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State of the Oil & Gas Industry
Dynamic Challenges Facing Kansas Oil & Natural Gas Industry

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Since mid-March 2020, our state, nation, business owners, and employees have had their world turned upside-down because of a virus.



The economy has been engaged in a slow recovery from the worst of the coronavirus, and the accompanying improvement in energy demand has been evident in crude oil prices. Kansas crude oil prices topped \$53/bbl in early January and then dipped below \$11/bbl in March and below \$1/bbl in April. Crude oil prices began to recover thereafter, surpassing \$25/bbl in May before pushing above \$30/bbl in late June and topping \$35/bbl by the end of 2020.

Signs of improving market conditions come against the backdrop of rising COVID-19 cases and chatter anew about implementing restrictions on economic activity, raising concerns about the sustainability of higher prices and rising demand. Fear exists on both sides of the oil ledger with concerns about slowing demand and swelling supplies. Until there is a resolution to the COVID-19 pandemic, crude oil prices will likely remain bearish. The crude oil market is fraught with uncertainty that creates volatility in crude oil prices. Volatile crude oil prices have a significant impact on the small businesses that make up the Kansas oil and natural gas industry.



The Kansas Independent Oil & Gas Association (KIOGA) represents thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that are significantly affected by crude oil prices. In Kansas, small independent producers account for 92% of the oil and 63% of the natural gas produced. The oil and natural gas industry is an important part of the livelihoods of Kansans throughout the state. Nationally, independent producers drill about 90% of American oil and natural gas wells; produce about 54% of American oil, and more than 85% of American natural gas. With nearly 3,500 members, KIOGA is the lead state and national advocate for the Kansas oil and natural gas industry.

Kansas ranked one of top three states for oil and gas investment

On a positive note, we can all be proud that Kansas ranked 3rd in a recent national survey of attractive oil and gas investment states by the Fraser Institute. Texas was ranked first followed by Oklahoma, Kansas, and Wyoming. Interestingly, Colorado was the least attractive on the list finishing a dismal 20th out of 20. Colorado passed sweeping measures in 2019 that imposed onerous, unnecessary, and uncertain regulations on the oil and gas industry.

Global Crude Oil Supply/Demand Dynamics



COVID-19 pandemic destroyed about 30% of crude oil demand worldwide. The 20 countries of OPEC+ agreed to an historic production cut on April 9, 2020 to address the crude oil demand destruction of COVID-19. They cut production by about 10 million b/d. OPEC+ met again on July 16, 2020 and agreed to extend output cuts through the end of July 2020, and then reduce those cuts (otherwise known as raising production) by 2 million bpd to a cut of 7.7 million bpd from pre-COVID levels through the end of the year. According to the plan, the cuts would be further tapered to 5.8 million bpd from January 2021 – April 2021.

The energy outlook for 2021 remains subject to heightened levels of uncertainty because responses to COVID-19 continue to evolve. Reduced economic activity related to the COVID-19 pandemic caused changes in energy demand/supply patterns in 2020 and will continue to affect these patterns in 2021.

OPEC+ met again on December 3, 2020 and decided to limit oil production increases planned for January 2021 to 0.5 million bpd. U.S. crude oil production is expected to fall from 12.2 million b/d in 2019 to 11.3 million b/d in 2020 and 11.1 million b/d in 2021. The U.S. Energy Information Administration (EIA) Short-Term Energy Outlook (STEO) released December 8, 2020 expects U.S. crude oil production will decline to less than 11 million b/d in March 2021. EIA projects U.S. crude oil production will increase by 4.6% from March 2021 - December 2021 as drilling increases in response to rising oil prices.

Long-Term Oil Forecasts – In its 2020 World Energy Outlook released in late 2020, OPEC forecasted world oil demand would plateau in the late 2030's. The report projected global oil consumption would rise to 107.2 million bpd in 2030 from 90.7 million bpd in 2020. Global oil consumption is projected to rise to 97.7 million bpd in 2021, reach 99.8 million bpd in 2022, and grow to 102.6 million bpd by 2024.

