State of the Oil & Gas Industry

Dynamic Challenges Facing Kansas Oil & Gas Industry

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Kansas House Energy & Environment Committee

Kansas State Capitol Room 582-N

Topeka, Kansas

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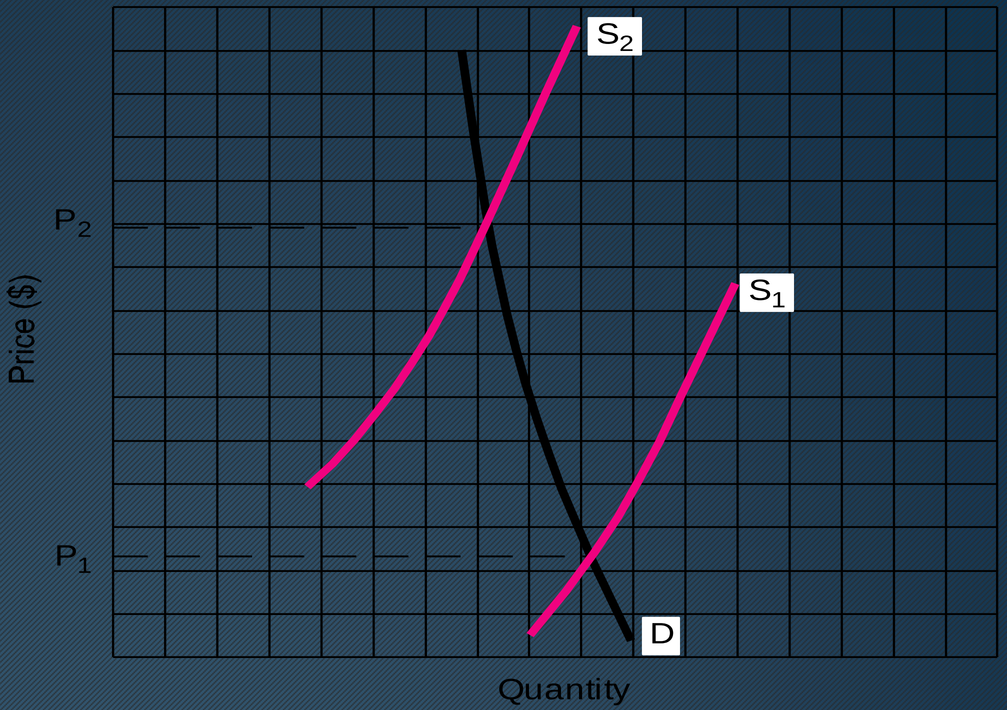
What happened to crude oil markets over the last year?

- 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

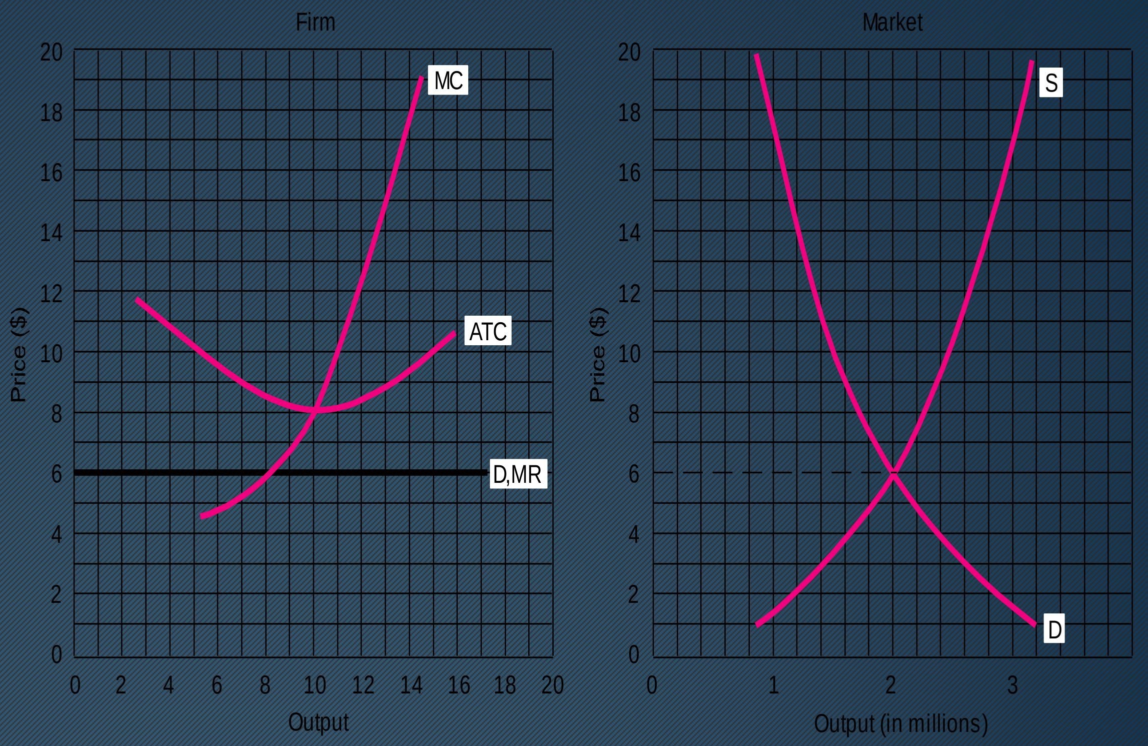
- Oligopoly
  - OPEC cartel collude to influence market price
- U.S. Producers are Perfect Competitors
  - Price-takers not price makers
- Cost structure optimization determines profit

