Introduction

After many decades of productive stewardship, oil and natural gas resources continue to play an important part of the livelihoods of Kansans throughout the state. In 2019, the Kansas oil and gas industry generated over $2.1 billion in output, put tens of thousands of people all across Kansas to work, and pumped hundreds of millions of dollars into the state’s economy. Over the past decade, the Kansas oil and gas industry supported 118,000 jobs, $3 billion in family income, and $1.4 billion in state and local tax revenue. The industry is an important element of the Kansas economy today and will be a critical part of the economy going forward.

Nationally, Kansas ranks as the 11th largest oil producing state and 14th largest natural gas producing state. Over 1,800 licensed oil and gas operators produced over 33 million barrels of oil and over 185 billion cubic feet of natural gas in 2019.

Oil and natural gas are an integral part of our society. Much of our high standard of living can be traced to the use of petroleum. Today, an estimated 6,000 products are produced from petroleum. The Kansas oil and natural gas industry does more than fuel Kansas and help the Kansas economy. The industry fuels America and makes significant positive contributions to our way of life!

Challenges Face Policymakers and the Kansas Oil & Gas Industry

Even with renewable energy being the world’s fastest growing form of energy, the latest (2019) Energy Information Administration projections indicate fossil fuels will continue to meet much of the world’s energy demand (69%) through 2050.

Energy policies that value innovation over regulation can turn energy policy challenges into great opportunities for economic growth and energy security. Policymakers should advocate smart energy policies that includes common-sense regulatory structures that base rulemakings on sound science, legitimate cost/benefit analyses, and economic impact. We should abandon the stale mindset of last century’s thinking that increased oil and gas production and achieving climate goals are not compatible. And we must abandon the zero-sum game philosophy for energy policy that says we must have less oil and gas so that we can have more of something else.

The American people want, expect, and deserve elected leaders who will place what’s best for our state and nation’s economy and energy future above partisan ideology and political posturing. We need real energy solutions!
The Kansas oil and gas industry contributed over $138 million to the State of Kansas in taxes in 2019. In addition, $6.6 million in fees were collected from the industry. These tax dollars and fee collections come from oil and gas producers and royalty owners. We are happy to pay our fair share but also believe we are a highly taxed industry. Calendar year 2019 saw the oil and gas industry pay nearly $48 million in severance taxes and over $91 million in ad valorem taxes.

According to production data provided by the Kansas Department of Revenue, oil production in Kansas has risen 5 of the last 10 years, but has fallen significantly the last 5 years. Natural gas production in Kansas has declined by a Compound Annual Decline Rate (CADR) of 6.3% over the last 10 years. Oil production in Kansas has decreased by a CADR of 1.4% over the same period. Oil prices fell 75% over 20 months beginning in 2014 resulting in falling tax collections. As the market balanced and oil prices stabilized in 2018 and 2019, Kansas oil production began to stabilize, but activity in Kansas was very conservative and muted in 2019 as producers focused on their core producing assets - high-grading and drilling only the best prospects. As a result, the Kansas Department of Revenue reports that Kansas collected about 20% less oil and natural gas severance receipts in calendar year (CY) 2019 than CY 2018 and nearly 70% less than CY 2014 (over $111 million less). Kansas collected about 8% less oil and natural gas ad valorem tax receipts in CY 2019 as it did in CY 2018 but over 64% less than 2014 (over $165 million less).

The relative tax burden on the Kansas oil and natural gas industry can be illustrated in three ways: marginal tax rate, discounted cash flow analysis, and finally the average effective tax rate.

**Marginal Tax Rate**

The marginal tax rate for the Kansas oil and natural gas industry is a measure of the taxes paid on an increase or decrease in the marginal price of oil and natural gas expressed as a percentage of revenues. The marginal tax rate includes the combined effect of severance and ad valorem taxes on new primary production. Kansas’ marginal tax rate on new primary oil and natural gas production is 12.3%.

**Discounted Cash Flow Analysis**

The discounted cash flow analysis evaluates the impact of taxes on the economics of specific investments over their entire life. For the oil and gas industry, the analysis is helpful in gauging the effect of taxes on new exploration and production investments. Discounted cash flow analyses on several Kansas exploration and development projects using current economic characteristics indicate the impact of Kansas severance and ad valorem taxes alone is to generally reduce rates of returns by 25%-35% for all states. For Kansas, state taxes reduce the rates of return on new exploration and production investments by an average of 26.5%.

