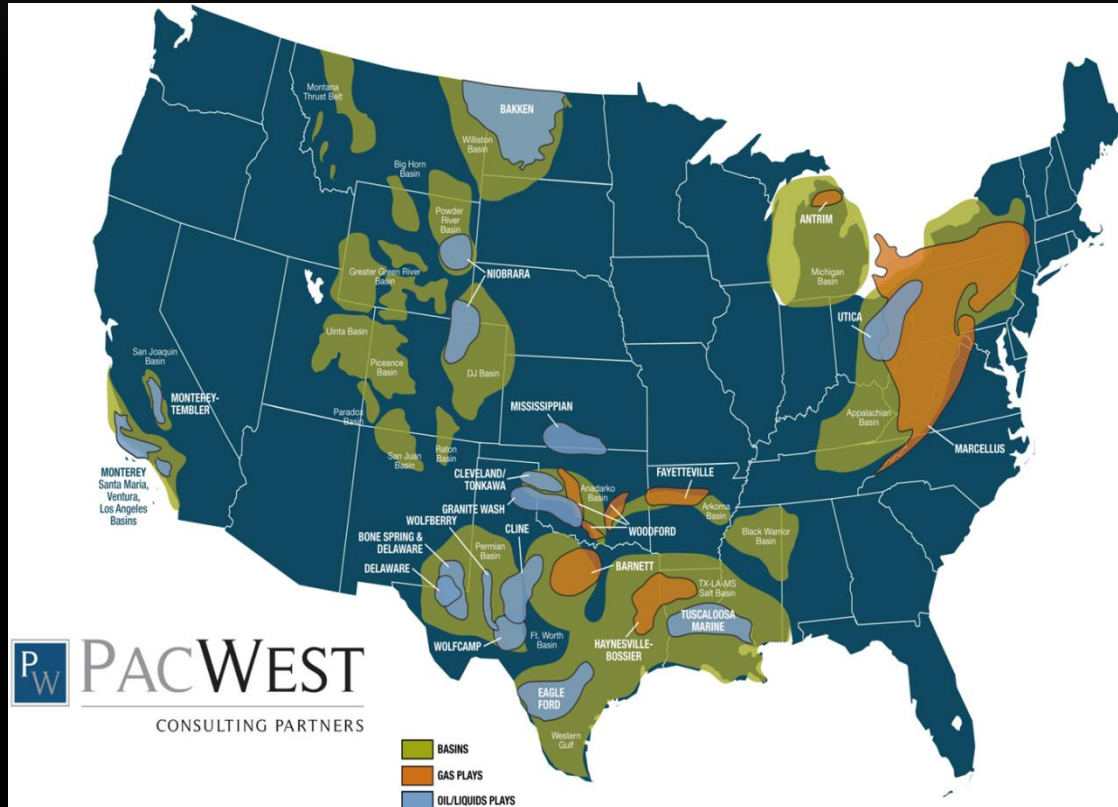
Kansas House Energy, Utilities, & Telecommunications Committee

Kansas State Capitol Room 582-N

Topeka, Kansas

January 25, 2017

AMERICAN ENERGY RENAISSANCE



CRUDE OIL MARKET DYNAMICS SINCE MID-2014

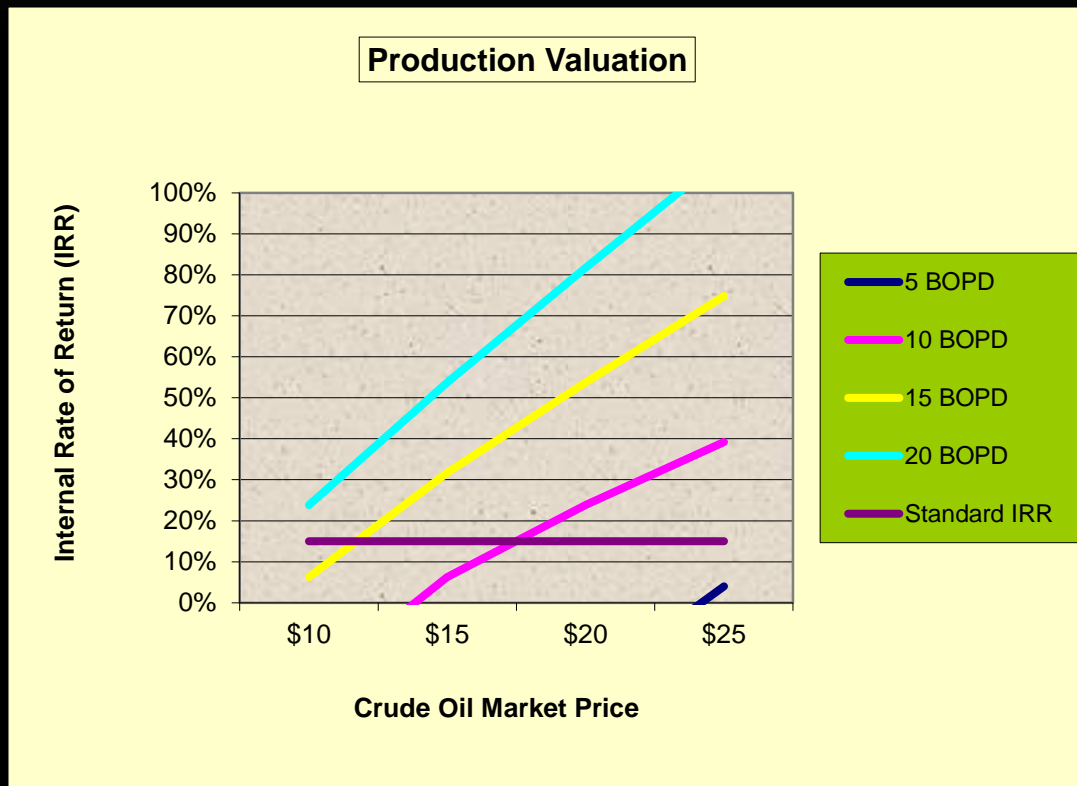
- Oversupply
 - U.S. Oil Production
 - OPEC Dump Low-Cost Oil on Market
 - Deceleration of Demand Growth
 - Strong U.S. Dollar
 - Oil Demand Remains Inelastic
 - World Oil Supply becoming Increasingly Inelastic
-