While oil use to fuel cars, trucks, and industry will rebound as economies recover, future growth may be partly offset by factors like a post-pandemic shift to homeworking and teleconferencing over commuting.

The report sees potential for global oil demand beginning to decline after 2030 with faster adoption of electric cars, more fuel efficiency, and a larger reduction in business and leisure travel after the pandemic.

Longer term, OPEC sees global oil demand to reach 109.3 million bpd in 2040 and decline to 109.1 million bpd by 2045. The OPEC report said that despite lower future demand due to the COVID-19 pandemic and the accelerating energy transition, the world is on track to run out of sufficient oil supplies to meet its needs through 2050 unless exploration speeds up significantly and capital expenditure of at least \$3 trillion is put to task. To meet the global cumulative demand over the next 30 years, undeveloped and undiscovered resources totaling 313 billion barrels of oil need to be added to currently producing assets.

The report said electric cars will account for over 27% of new cars globally by 2045. Oil will continue to account for the largest share of the energy mix by 2045.

Crude Oil Market Structure

The crude oil market is a global oligopolistic market mostly influenced by the OPEC cartel. The OPEC+ cartel is made up of 20+ oil producing nations. The OPEC cartel control about 1/3 of the world's oil supplies and collude to control global crude oil prices. The U.S. is the largest oil producing nation in the world. Kansas oil and gas producers are perfect competitors in an oligopolistic market. That is to say, we are price takers, not price makers.

Kansas oil and gas producers have no control of crude oil prices, but can only manage their internal costs. For Kansas oil and gas producers, optimizing internal operating efficiencies is paramount in order to hedge against volatile crude oil price swings.

A recent study on upstream drilling and production costs and found that upstream costs in 2020 for onshore plays were 25% to 30% below their 2012 levels and 16% to 20% lower than the average of the past five years. This cost analysis 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.

Low-cost oil producers across the U.S. establish a fair price for oil based on how low they can get production costs. Kansas oil and gas production will likely remain a conventional, small business operation that will be tweaked with technology. The bottom-line is the low-cost producer will stay in business.

Impacts of Crude Oil Price Collapses from the Past

We can learn from past market downturns. Crude oil prices fell 75% over 20 months beginning in 2014. As a result, Kansas lost over \$730 million in oil and gas output over that period. This aligns with the roughly \$1 billion cut in capital expenditures (capex) in Kansas over the same period.

To understand this better, let's look at capex which are *Funds used by companies to maintain or increase the scope of their operations*. This kind of spending is very good for an economy. It builds infrastructure, creates jobs, and is an investment in the future.

Companies make these 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 oil and gas companies in Kansas and elsewhere cut capex by 75%-80% in 2015-2016. Kansas oil and gas companies invested about \$300 million in 2017, down from \$1.3 billion invested in 2014. Companies deferred well completions and many high-cost marginal wells were temporarily shut-in. As a result, royalty payments to Kansas oil and gas royalty owners dropped by about \$400 million since 2014.

In Kansas, much like the rest of the nation, some oil and gas service companies layed off as much as 55%-60% of their workforce and reduced wages by as much as 20%-25% and some producers layed-off as much as 20%-25% of their workforce in 2015-2016. As a result, family income has dropped by about \$341 million across Kansas. Direct oil and gas employment loss in Kansas since 2014 is over 3,100. When you add in indirect jobs, employment losses in the Kansas oil and gas industry jumps to over 6,100.

The ripple effects are everywhere. If you think about the role of oil in your life, it is not only the primary source of many of our fuels, but is also critical to our lubricants, chemicals, pharmaceutical, plastics, and many other items. If you think about the law, accounting, and engineering firms that serve the industry, the pipe, drilling equipment, and other manufactured goods that it requires, and the large payrolls and their effects on consumer spending, you will begin to get a picture of the enormity of the oil and gas industry. Clearly, lower oil prices do not compensate for the loss of capex in the U.S. and Kansas economy.