**Impact of Oil Price on Tax Collections**

Oil prices fell 75% over 20 months beginning in 2014 before stabilizing in 2018 and 2019. As a result, oil and gas severance and ad valorem tax collections fell by more than 66% from 2014 through 2019. While oil prices in Kansas stabilized in 2019 averaging about $47, the market has experienced much uncertainty. Natural gas supplies nationwide remain very high and prices remain very low averaging about $2 in Kansas. As a result, Kansas producers have been very conservative and cautious in 2019 resulting in severance tax collections dropping 20% and ad valorem taxes dropping by about 8%.
Taxation Analysis (continued)

Average Effective Tax Rate

The average effective tax rate focuses on the total taxes paid in relation to total taxable value. The Kansas oil and gas industry’s 2019 effective tax rate was 13.3%. Different state tax systems greatly impact the average tax rate for the oil and natural gas industry. For example, the Oklahoma oil and gas industry pays a 7% severance tax and ad valorem taxes on equipment only, not reserves. On the other hand, the Kansas oil and gas industry pays a 4.33% severance tax and ad valorem taxes on equipment AND reserves resulting in double-taxation of oil and gas reserves that leads to a higher average tax rate than Oklahoma.

Oil & Natural Gas Prices

The crude oil market is a global oligopolistic market. Kansas oil and gas producers are price takers, not price makers, in this oligopolistic market.

Crude oil prices received by Kansas oil producers are a result of several factors. The New York Mercantile Exchange (NYMEX) price is set daily by an open auction. The price is based on global supply/demand factors. West Texas Intermediate (WTI) is the benchmark price for crude oil produced in the U.S. A barrel of WTI crude oil produces more products, like gasoline, than any other crude oil, not only in the U.S., but in comparison to almost any other crude oil produced in the world. Kansas common crude oil is a little lesser quality oil and produces less products per barrel than WTI and, as a result, is priced about $10-$11 per barrel less than WTI.

Several energy economists and analysts have warned that prices could reach highs in excess of $100 per barrel or lows ranging from $30 to $40 per barrel in 2020. In late 2007, oil price was approaching $80 per barrel and various experts projected that oil price in 2008 could reach as high as $120 or as low as $40. As it turned out, the price not only reached $120, but went on to $145 on the futures market that July. By the end of 2008 it was in the low $30s.

Once again we are in a market fraught with uncertainty and it is certainly possible that 2020 could experience price fluctuations similar to those experienced in 2008.

Falling consumption is the number one factor associated with price collapses. The U.S. and world economies expanded significantly in 2018 and 2019. The threat of recession and slowdown could significantly reduce oil demand. Fear exists on both sides of the oil ledger with concerns about slowing demand and swelling supplies.

The demand for oil is quite price inelastic and a supply shock would likely be met with higher prices. However, the threat of recession and slowdown in world economy create risks for a price collapse.

Conclusions

Tax analyses indicate that Kansas taxes on oil and gas production are high relative to other states examined, and we are especially high considering the characteristics of the Kansas resource relative to most other states evaluated. Kansas oil and gas producers are taxed five times on each barrel of oil or Mcf of natural gas produced (severance tax, property tax on equipment, property tax on reserves, state income tax, and federal income tax). Kansas oil and gas producers pay considerably higher taxes as a percentage of revenue than most other oil and natural gas producing states.

While the oil and gas severance tax provides an important source of revenue for the State of Kansas, the volatile nature of markets makes it risky to depend on the revenue from year to year.