CRUDE OIL MARKET STRUCTURE

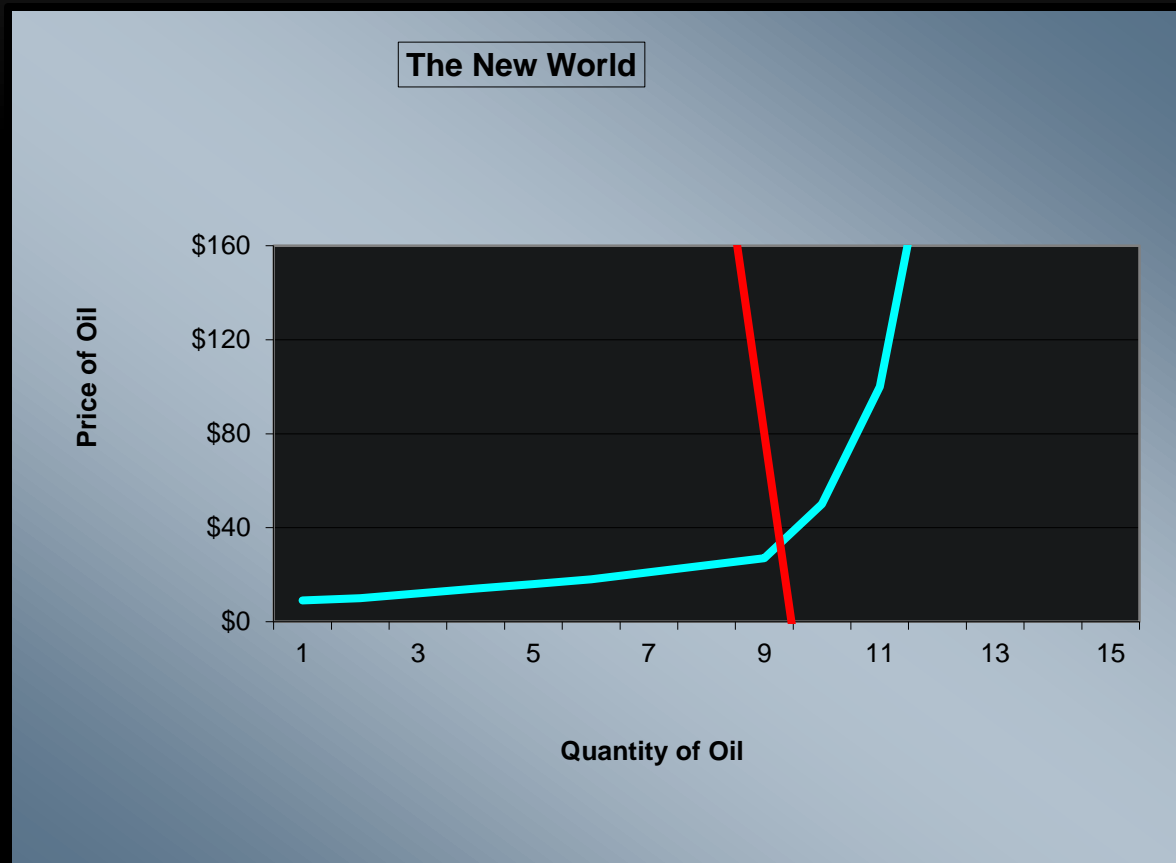
- Oligopoly
 - OPEC Cartel Collude to Influence Market Price
 - U.S. Producers are Perfect Competitors
 - Price-Takers Not Price-Makers
 - Cost Structure Optimization Determines Profit
-

CAPITAL BUDGETING DECISIONS

- Generalized Internal Rate of Return Discounted Cash Flow Analyses



SUPPLY LEVERAGE DIMINISHING



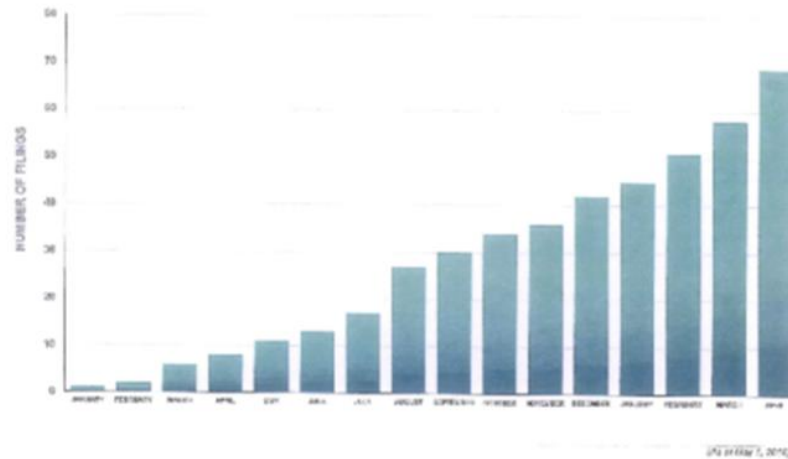
IMPACT OF OIL PRICE COLLAPSE ON OIL INDUSTRY NATIONALLY

- Capex Cuts
 - \$61.2 billion in 2015
 - \$89.6 billion in 2016
 - Layoffs
 - 250,000 Direct Industry Layoffs
 - 1 million Indirect Industry Layoffs
 - Rapid Decline of Domestic Rig Count
 - Declined by 62% in 2015
-