Kansas Oil & Gas Summary

The fallout from COVID-19 and concurrent crude oil supply shock continues and has had a profound impact on the Kansas oil and gas industry. Oil and gas exploration and production activity in Kansas and across the nation has slowed dramatically. Operators across Kansas and the nation have responded quickly by laying down rigs, shutting in production, and cutting capex by as much as 60%.

Economic Impact – Oil and gas production and exploration activity in Kansas during 2020 was down significantly. Nearly 5,000 wells were shut-down resulting in oil production falling by 14.5% and natural gas production falling by 9.2%. In 2020, Kansas experienced **over \$180 million in lost oil production**. The concomitant economic impact of lost production is felt by all Kansans as this lost output resulted in **over \$360 million in lost gross state product (GSP)**.

U.S. gross domestic product (GDP) declined by 4.4% in the first half of 2020, but began to rise in the third quarter of 2020 and is projected to grow 3.1% in 2021. Slow economic recovery from the sudden and severe contraction of early 2020 is expected to continue in the Kansas economy in 2021. Kansas gross state product (GSP) is expected to grow 3.6% in 2021.



Oil production in Kansas during calendar year (CY) 2019 was about 33.2 million barrels (90,953 bbls/day). Kansas oil production in CY 2020 was about 28.3 million barrels (77,756 bbls/day) – down about 14.5%. Hopefully, we will see production improvement in 2021 if prices recover adequately, but it will be some time before we get back to the 90,000 - 100,000 barrels per day level.

Kansas oil production fell by 42.6% from 2014 to 2020. After the oil price collapse of 2014 and 2015, the market began to balance and oil prices stabilized in 2018 and 2019. As a result, Kansas oil production began to slowly stabilize at a lower level. Oil production in Kansas fell by 4.4% in 2019 after falling 3.1% in 2018, 5.6% in 2017, and 16.6% in 2016.

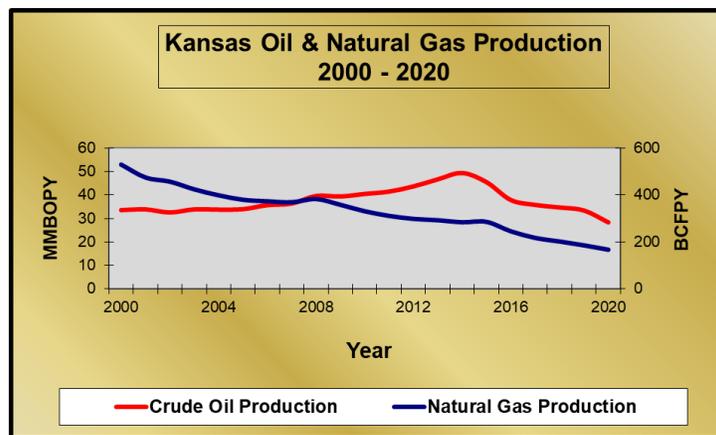


Figure 1

Figure 1 illustrates the trend in Kansas oil and natural gas production over the last 20 years.

As a result of low oil prices and a corresponding significant drop in the state's 2020 crude oil production, tax collections to the State of Kansas and Kansas counties have also declined dramatically. Oil and gas severance tax collections by the State of Kansas in CY 2020 declined by 43% from CY 2019 and declined nearly 84% since 2014. Oil and gas property tax collections by counties in CY 2020 declined by about 41% from CY 2019 and declined over 77% since 2014.