The ad valorem tax structure has several features which are detrimental to the state’s oil and gas industry and hinders economic growth in the oil and gas industry and the State of Kansas. Ad valorem taxes are levied based on ability to produce rather than actual production, resulting in very high taxes relative to revenues for some wells. In addition, ad valorem taxes vary county by county based on variations in local mill levies. The current tax policy of levying ad valorem taxes on reserves contradicts good engineering practices. Good engineering practices suggest slow development of oil and gas reserves to more thoroughly drain oil and gas reservoirs. Ad valorem tax policy encourages producers to produce oil and gas reserves as quickly as possible to avoid double-taxation. Finally, ad valorem taxes encourage premature abandonment of oil and gas wells by applying a minimum tax to non-producing marginal wells, thus creating an incentive to plug and abandon such wells. Perhaps tax structure revisions are needed.
Policy Recommendations

Kansas oil and gas producers need policies that enhance access to capital to develop and maintain production. Tax reforms are particularly important for Kansas oil and gas producers. These small businesses do not have the substantial additional resources possessed by many major integrated and/or public traded companies. Independent oil and gas producers generate capital through their production, not by tapping equity markets or other corporate measures. Consequently, tax reforms that allow oil and gas producers to retain more of their revenues to reinvest directly translates into new resources and economic development for Kansas. Historically, independent oil and gas producers reinvest more than 100% of their cash flow into new projects. Every new oil and gas project is like a new small business start-up. Perhaps restructuring severance and ad valorem tax structures would promote more economic growth for Kansas and more energy for our nation.

The Kansas oil and gas industry contributed over $145 million to the State of Kansas in taxes and fees in 2019, over $165 million in 2018, over $153 million in 2017, and over $111 million in 2016. We are happy to contribute our fair share but, as pointed out, are a highly taxed industry. Perhaps restructuring the current severance tax structure could preserve the absolute tax dollars received by the State of Kansas while providing the incentives needed by oil and gas producers to expand oil and gas development and create significant economic growth for Kansas. The current severance tax structure as defined in K.S.A. 79-4217 imposes an 8% tax rate on the gross value of all oil and gas severed from the earth or water. K.S.A. 79-4219 provides for a property tax credit in the amount of 3.67% for ad valorem taxes paid. Therefore, the effective severance tax on oil and gas severed from the earth or water in Kansas is 4.33%.

Oil production in Kansas has increased 5 of the last 10 years. Kansas crude oil prices fell by 75% over 20 months beginning in 2014. Kansas oil production fell by 32.4% from 2014 through 2019. The price of crude oil stabilized in 2018 and 2019 and the oil producing characteristics of Kansas uniquely positions the State for a bright energy future.

Now is the time to consider restructuring the severance and ad valorem tax system to maintain absolute tax dollars received by the State while providing producers incentives to expand economic growth. Perhaps amending K.S.A. 79-4219 to increase the property tax credit from 3.67% to 4.5% is in line. A property tax credit of 4.5% would make the effective severance rate 3.5% and allow producers to retain more of their revenues to reinvest into more projects that generate economic growth for Kansas. Any decrease in absolute tax revenues to the State of Kansas would be mitigated by increased economic growth.

A different approach might consider addressing the ad valorem tax structure directly. Only Kansas, California, Utah, and Texas assess ad valorem taxes on reserves. Other states assess ad valorem taxes on equipment only. Empirical evidence suggests assessing ad valorem taxes on reserves causes outside oil and gas investors to devalue Kansas properties by 25%-30% greatly reducing outside investment capital. Perhaps Kansas could restructure ad valorem taxes to eliminate the double-taxation of reserves. By assessing ad valorem taxes on equipment only, reserves would be taxed only once through the severance tax structure. An increase in the severance tax rate from the effective 4.33% to something around 6% could make up the difference between total taxes collected under the current ad valorem tax system of assessing equipment and reserves and the proposed ad valorem system of assessing only equipment. By eliminating ad valorem taxes on reserves, counties and companies will be able to greatly reduce administrative costs. The severance tax receipts to the State’s general revenue fund could then be allocated as seen fit back to the counties. Such a design would eliminate the need for counties to perform oil and gas property appraisals and greatly reduce complaints, all of which saves the State, counties, and companies time, money, and resources.
Small independent oil and gas producers account for 92% of the oil and 63% of the natural gas produced in Kansas. Nationally, small independent producers drill 95% of domestic wells. Nationally, small independent producers’ employees paid $30.7 billion in income taxes (federal and state), sales tax, and excise tax last year. The entire direct/indirect/induced economics of small independent producers generated $131 billion of federal and state taxes last year, a figure that will increase to $189 billion by 2022. Every $1 million of capital expenditures (capex) for independents result in $1.1 million of total taxes generated along with the creation of 39 total jobs. Every $1 million of capex for independents result in $2.4 million of direct and $5.1 million of overall contribution to GDP.