OIL & GAS INDUSTRY BANKRUPTCIES

2015-2016 CUMULATIVE NORTH AMERICAN E&P BANKRUPTCY FILINGS

HAYNES AND BOONE OIL PATCH BANKRUPTCY MONITOR



JUNE 2016, 2016



HAYNES AND BOONE, LLP
OIL PATCH BANKRUPTCY MONITOR

IMPACT OF OIL PRICE COLLAPSE ON KANSAS OIL INDUSTRY

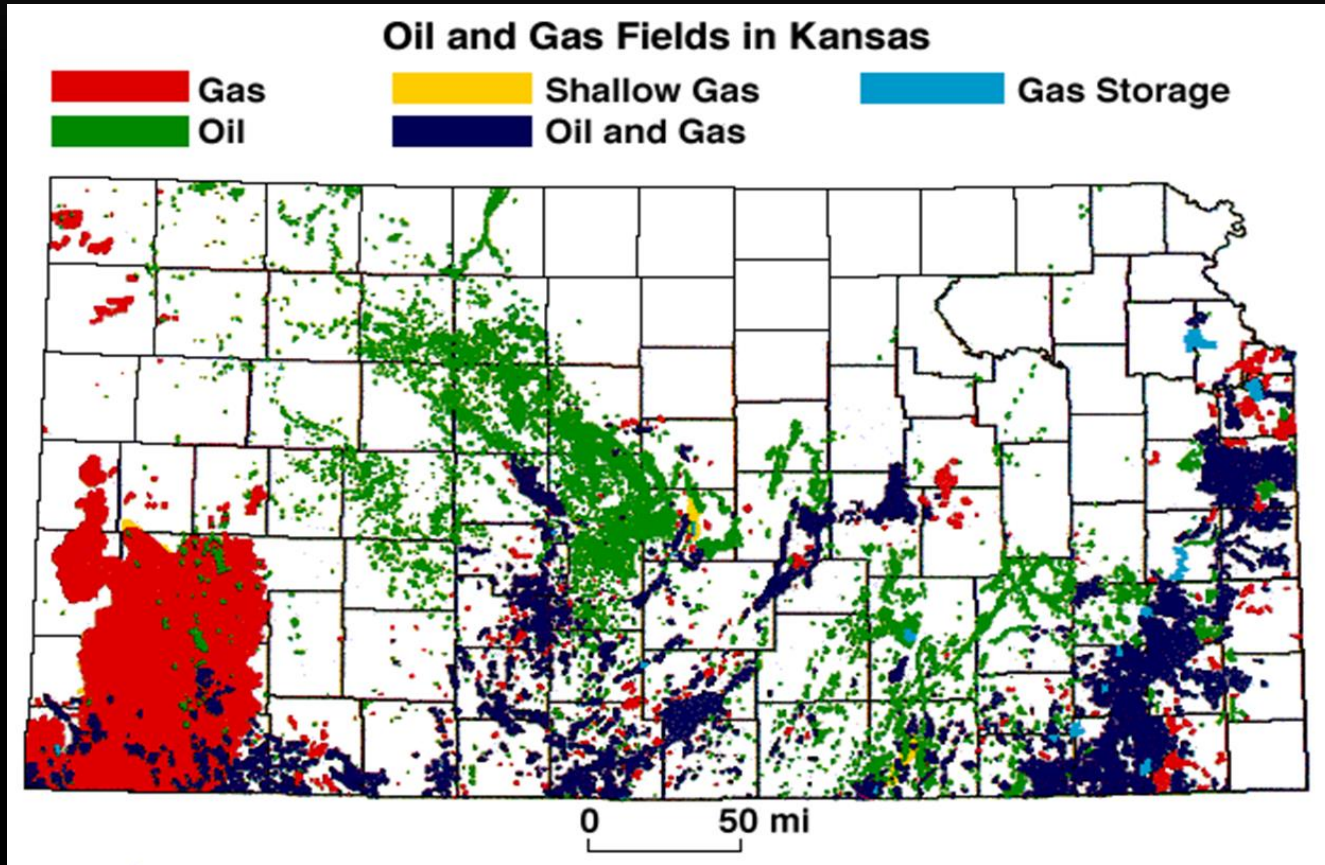
- Cut Capex by 75% - 80% in 2016
 - \$300 million in 2016 (\$1.3 Billion in 2014)
- Deferred Well Completions & High-Cost Wells Temporarily Shut-In
 - Royalty Payments Dropped by \$400 million in 2016
- Layoffs
 - 20% - 30% in Production Sector
 - 55% - 60% in Service Sector
 - 3,100 Direct Industry Layoffs
 - 3,000 Indirect Industry Layoffs
 - Loss of \$341 million in Family Income
- Reduced Activity
 - 50% Drop in Permits in 2016
 - 67% Drop in Permits in 2015
 - 40% Drop in Rig Count in 2016
 - 60% Drop in Rig Count in 2015

WHO ARE INDEPENDENTS?

- Small Businesses
- Drill & Produce Crude Oil and Natural Gas
- Not Integrated
 - Sell Crude Oil and Natural Gas to Purchasers
 - Do Not Generate End-Products