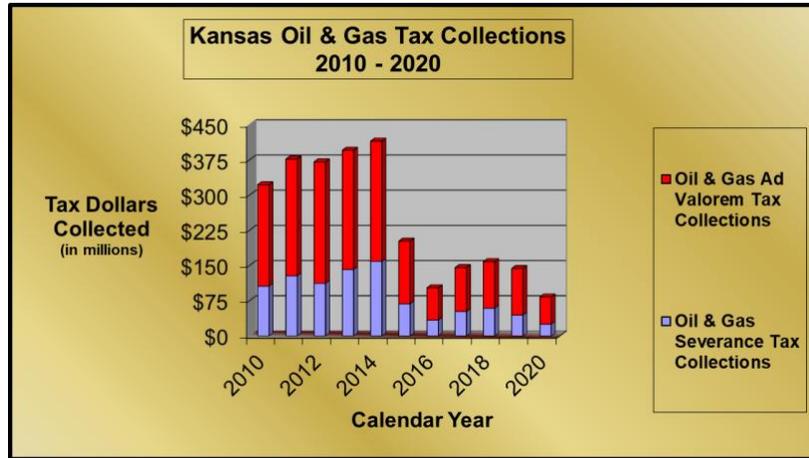


Figure 2

Figure 2 illustrates the impact of falling oil prices on oil and gas severance tax collections and property tax collections in Kansas.

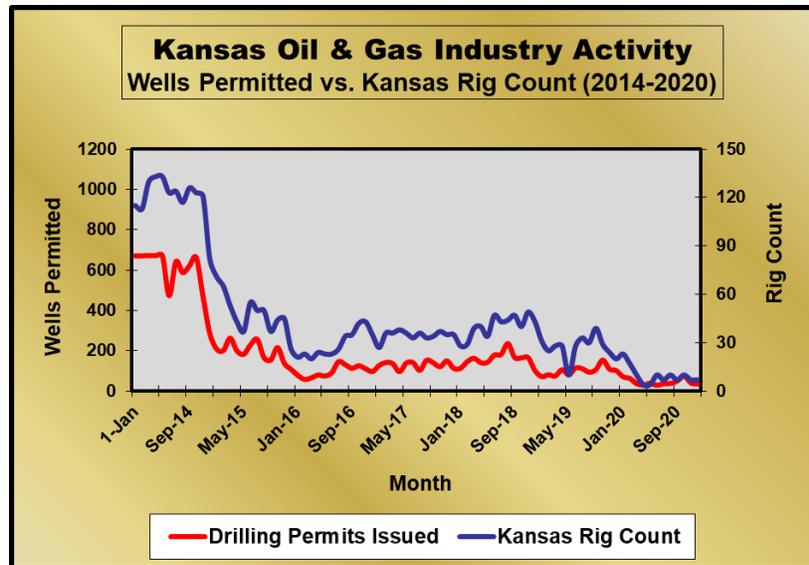


Figure 3

Figure 3 illustrates oil and gas activity in Kansas from 2014-May 2020. The industry experienced a 91% drop in drilling rig count and a 92% drop in drilling permits issued in the 2014-May 2020 period.

What are Kansas oil & gas companies doing?

The Kansas oil and gas industry has displayed a lot of discipline in 2020 after learning some tough lessons from experiences with past low-price markets, from the mid-1980s to the last 1990s and the more recent 2014-2016 downturn.

Many Kansas companies are refocusing capex to strategize their way out of the current downturn. Companies are working to optimize operating cost structures to achieve more efficiency gains and became more specialized regarding their core producing assets. Kansas producers are focusing on the most resilient short-cycle projects and concentrating on their core competencies and smaller producer advantages. Many oil and gas producers across Kansas are working to optimize supply chain relationships, improve operational efficiencies, reduce and refocus capex, and examine acquisition and divestiture opportunities. Operators are high-grading and drilling only the best prospects. In many cases, improved productivity is less about improved technology and more about better application of existing technology.

Expenditures for exploration and development constitute most of a company's upstream capital investment. When calculated on a reserve addition per barrel basis, these expenditures represent the cost of finding and developing a barrel of oil. Studies have indicated finding and development costs declined by \$10.23 per barrel since 2014.

Efficiency gains achieved by Kansas oil and gas producers over the last couple of years have proven to be very important for reducing break-even prices. Many Kansas operators have reduced breakeven points to about \$25-\$30 per barrel. Kansas operators in general are adhering to cash flow neutrality. Currently, exploration and development activity in Kansas is very conservative and muted.

The oil and gas industry and the economy in general can be helped by getting people back to work. The longer this goes on, the deeper you dig the hole; the harder it is to crawl out. The solution for our industry and everybody is to get people back to work.