The average Kansas oil well produces 2.3 barrels of oil per day and the average Kansas natural gas well produces 32 Mcf of natural gas per day. Marginal wells account for nearly 80% of the total wells in the U.S. and are responsible for about 20% of total oil and gas production domestically. Every $1 million generated by marginal well production generates $2 million in economic activity elsewhere in the economy.

Studies show that the impact of losing marginal well production would cost the U.S. economy $184.5 billion, 178,000 jobs, and $115 billion in earned labor income per year. The livelihood of the small business sector of the oil and gas industry and that of nearly 10 million royalty owners nationwide is based on marginal well production.

The studies show the economic cost of losing marginal well production to the U.S. and Kansas economy is large and grows over time. The direct and indirect costs to other industries are larger than the direct costs to oil and gas producers. The U.S. oil and gas industry generates an economic stimulus of nearly $1.2 trillion in gross product each year and supports more than 10.8 million jobs nationwide. In Kansas, the oil and gas industry supports over 118,000 jobs and $3 billion in family income.

As the public debate focuses on how to move to a vibrant energy future, we must recognize that oil and gas will continue to serve as the principal component of our economy for many years to come. The Energy Information Administration (EIA) reports that oil and gas supplied 68% of our nation’s energy in 2019. By 2050, the EIA estimate that oil and gas will supply more than 49% of U.S. energy needs.

Globally, the EIA projects that by 2050, world energy demand will increase by 50%, and 69% of that demand will be supplied by fossil fuels. Oil and natural gas are expected to remain the primary energy sources through 2050. Coal is expected to see global market share shrink. Solar and wind are expected to grow briskly in the coming decades and could approach 9% of global energy demand by 2050. Most wind and solar installations are not cost-effective on the open market, necessitating subsidies. As long as subsidies exist, taxpayers have to support industries that are not economically viable on their own. Funding underperforming assets often comes at the cost of starving productive assets.
The U.S. currently has a better, more sensible approach to energy development than any other country in the world. Where government policy has been absent, free markets have filled the void with great success. By focusing on more efficient use of energy, it is possible to lower emissions without imposing a carbon tax or even more environmental restrictions.

Few doubt that energy has improved lives and enabled human progress. Yet one of the biggest challenges facing the world is the polarized debate over the future of energy. Facts and economics are too often replaced with assertions and emotions. Discussions about fossil fuels and alternative energy sources often degenerate into a battle to delegitimize the other side. This is a recipe for inaction. And it keeps billions of people trapped in energy poverty. Almost 40% of humanity have access to only rudimentary forms of energy and a very low standard of living. The world expects and deserves better.

**Beware of Crocodile Tears** - All too often state and federal proposals to tax carbon directly or launch new carbon tax schemes have much more to do with raising revenue than helping our environment.

A recent study analyzed probable effects of a U.S. carbon tax that starts at $20 per ton and then rises 4% per year, which is in line with recent proposals. The study suggested that such a tax would decrease household consumption, due to the increased cost of goods. The average household would have to pay 40% more for natural gas, 13% more for electricity, and more than 20 cents per gallon extra for gasoline. Costs would rise even more in subsequent years.

Price hikes like these can only mean lower standards of living and less opportunity. Families that spend a bigger portion of their household income on transportation, utilities and household goods are hurt, not helped, by carbon tax schemes that make traditional forms of energy more expensive.

Fossil Fuels are needed throughout the world to lift people up, which is different than a philosophy of embracing a zero-emissions world. Over 80% of the energy that the peoples of the world use to survive come from fossil fuels, because that is the cheapest, most plentiful, most reliable source ever developed. More than a billion people around the world face challenges for adequate food, clean water and protection from heat and cold due to a lack of access to energy.

**A Better Way** - As the oil and gas industry has shown, there is a better way. Just a few years ago, no one would have imagined the U.S. could increase production of oil and natural gas while cutting greenhouse gas emissions, which are now near 25-year lows. The oil and gas industry has proven that over the long-term it is possible to lead in energy production and environmental stewardship. By focusing on more efficient use of energy, it is possible to lower emissions without imposing even more environmental restrictions. An American energy policy that values innovation over regulation can turn energy policy challenges into great opportunities for economic growth and energy security. This approach is not just good business, it’s good stewardship and a much better strategy for improving the quality of life for all.
The Kansas oil and gas industry is a $2.1 billion industry that supports an average annual estimated 118,000 jobs, over $3 billion in family income, and over $1.4 billion is state and local taxes.