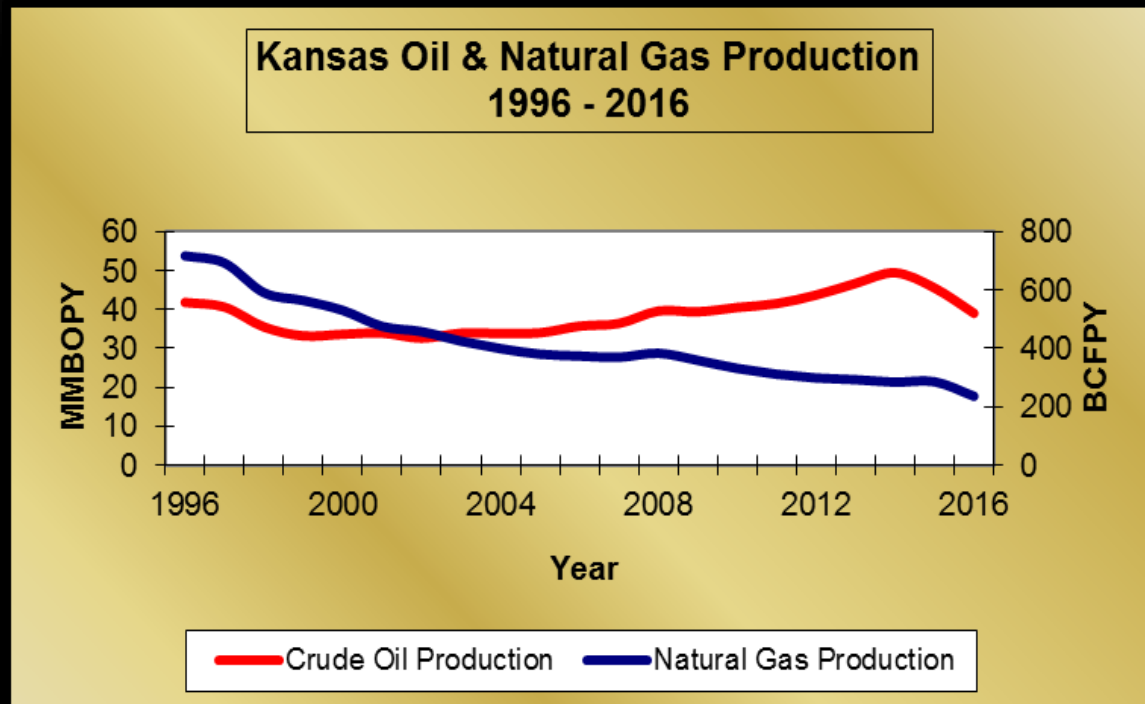
KANSAS OIL & NATURAL GAS PRODUCTION



KANSAS OIL & NATURAL GAS DYNAMICS

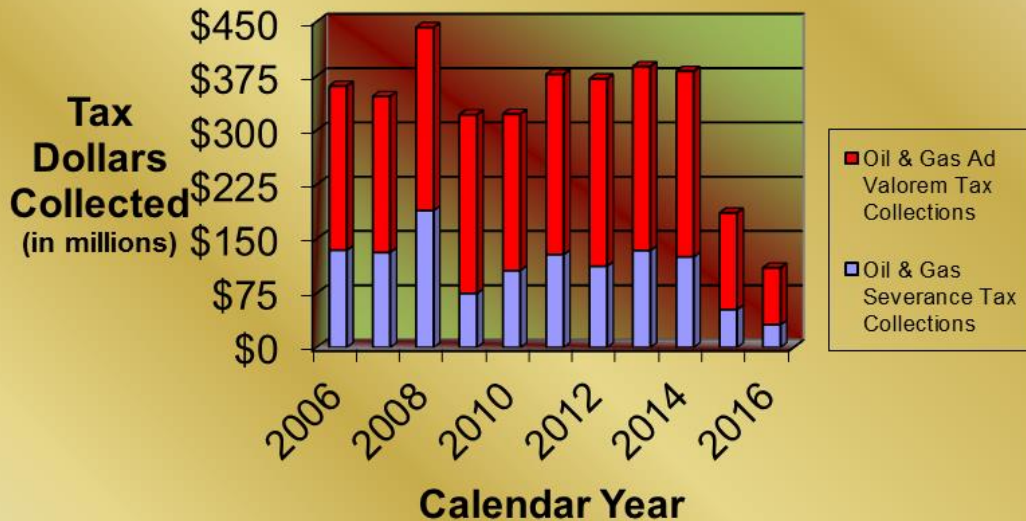
- Average Daily Oil Well Production = 2.63 BOPD
 - 44% of Kansas Crude Oil Production From Marginal Wells
 - 45% of Total Kansas Oil Wells are Classified as Marginal Wells
 - Average Daily Natural Gas Well Production = 27 McF/day
 - 67% of Kansas Natural Gas Production from Marginal Wells
 - 55% of Kansas Natural Gas Wells are Classified as Marginal Wells
 - Supports 118,000 Kansas Jobs and \$3 Billion in Family Income
-

KANSAS OIL & NATURAL GAS PRODUCTION

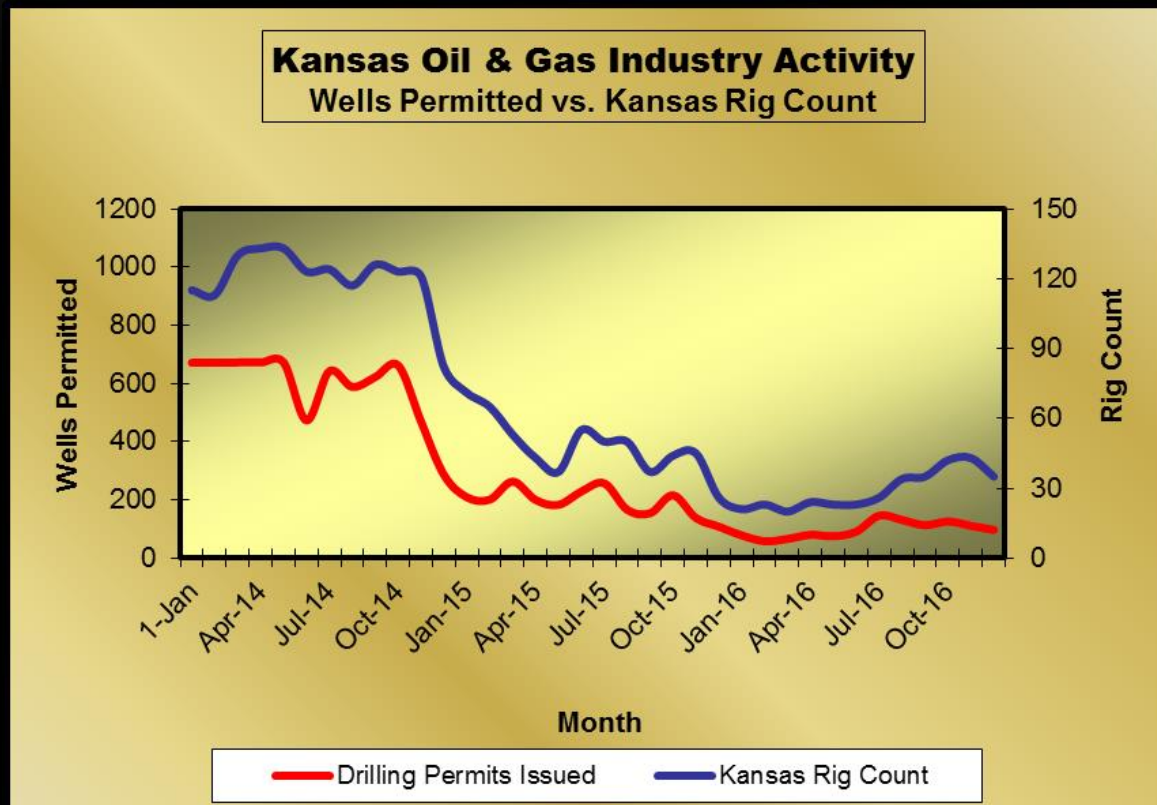


KANSAS OIL & NATURAL GAS TAX COLLECTIONS

**Kansas Oil & Gas Tax Collections
2006 - 2016**



KANSAS OIL & NATURAL GAS INDUSTRY ACTIVITY



WHAT ARE MARGINAL WELLS?

- IOGCC Defines Marginal Wells as
 - Oil Wells Producing 10 BOPD or Less
 - Natural Gas Wells Producing 60 Mcf of Natural Gas Per Day or Less




MARGINAL WELL ECONOMIC IMPACT STUDIES

BIS ECONOMICS & COUNTRY RISK
October 2014
Report
bis.com

The Economic Impact of Eliminating the Percentage Depletion Allowance

National, State and Sector Level Analysis



Report prepared by the National Energy Well Association
00264138

GLOBAL INSIGHT

The Economic Contribution of the Onshore Independent Oil and Natural Gas Producers to the U.S. Economy

Final Report

THE POWER OF PERSPECTIVE

PREPARED BY
IHS Global Insight (USA), Inc.
24 Highland Avenue
Lexington, MA 02421
April 2011

INDEPENDENT
Independent Petroleum Association of America

Kansas Independent Oil & Gas Association
800 SW Jackson Street - Suite 1400
Topeka, Kansas 66612-1216
785-232-7772 Fax 785-232-8917
www.kioiga.org

I. Current Information

Name: Edward Cross
Title: President
Organization: Kansas Independent Oil & Gas Association
Mailing Address: 800 SW Jackson Street - Suite 1400, Topeka, Kansas 66612-1216
Email: kioiga@igmail.com
Telephone Number: 785-232-7772

II. Description of Current Tax Expenditures

Title of Tax Expenditure: Excess of percentage over cost depletion, both (oil and gas)

Function: Energy
Estimated Cost (2013-2017): \$5.7 billion
Internal Revenue Code Section: Secs. 413 and 413A

Description of Current Law:
Depletion is available to any person having an economic interest in a producing oil and gas property. There are generally two types of depletion - cost and percentage depletion. Cost depletion is limited to the taxpayer's basis in the property, whereas percentage depletion is not limited by the basis but is subject to limitations on net income derived from the property and taxable income.

Percentage depletion for producing oil and gas property (15 percent rate) is available only to independent producers and royalty owners. Special rules apply to oil and gas production from marginal wells (generally, wells for which the average daily production is less than 13 barrels of oil or barrel-of-oil equivalents or that produce only heavy oil). In no event may the rate of percentage depletion exceed 27% for any taxable year.