Oil Market Dynamics

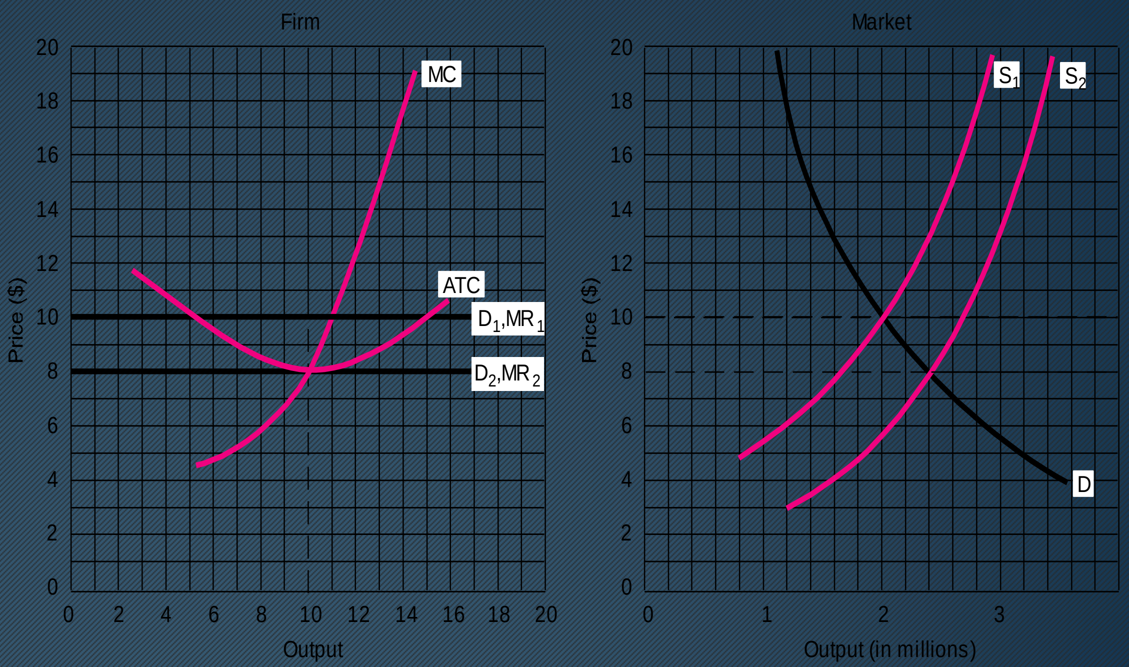


When supply increases from S_2 to S_1, price falls from P_2 to P_1

The Perfect Competitor



Effects of Oversupply on Perfect Competitor



Supply Leverage Diminishing

Impact of Oil Price Collapse on Oil Industry Nationally

- Capex cuts
  - $61.2 billion in 2015
- Layoffs
  - 240,000 direct industry layoffs
  - 924,000 indirect industry layoffs
- Rapid Decline of Domestic Rig Count
  - Declined by 62% in 2015 (1,192 rigs)

Impacts of Oil Price Collapse on Kansas Oil Industry

- Cut capex by 75% -80% in 2015
- Deferred well completions
- High-cost wells temporarily shut-in
- Layoffs
  - 30% of workforce in service sector
- Wage reductions
  - 20%-25% in some cases