Over 1,170 permits to drill oil and gas wells were issued by the Kansas Corporation Commission (KCC) in 2019. The industry produced over 33 million barrels of oil and nearly 186 billion cubic feet of natural gas in 2019. Nearly 84% of the value of the Kansas oil and gas industry came from oil production and 16% came from natural gas production.

Oil and gas activity in Kansas during 2019 was down. The industry saw 10-39 drilling rigs running each month. In 2019, Kansas oil production fell by 3.6% and Kansas natural gas production fell by 8.1%.

The Kansas oil and gas industry employs an annual average of 13,800 people paid $940 million per year, an average salary of nearly $60,000 per year. In areas where oil and gas are found, the industry represents a quarter of the jobs in some counties and 60%-70% of the property tax. Add in every Kansas job touched by the oil and gas industry, and the number of employees swell to 118,000, payroll to $3 billion and taxes to $1.4 billion.

A 2019 analysis revealed that over 75 different companies could be involved in the exploration and development of one Kansas oil well. The analysis indicated 100 people are employed by varying businesses in the drilling and completion of one oil well in Ness County, Kansas.

The Kansas oil and gas industry used 2019 as a recovery year. Many Kansas producers refocused capex high-grading and drilling only the best prospects. Companies have optimized operating cost structures to achieve efficiency gains and becoming more specialized regarding their core producing assets focusing on the most resilient short-cycle projects.

Kansas producer efficiency gains have reduced development costs by $10.23 per barrel since 2014. For Kansas producers, improved productivity and efficiency is less about improved technology and more about better application of existing technology.

Kansas oil and gas operating costs are 25% to 30% below their 2014 levels and 16% to 20% lower than the average of the past 5 years. These operating efficiencies have led to an overall decrease in cost per barrel of oil equivalent produced. The unit cost concept does not, however, factor in the market value of oil and gas produced from these wells, which is important for calculating net present value of profit or loss.

There also exists a key juxtaposition between those producers that are more aggressively engaging in development activity and those that are still dealing with leverage on their balance sheets and adhering to cash flow neutrality. For many Kansas producers, the recent market stabilization has not yet reached the critical inflection point and development activity remains conservative and more muted.
The challenges facing the oil and gas industry have grown both in number and complexity. KIOGA continues to leverage our core competencies, namely intellectual capital, volunteerism, and leadership. These competencies set KIOGA apart from other oil and gas advocacy groups and makes us the lead state and national advocate for the Kansas oil and gas industry. Because of the efforts of KIOGA members, voters and policymakers in Kansas are learning that the oil and gas industry is working for them, the economy, and the environment.

Kansas Independent Oil & Gas Association

Founded in 1937, the Kansas Independent Oil & Gas Association (KIOGA) is a nonprofit member organization representing oil and gas producers in Kansas, as well as allied service and supply companies. KIOGA’s vision is simple - to promote the development of Kansas’s oil and natural gas resources for the betterment of society.

We are the lead state and national advocate for Kansas independent oil and gas producers. KIOGA represents the interests of the Kansas oil and gas industry at the local, state, and federal levels of government. We are committed to ensuring that tomorrow’s climate will be one in which our members grow and prosper. Our active presence before the Kansas Legislature, U.S. Congress, and state/federal regulatory agencies means the concerns of Kansas independent oil and gas producers are foremost in the minds of legislators and government officials. Our cooperative partnerships with other national, regional, and state oil and gas associations and industry groups means the concerns of Kansas independent oil and gas producers are heard in Topeka and Washington.

KIOGA believes in seeking common ground, through common sense solutions, to the challenges facing the Kansas oil and gas industry. Our bipartisan approach provides a uniquely powerful voice for our members at the state and national level.

Today, KIOGA is over 4,000 members strong. We believe we will achieve our goals because we have the human capital and corporate values essential for success. Please feel free to contact the KIOGA Topeka Office with any questions or comments at 800 SW Jackson Street, Suite 1400, Topeka, Kansas 66612, phone 785-232-7772, fax 785-232-0917, or visit our website at www.kioga.org.