Also, perhaps most notably, percentage depletion is limited the first 1,000 barrels of oil (or equivalent) of daily production, some many larger independent receive this tax treatment for only a small percentage of their production.

Economic Impact of 2014 Federal Budget Proposals on Oil & Gas Extraction Industry

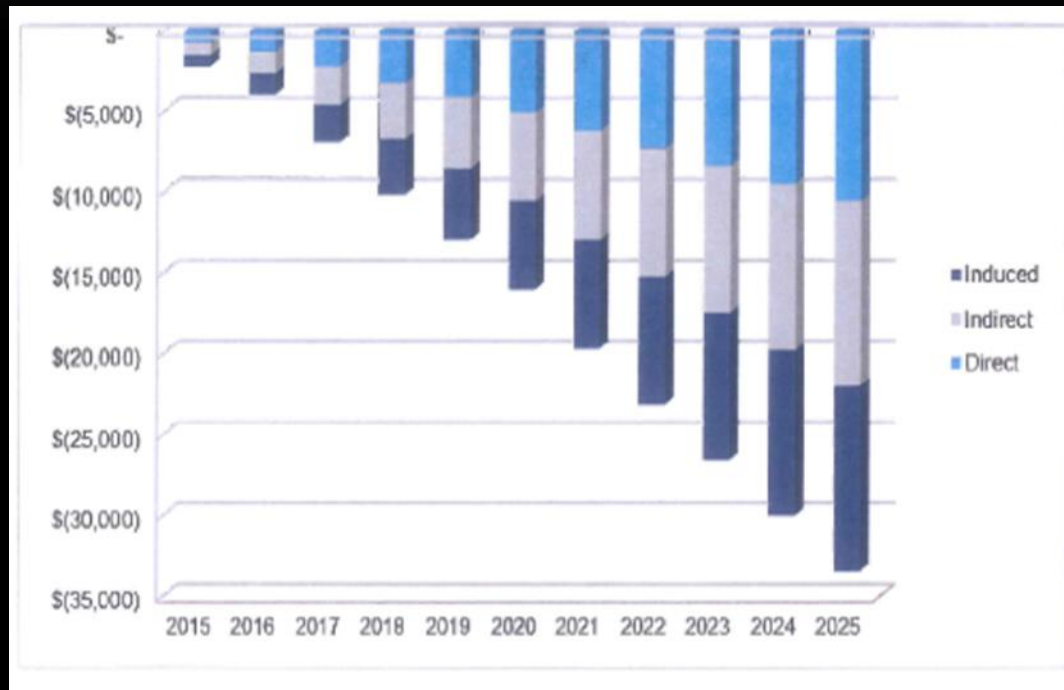
	National	Kansas
Drilling Rig Count (April 03, 2013)	1,022	113
Drilling Rig Count in 12 months (Forecast)	768	42
Crude Oil Production (000,000 Bbls 2013)	2,285	43.3
Crude Oil Production (Monthly Average) (000,000)	1,476	28.9
Production if restricted to 2013 level ¹	\$116,944,000,000	
Crude Oil Production by State ²		\$162,400,000
Natural gas production (million cubic feet)	29,779	299
Natural gas production (trillion cubic feet)	17,887	779
Other energy production by state ³		\$11,150,000
Employment (Oil & gas extraction and services) (2011)	9.2 million	47,300
Employment (2011)	9.1 million	44,575

It is difficult to gauge the size of the economic and job creation impact of production. Since the 1980s and 1990s governments will face significant job cuts in the form of state and local government and state. This loss-negative economic impact to the state. OFFSHORE DRILLING WOULD BE ABOUT \$1.2 TRILLION OVER THE 2012-2014 PERIOD.

Source: Independent Oil & Gas Association
100 SW Jackson Street, Suite 1400, Topeka, Kansas 66612-1216
Tel: 785-232-7772 Fax: 785-232-8917 Email: kioiga@igmail.com

¹ Excludes offshore drilling for natural gas production and offshore oil production for gas.
² Includes offshore drilling for natural gas production and offshore oil production for gas.
³ Includes offshore drilling for natural gas production and offshore oil production for gas.

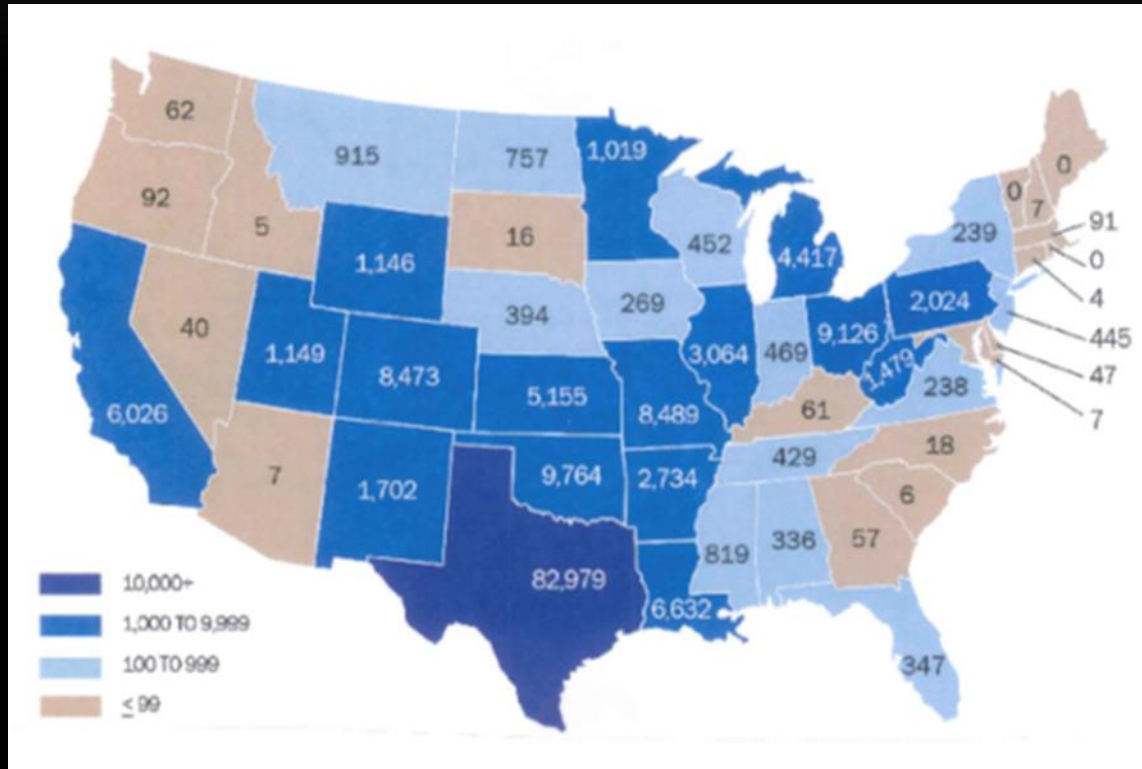
ECONOMIC COST TO U.S. ECONOMY



EFFECT ON JOBS BY INDUSTRY SECTOR

	2015	2020	2025	Average
Information & Professional Services	5,857	40,006	53,469	42,027
Manufacturing	4,827	27,636	57,119	29,002
Leisure & Other Services	2,567	18,253	38,068	19,167
Natural Resources	1,541	17,892	37,983	18,816
Wholesale & Retail Trade	2,149	15,190	29,856	15,774
Financial Services	1,900	14,278	29,787	14,982
Construction	1,845	12,053	25,046	12,659
Transportation & Utilities	919	8,072	17,076	8,495
Government	117	863	1,804	906
Total	21,722	154,233	320,238	161,829