Once demand and prices return to normal, several things should be considered to help the Kansas oil and gas industry, none of them involving bailouts.

We need to find solutions to high Kansas electric rates - which hurt not just the oil industry, but general economic development as well.

Kansas rates are the highest in our region. Kansas consumers spent more than \$775 million more on electricity than just 10 years ago. If electric rates in Kansas had decreased by the same amount experienced in Texas over the last 10 years, Kansans would have saved over \$300 million.

With electric costs that are 30-50% of expenses, oil wells in rural Kansas could run for many years longer with more competitive electricity prices. Who will be left to absorb the high fixed costs that burden rates? Oklahoma rates can be more than 50% less than in Kansas.

Renewable energy sources like wind need to be carefully considered going forward. The state has adequate renewable energy generation, and careful study is required before allowing more subsidies. Methane and carbon dioxide emissions are significantly down in the U.S. even as oil and gas production has dramatically increased. We must resist unduly penalizing and regulating the fossil fuel industry for political expedience.

The oil and gas industry has lived through several ugly downturns before, and we know that patience, persistence, insight, and innovation pay off. We move forward together to focus on value reconstruction and prepare for brighter days ahead.

Other Key Challenges

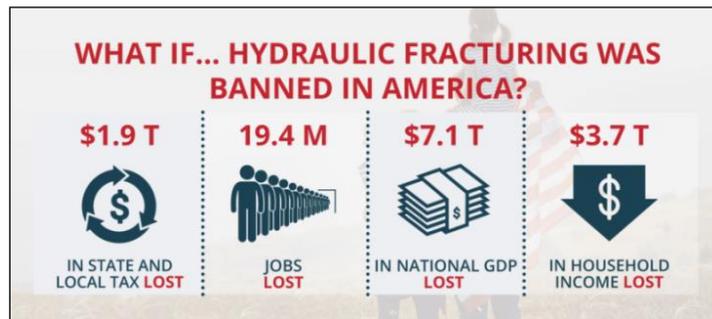
The oil and gas industry continues to address many challenges including energy policy, carbon tax, emissions, ESG, prices, and more.

Energy Policy – In the 1970s, many experts forecasted a permanent energy shortage in the U.S. Fast-forward to today and we see the U.S. is the top producer of oil and natural gas in the world. Technological developments and efficiency gains have resulted in U.S. oil production doubling since 2011. The energy shortage predicted in the 1970s has not come true. In reality, we did not have an energy shortage in the 1970s, but had a shortage of imagination and loss of confidence in our ability to innovate.

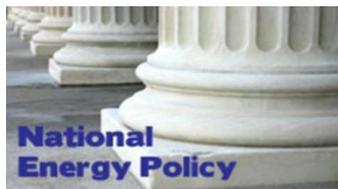
Soaring output from oil producing regions across the U.S. has been the main driver of the transition. But with the emergence of the COVID-19 pandemic and corresponding demand destruction, we are now seeing declines in production. In addition, some uninformed policymakers and environmental activists have called for a ban on hydraulic fracturing (HF).

Without HF, studies by IHS Global Insight indicate 50% of America's oil wells and 33% of America's natural gas wells would be closed. Domestic oil production would be slashed by 183,000 barrels per day and domestic natural gas production would be slashed by 245 billion cubic feet per day. By 2025, our nation's real GDP would be lowered by \$7.1 trillion, \$1.9 trillion in state and local tax revenue would be lost, \$3.7 trillion in household income would be lost and more than 19 million jobs would be lost, including 10,000-14,000 Kansas jobs.

A ban on HF would also damage America's standing in the world. We would surrender our status as a global energy superpower and weaken our national security as we become more reliant on foreign sources of energy.



Energy Policy Challenges - The U.S. currently has a better, more sensible approach to energy development than any other country in the world, both short-term and long-term. Where government policy has been absent, free markets have filled the void with great success.



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 lead in energy production and environmental stewardship.

By focusing on more efficient use of energy, it is possible to lower emissions without imposing a carbon tax or even more environmental restrictions. 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.