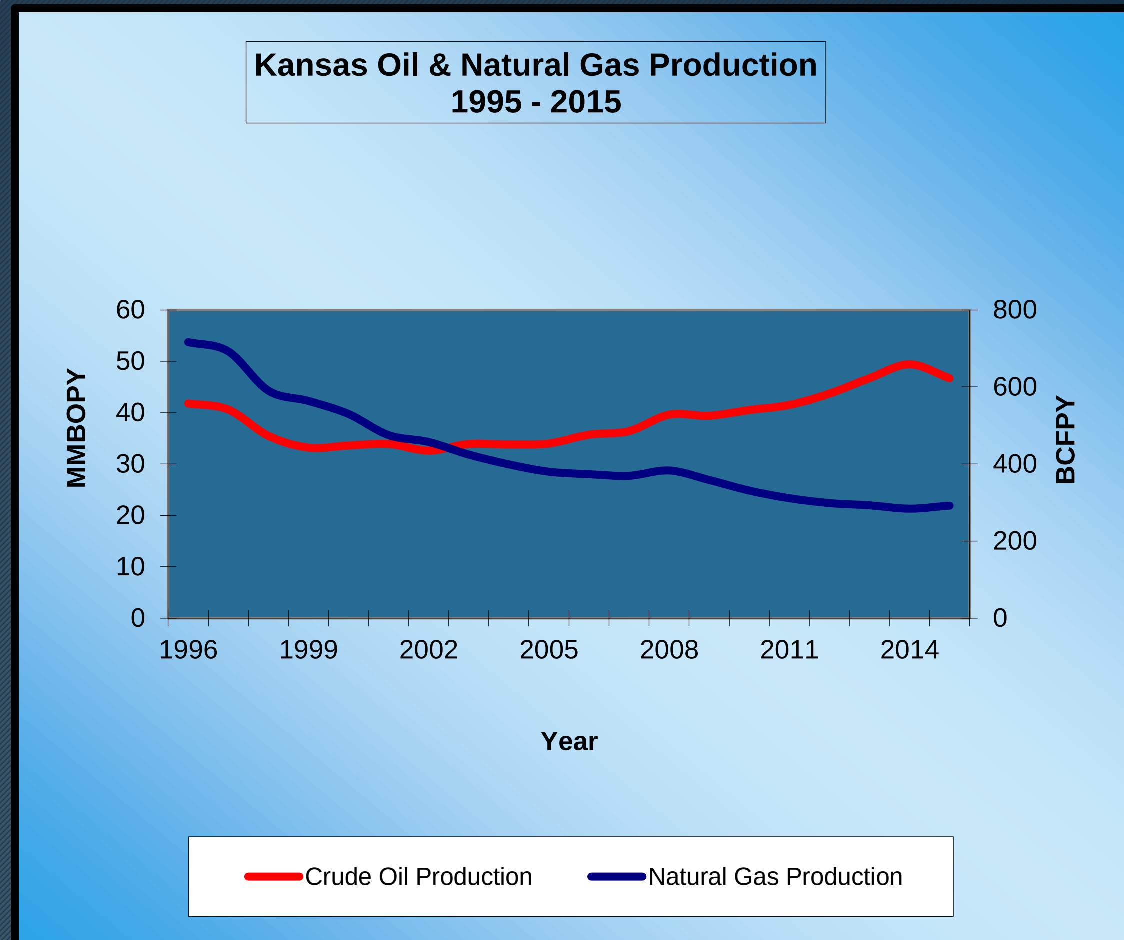
Who are Independents?