DIRECT JOBS LOST PER YEAR PER STATE



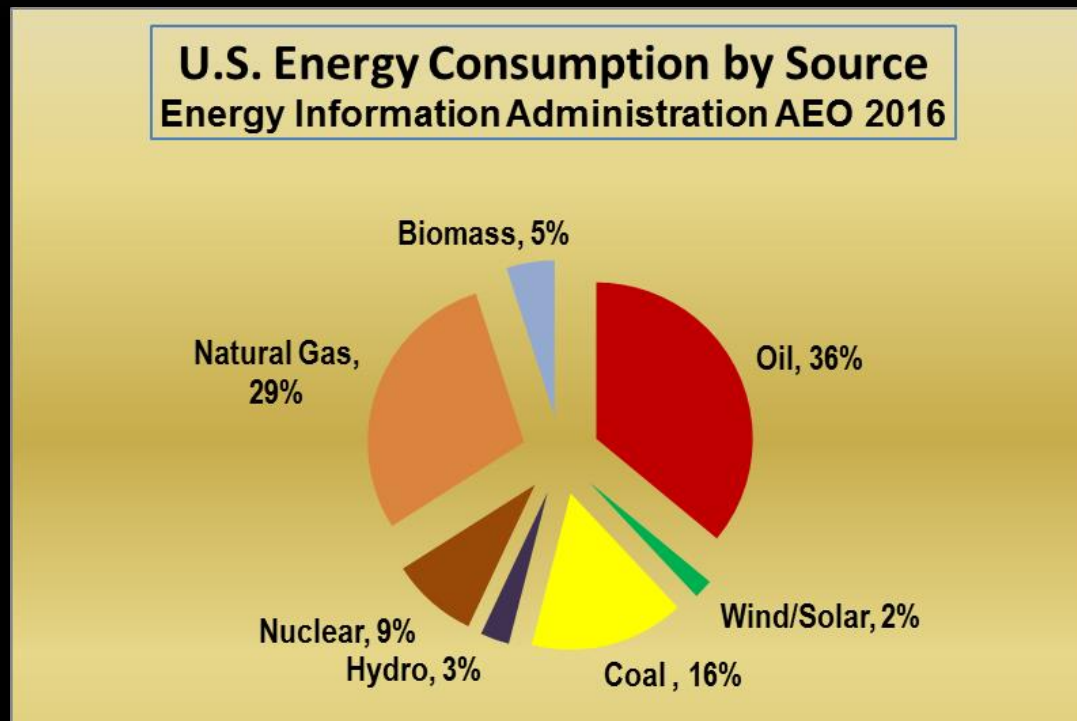
WHAT ARE COMPANIES DOING?

- Supply Chain Optimization
 - Operational Improvements
 - Reduce and Refocus Capex
 - Acquisition/Divestiture
 - Talent Acquisitions
-

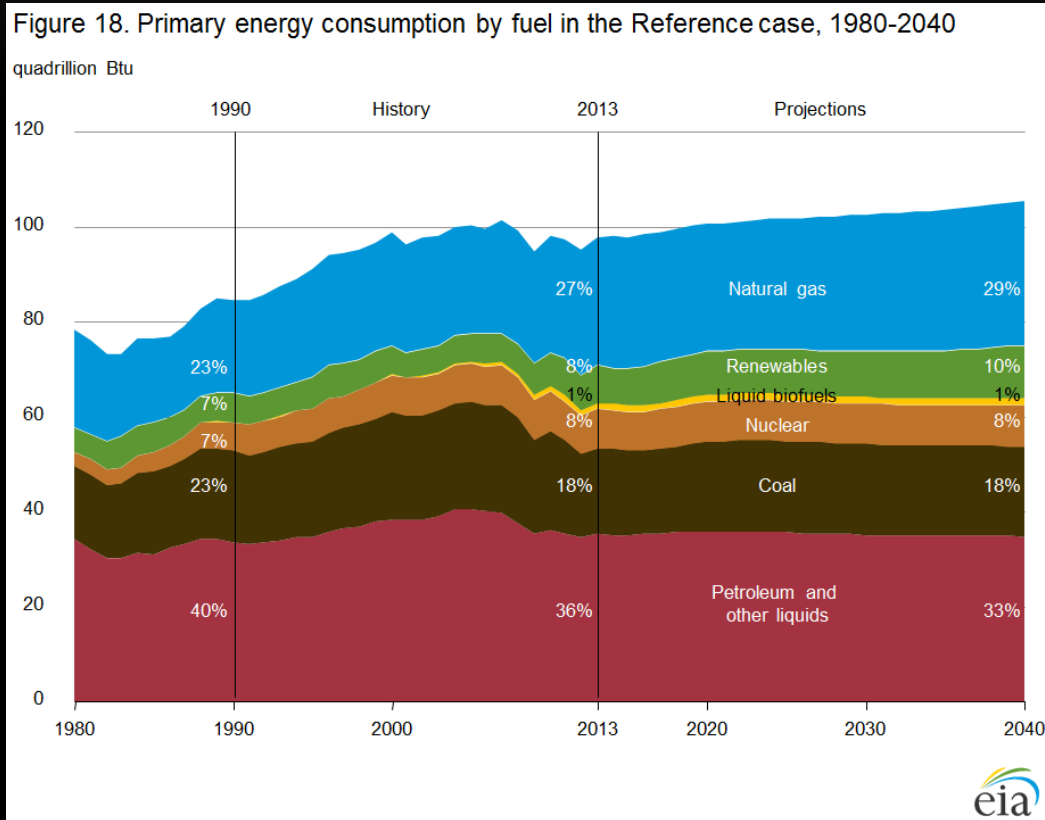
KEY CHALLENGES FACING KANSAS PRODUCERS

- Crude Oil Prices
 - Do Not Compensate for Loss of Capex in U.S. Economy
 - Production Rollover Happened Sooner and was More Severe than Anticipated
 - Market has Entered into an Inflection Phase
-

LOW CRUDE OIL PRICES NOT LONG-TERM STORY OR TREND



WHAT WILL POWER THE U.S. IN THE FUTURE?



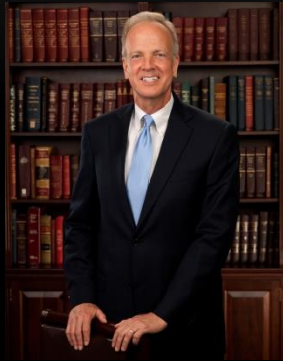
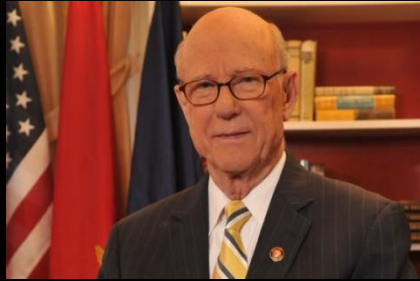
KEY CHALLENGES FACING KANSAS OIL & GAS INDUSTRY



FEDERAL LEGISLATIVE CHALLENGES



FEDERAL ENERGY & TAX POLICY DYNAMICS

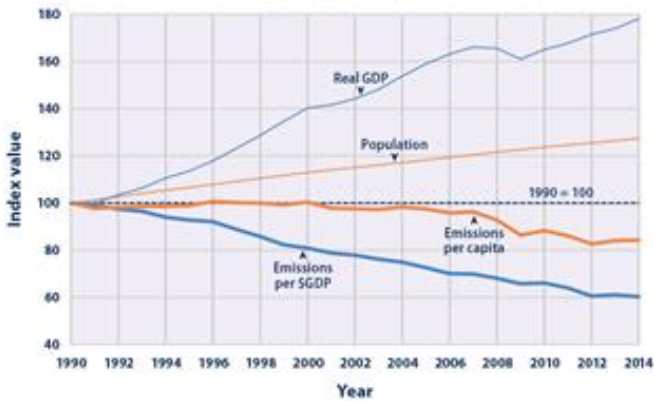


FEDERAL REGULATORY CHALLENGES



EMISSIONS

U.S. Greenhouse Gas Emissions per Capita and per Dollar of GDP, 1990–2014



Data source: U.S. EPA, U.S. Environmental Protection Agency, 2015, Inventory of U.S. greenhouse gas emissions and sinks: 1990–2014, EPA 430-R-16-002, www.epa.gov/climatechange/ghgemissions/usinventoryreport.html.

For more information, visit U.S. EPA's "Climate Change Indicators in the United States" at www.epa.gov/climate-indicators.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Respondents: Independent Petroleum Association of America, Independent Oil and Gas Association of West Virginia, Inc., Kentucky Oil & Gas Association, Inc., Pennsylvania Independent Oil & Gas Association, Ohio Oil and Gas Association, Illinois Oil and Gas Association, Indiana Oil and Gas Association, and Virginia Oil & Gas Association.

Plaintiffs: Environmental Protection Agency.

Case No. 15-1156

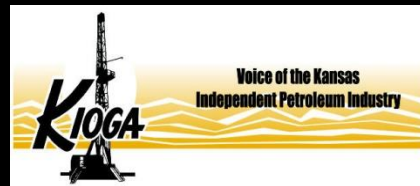
FILED FOR REVIEW

RECEIVED
STATE OF MISSISSIPPI
STATE OF ALABAMA
STATE OF ARIZONA
STATE OF ARKANSAS
COMMONWEALTH OF CALIFORNIA
STATE OF COLORADO
ATTORNEY GENERAL DELL SCHEIDT,
Care in Profile of Michigan
STATE OF DELAWARE
STATE OF FLORIDA
STATE OF GEORGIA
STATE OF ILLINOIS
STATE OF INDIANA
STATE OF IOWA
STATE OF KANSAS
STATE OF KENTUCKY
SENATOR AND GOVERNMENT COUNCIL
AND STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL
QUALITY

PETITION FOR REVIEW
Case No. 15-1156

Respondents:

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY,
DSC, BUREAU A, HALLWAY, 4th Floor,
United States Environmental Protection Agency,



FEDERAL REGULATORY ONSLAUGHT

- PHMSA
 - Tank Gauging
 - RCRA
 - TRI
 - TSCA
 - NEPA
 - Induced Seismicity
 - Endangered Species Act
 - PSM
 - Silica Exposure
 - Ozone
 - WOTUS
 - ONRR
 - And More
-

KIOGA REGULATORY ADVOCACY



Kansas Independent Oil & Gas Association
800 SW Jackson Street – Suite 1400
Topeka, Kansas 66612-1216
785-232-7772 Fax 785-232-0917

September 17, 2015

ATTN: Regulatory Affairs
U.S. Department of Interior
Bureau of Land Management
Mail Stop 2134 LM
1849 C Street NW
Washington, D.C. 20240

Re: Comments on the U.S.
and Gas Order No. 3.

Ladies & Gentlemen:

On behalf of the KIOGA, we have the opportunity to comment on Order No. 3.

The following comment Association (KIOGA), KIOGA and producers, as well as oil and natural gas industry family income, and over 50 industry is an important part be significantly affected by opportunity to provide our Order No.3, Site Security a 3170.



Kansas Independent Oil & Gas Association
800 SW Jackson Street – Suite 1400
Topeka, Kansas 66612-1216
785-232-7772
www.kioga.org

August 12, 2015

The Honorable Janet McCabe
Acting Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Ms. McCabe:

As the U.S. Environmental Protect voluntary measures, as directed by Pres methane emissions from the oil and natural (KIOGA) writes to identify some key issues I

KIOGA represents the thousands of as well as the service and supply indus significantly affected by the actions results drill about 90% of American oil and natural than 85% of American natural gas. KIOGA producers, as well as service and supply cor

Existing Clean Air Act (CAA) regulati goal of reducing methane emissions 40-45% additional regulatory measures are nece reduction targets for the exploration and pr

Using EPA's Greenhouse Gas (GHG) for the exploration and production sector a



Kansas Independent Oil & Gas Association
800 SW Jackson Street – Suite 1400
Topeka, Kansas 66612-1216
785-232-7772
www.kioga.org

September 4, 2015

Members of the U.S. Senate Committee on Homeland Security & Governmental Affairs
340 Dirksen Senate Office Building
Washington, DC 20510

Ladies & Gentlemen:

The Kansas Independent Oil & Gas Association (KIOGA) applaud the introduction of S. 2006, the "Regulatory Accountability Act of 2015," and the leadership of this bill's original co-sponsors—Senators Rob Portman, Susan Collins, Angus King, Ron Johnson, Kelly Ayotte, John Cornyn, and David Perdue. This critical bipartisan bill would bring into the 21st century the process federal agencies use when they write the regulations that most significantly affect the lives of all Americans.