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

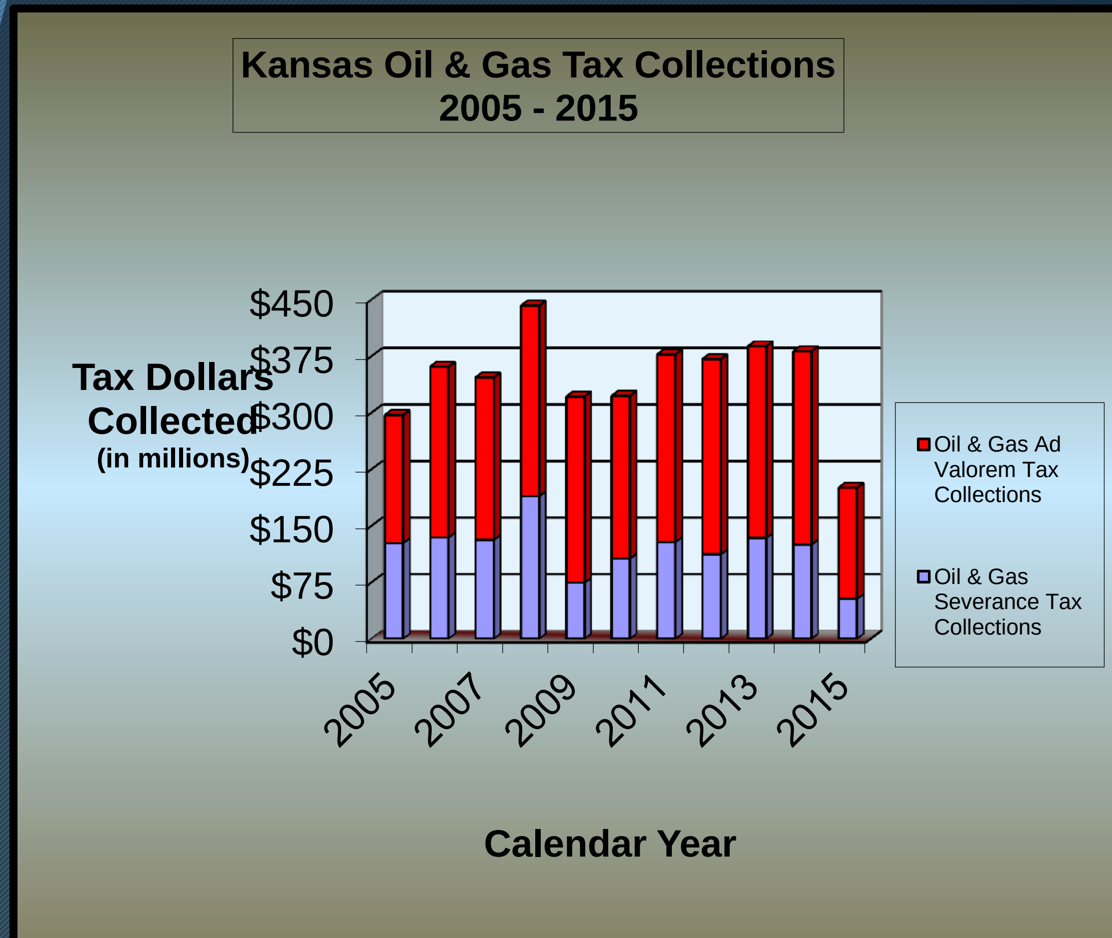
Kansas Oil & Natural Gas Dynamics

- Average Daily Oil Well Production = 3.2 BOPD
  - 72% of Kansas crude oil production from marginal wells
  - 94% of total Kansas oil wells are classified as marginal wells
- Average Daily Natural Gas Production = 41 McF
  - 74% of Kansas natural gas production from marginal wells
  - 81% of Kansas natural gas wells are classified as marginal wells
- Supports 118,000 Kansas jobs and $3 billion in family income