KIOGA represents over 4,200 small businesses and we believe that federal regulations must be narrowly tailored, supported by strong and credible data and evidence, and impose the least burden possible while still implementing Congressional intent. Unfortunately, however, we are now confronted with a growing number of massive, costly, and complex rules that breed uncertainty and stifles hiring and investment. These growing regulatory burdens and the uncertainty caused by badly-written regulations are a fundamental concern to us.

S. 2006 would improve the process by which federal agencies promulgate regulations to improve accountability and the integrity of the rulemaking process. This bill would not prevent federal agencies from issuing regulations or accomplishing needed regulatory objectives. It would, however, make the regulatory process more transparent, agencies more accountable, and regulations more carefully designed.

KIOGA applauds the introduction of this important bill and encourage the Committee to support this bill.

Sincerely,

Edward P. Cross, President
Kansas Independent Oil & Gas Association



Kansas Independent Oil & Gas Association
800 SW Jackson Street – Suite 1400
Topeka, Kansas 66612-1216

December 15, 2015

Gina McCarthy
Administrator
U.S. Environmental Protection
1300 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Administrator McCarthy:

This letter is being sent represents over 4,200 Indiana support their efforts in Kansas.

As the Environmental on the agency's five year study on Drinking Water Resources," revealing its finding, namely its to drinking water resources."

The conclusion of no w that while oil and natural gas i flow, the risk of water contami leaching poses an inherent th

We are concerned, ha science, but rather presser fr David Donohue, who chairs a modified," referring to the ric systemic impacts to drinking an "ambiguous and requires clarif

1 Environmental Protection Agen (drinking water resources), June 20
2 Mike Soraghan, "The Swaling <http://www.enr.com/stories>



Kansas Independent Oil & Gas Association
800 SW Jackson Street – Suite 1400
Topeka, Kansas 66612-1216
785-232-7772 Fax 785-232-0917
www.kioga.org

March 12, 2015

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
EPA Docket Center
ATTN: Docket ID No. EPA-HQ-OAR-2008-0699
Mailroom 29231T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Docket No. EPA-HQ-OAR-2008-0699

Dear Administrator McCarthy:

The following comments are submitted on be Association (KIOGA). KIOGA represents over 4,200 I and producers, as well as service and supply indus oil and natural gas industry in Kansas supports over family income, and over \$1.4 billion in state and I industry is an important part of the backbone of far be significantly affected by this proposed change to respectfully requests that the EPA retain the existing.

As an association representing some of the m employ millions of Americans, the Kansas Independe concerned about the harmful impact that the Envrion proposed rule to make ozone standards more str



Kansas Independent Oil & Gas Association
800 SW Jackson Street – Suite 1400
Topeka, Kansas 66612-1216
785-232-7772
www.kioga.org

January 7, 2015

TO THE MEMBERS OF THE U.S. HOUSE OF REPRESENTATIVES:

The Kansas Independent Oil & Gas Association (KIOGA) strongly support efforts by the House of Representatives to make federal agencies more accountable to the American public and improve the transparency of agency actions. The federal rulemaking process was founded on principles of open government and public participation.

We are pleased, therefore, that the House is voting on a comprehensive regulatory reform bill, H.R. 712, the "Sunshine for Regulatory Decrees and Settlements Act," which would take important steps to stop the abusive practice known as "sue and settle" and give the public and affected parties a greater ability to know about potential rulemakings and to participate. H.R. 712 embodies several major principles of accountability, transparency, and fairness, drawn directly from three regulatory reform bills:

- **Title I** – the "Sunshine for Regulatory Decrees and Settlements Act." Behind closed doors, organizations and agencies enter into consent decrees or settlement agreements compelling the agencies to issue rules on an expedited timeframe. The states and the public are not given notice of the lawsuits, nor do they have a meaningful voice in the process, despite the adverse impact that rushed, sketchy regulations have on them. This title would improve the "sue and settle" process by requiring agencies to give early notice and take public comment on proposed settlement agreements obligating agencies to initiate a rulemaking or take other action on a specified timetable. These settlement agreements allow interest groups to commandeer an agency's agenda and regulatory priorities. The bill would allow affected parties to get notice of draft settlements and provide some opportunity to participate.
- **Title II** – the "All Economic Rules are Transparent (ALERT) Act." This title would require agencies to disclose rulemaking, the agency plans to propose or finalize to OMB's Office of Information and Regulatory Affairs (OIRA). OIRA would disseminate information about these planned rules to the public, including their estimated costs and benefits.

GOOD NEWS

- EPA Report Finds No Evidence that Hydraulic Fracturing has any Systemic Groundwater Impacts
 - U.S. Supreme Court Grants Stay of EPA Clean Power Plan
 - Nationwide Stay Issued Against EPA “Waters of the U.S.” (WOTUS) Rule
 - LPC Listing Vacated
 - BLM Hydraulic Fracturing Rule Struck Down
-

GOING FORWARD INTO 2017 AND BEYOND



FORM STRATEGIC COALITIONS



Trump Leadership Council



Council for a Secure America

- Make U.S. Energy Independent
 - Create Jobs and Expand Opportunities
- Fewer & Smarter Regulations
 - Make Rules More Efficient and Effective
- Curb Lawsuit Abuse
 - Keep Trial Lawyers in Check

KIOGA MULTIDIMENSIONAL PUBLIC INFORMATION EFFORTS



EXPANDING THE MESSAGE



Energy policy perspectives for 2017

January 15, 2017

During the give and take of public discourse, few truly stop to think how absolutely essential oil and natural gas are to our lives, to our prosperity and security, and to our future. Oil and natural gas are the foundation of our energy-dependent economy. They profoundly affect how we live and work. They are key to our mobility, to keeping our homes and businesses warm, to providing us with electric power, and to supplying the raw materials for countless consumer and industrial products.

The energy policy choices our nation makes today are among the most important and far-reaching policy decisions we will make in the 21st century. If we are to continue our nation's positive energy trends, we must implement energy policies based on current reality and our potential as an energy leader, not political ideologies or the wishes of professional environmental groups. American energy policy should focus on what's important: American jobs, American energy security and American global energy leadership.

President Donald Trump and the new 115th Congress can move forward and build upon our nation's new era of energy abundance, self-determination and global leadership, or take a step back to an era of scarcity, dependence and uncertainty.

The good news is we know how to lead the world in oil and natural gas production. And we have a potent ally, the American voter.

The 2016 election sent a clear message. Voters want and expect change. Political candidates who had a vision of increased consumer costs, lower standard of living, and economic de-growth soundly were rejected by voters. That is great news for a nation whose economic recovery has been slow. Election polls of actual voters showed the American voters clearly want policymakers to set aside outdated assumptions and partisan talking points and work together on safe, responsible and fact-based energy policy that grows our economy, creates well-paying jobs and maintains our nation's global energy leadership.



EDUCATING THE NEXT GENERATION



FEDERAL & STATE LEGISLATIVE TOURS



ENERGY FOR THE FUTURE!



THANK YOU



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Edward Cross, President