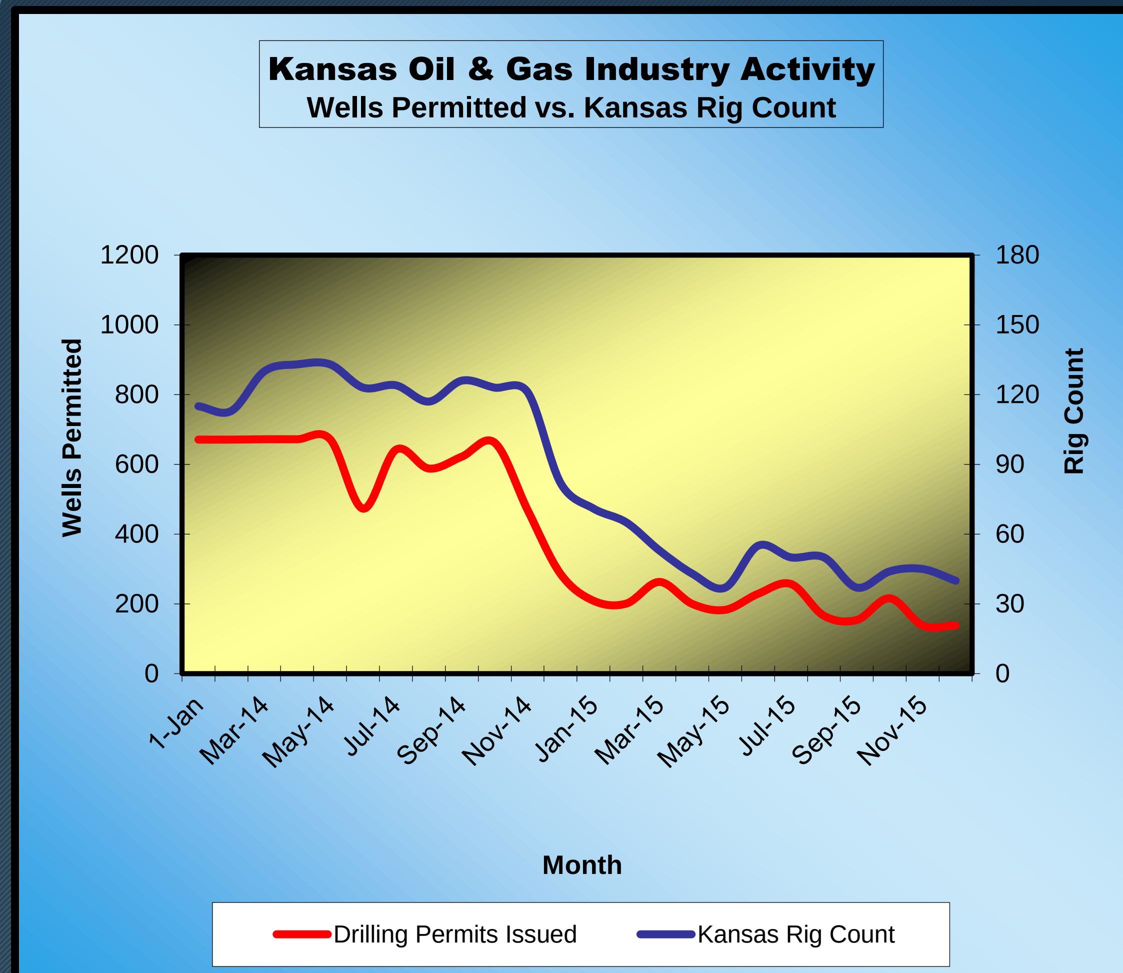
Kansas Oil & Natural Gas Production



Kansas Oil & Natural Gas Tax Collections



Impacts of Oil Price Collapse on Kansas Oil Industry

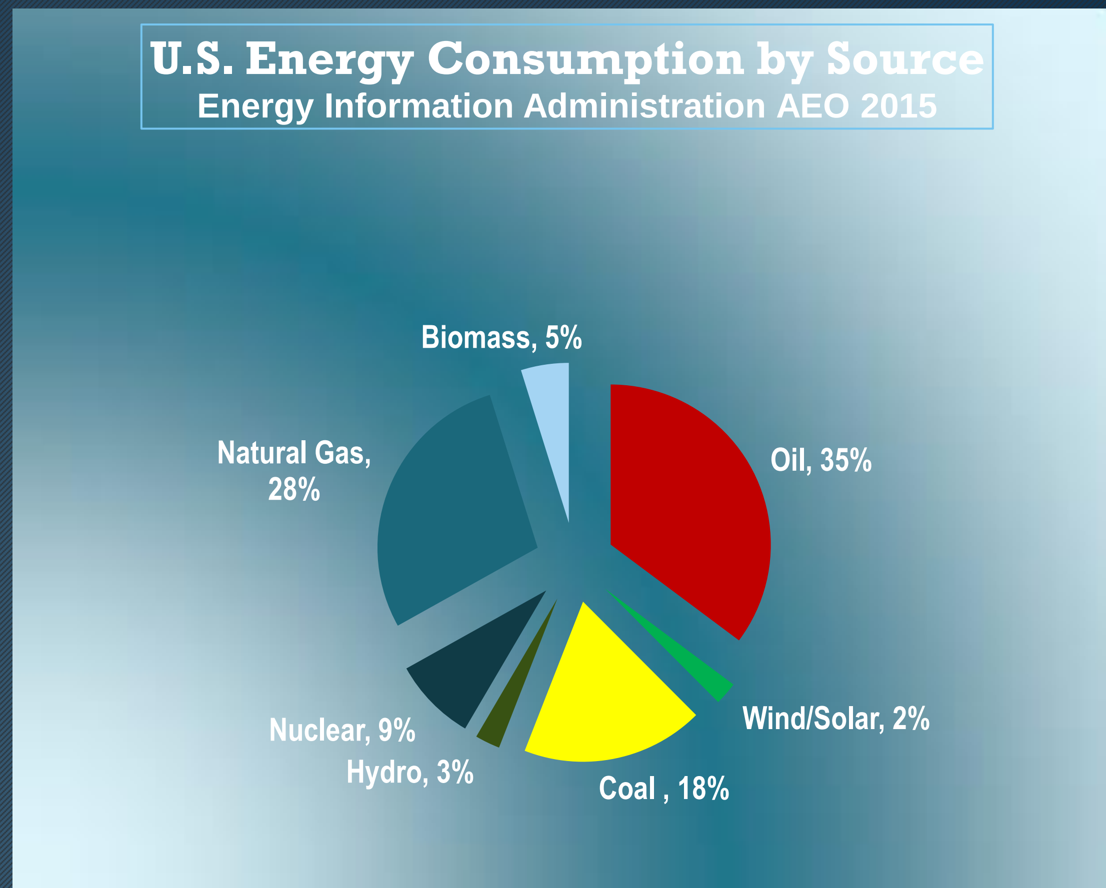


Key Challenges Facing the Kansas Oil & Gas Industry

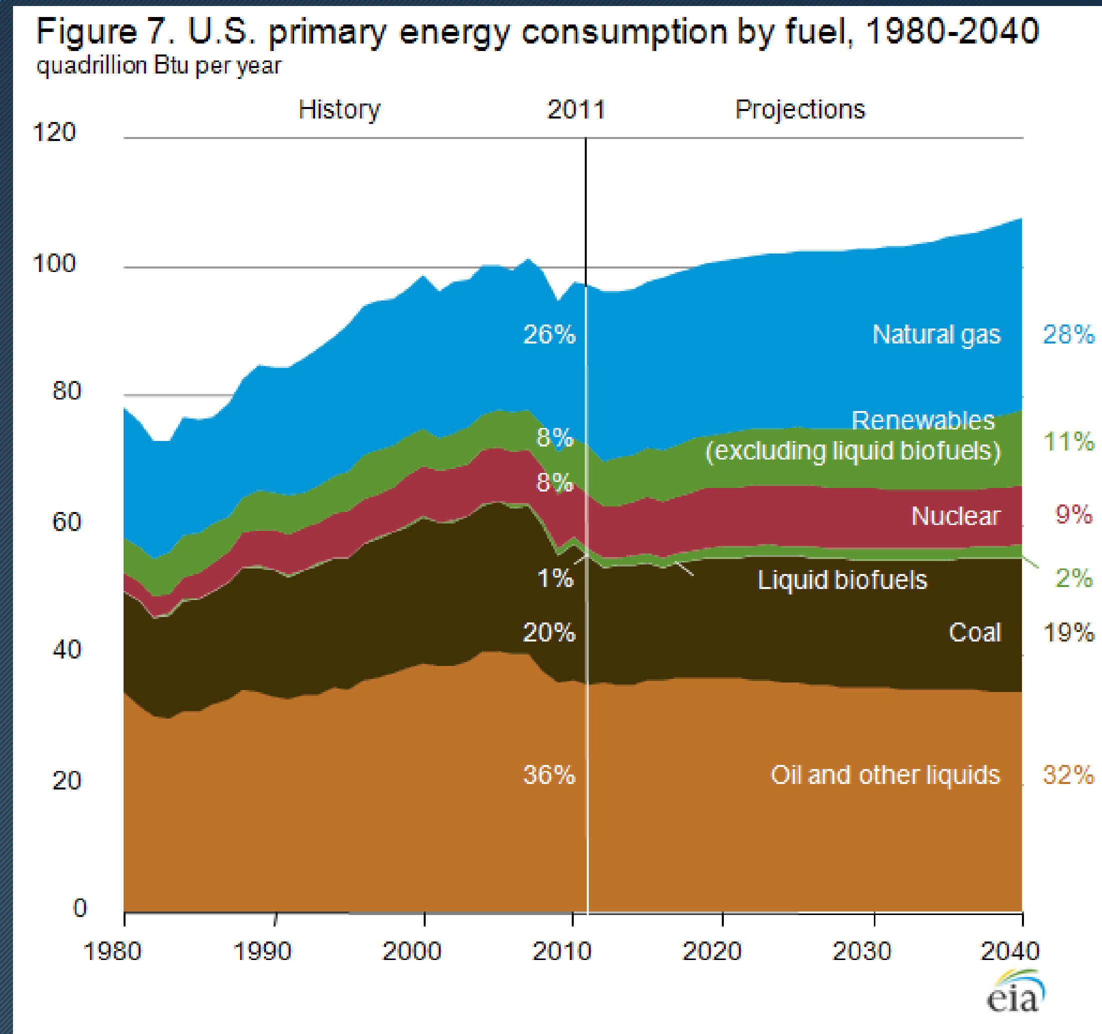
- Crude Oil Prices
  - Do not compensate for loss of capex in U.S. economy
  - Supply will fall as production rollover could be sooner and more severe than anticipated
- Bankruptcy
  - 40% of revenue toward interest payments
- Exiting “Survival Phase” and entering “Inflection Phase” followed by “Regeneration Phase”
- Low crude oil prices are not the long-term story or trend

Key Challenges Facing the Kansas Oil & Gas Industry

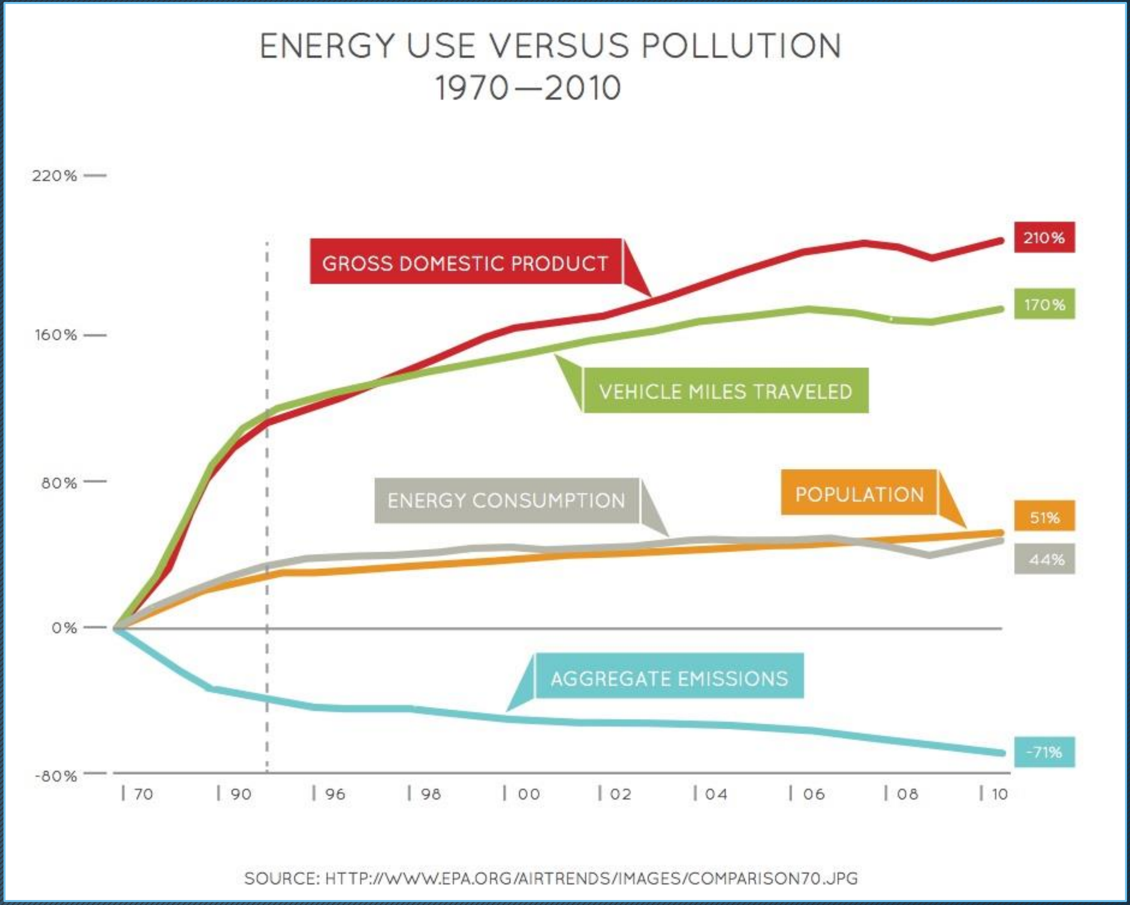
What powers the U.S. today?



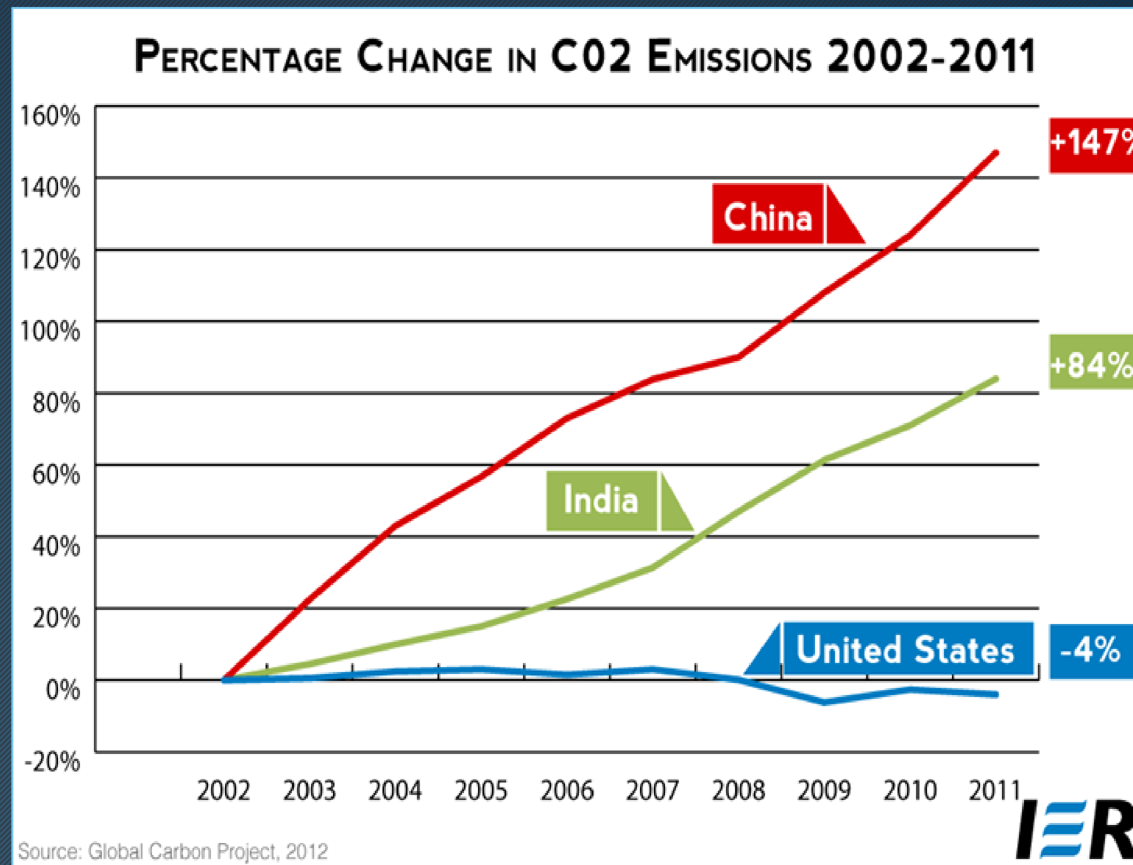
What will power the U.S. in the future?



Energy Efficiency & Environmental Indicators



Climate Issues



Going Forward into 2016 and Beyond

KIOGA Public Information Efforts

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The Whole Fracking Story
Regulatory & Policy Considerations

Kansas Oil & Gas Industry Strategic Analysis

PREPARED BY: JANUARY 2(

Kansas Independent Oil & Gas Association

THE HAYS DAILY NEWS

U.S. energy renaissance helps achieve significant emission reductions

December 15, 2015

KANSAS AGLAND

Are Lower Oil Prices Good for the Economy?

Edward Cross Oct 20, 2015

In response to a dramatic increase in U.S. oil production over the last several years, the Organization of Petroleum Exporting Countries (OPEC) decided in November 2014 to dump low-cost oil into the global markets in an effort to drive down the price of oil and punish U.S. oil producers. As a result, crude oil prices have fallen by about 50% over the last year.

So, are much lower oil prices good news for the U.S. economy? I think most people would rather pay $2 for a gallon of gas than $4. But in order to fill up your vehicle you have got to have an income first. Since the last recession, the oil and gas sector has been the number one creator of good jobs in the U.S. economy by far. The American oil and natural gas industry adds $300 billion - $400 billion annually to the U.S. economy – without which the U.S. GDP would be negative and the American economy would still be in a recession. Barack Obama loves to stand up and take credit for the fact that the employment picture in this country has been improving slightly. But without the growth in the oil and natural gas industry over the last decade, unemployment would be through the roof.

To understand this better, let's look at capital expenditures (capex). Investopedia defines "capital expenditure" as:

"Funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment. This type of outlay is made by companies to maintain or increase the scope of their operations. These expenditures can include everything from repairing a roof to building a brand new factory."

Needless to say, this kind of spending is very good for an economy. It builds infrastructure, it creates jobs, and it is an investment in the future.

In recent years, oil and gas companies have been pouring massive amounts of money into capital expenditures (capex). In fact, the oil and gas sector is responsible for 1/3 of S&P 500 capex. Companies make the investments because they believe they will get a good return on those investments. Unfortunately, when the price of oil crashes those investments become unprofitable and capex gets cut. Many companies in Kansas and elsewhere began cutting capex by 40%-50% early this year, but now we are seeing companies making 75%-80% cuts in capex.

THE HAYS DAILY NEWS

Importance of energy policy perspectives for 2016

Aug 17, 2015

In early August, the first primary debate of the 2016 election season gave many voters their first opportunity to hear — side-by-side — how one group of candidates intends to lead America in the 21st century.

This conversation would not be complete without addressing energy — an area where innovation, competition, diplomacy and domestic policy will intersect to determine America's future as a global and economic superpower.

During the last decade, our nation has left behind decades of energy scarcity and has become a worldwide leader in energy production. American oil and natural gas production is up because the independent oil and natural gas industry is committed to investment and job creation in the U.S. and are using technology and innovation to access more oil and natural gas reserves. This surging American production has marginalized the ability of other nations to dictate prices and created vast new economic opportunities for U.S. workers and consumers.

But this unique American moment of global energy leadership is not set in stone. It represents a crossroads, and our next president — as well as those who occupy Congress, governors and state legislators — will be called on to decide between two paths.

We 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.

A recent report outlined the economic realities that will accompany two different paths for the future of energy policy. The facts outlined in this report provide a clear roadmap for any leader seeking to present a positive, consumer-focused vision to the American people.

It shows the potential rewards of pro-development policies and the possible long-term economic harm that could result from many of the regulatory constraints and barriers imposed or under consideration.

Energy for the Future!

Thank You

www.kioga.org

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