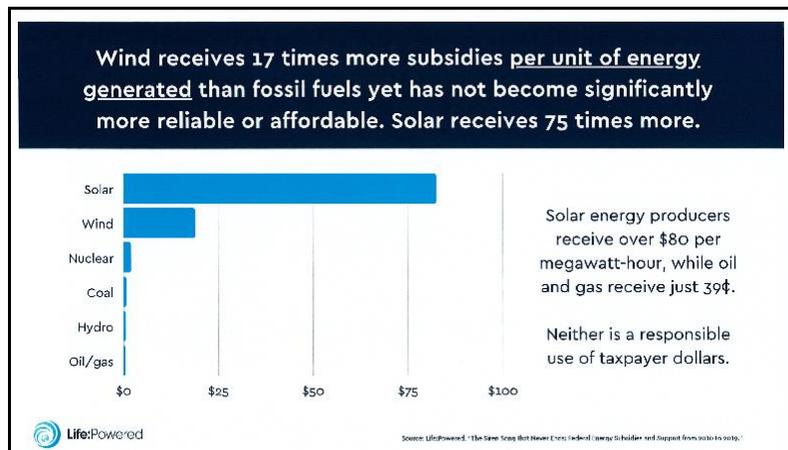
Energy prices affect all corners of the economy, and keeping up with demand is essential for maintaining a high standard of living. Thankfully, that doesn't require abandoning efforts to protect the environment, because newer technology is cleaner technology. The key is to avoid placing unnecessary political or legal obstacles in the way of innovation and expansion. Let America's entrepreneurs continue modernizing our energy technology as they work to meet growing demand. That's a prescription for economic prosperity and a cleaner environment.

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, or three billion people, have access to only rudimentary forms of energy and a very low standard living. The world expects and deserves better.

Green New Deal – President Biden released his energy and environment plan which reflected much of the Green New Deal (GND) introduced in 2019 by U.S. Representative Alexandria Ocasio-Cortez (D-NY) and includes an enormously damaging and historically large tax increase. The plan calls for setting a 100% clean-electricity standard by 2035 and investing \$2 trillion over four years on clean energy. Members of both parties have called the idea unrealistic. The GND is the far-left's wish list dressed up to look like serious policy. The philosophies and ideas behind this textbook socialism are not just foolish. They're dangerous. Biden's plan is out-of-touch with working people and the economy.

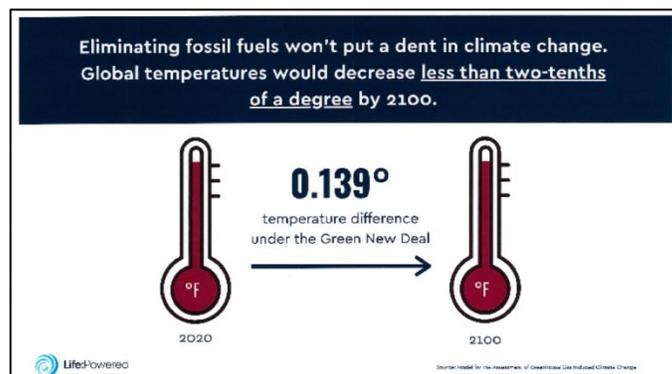


This is not the first time Biden has advanced an anti-energy agenda under the guise of climate change. Biden is promising to repeat the Obama-Biden legacy of failed green jobs, but this time he intends to spend more taxpayer money on what will likely be another failed enterprise. Biden plans to spend \$2 trillion that could be better used to assist the economy in its recovery from the coronavirus pandemic.



Facts debunk GND ideas. Many scientists, policymakers from both parties, and common sense have discredited the dingbat ideas proposed in the GND. Climate science conventional wisdom is flawed, relies on alarmist scenarios, and exaggerates economic impacts. The GND will fail for many reasons. One is that the people pushing it seem oblivious to the needs of low-income families, who would be directly hurt by the plan.

The whole idea behind the GND is to take fossil fuels away from the people. And the bureaucrats are nowhere near having a replacement for fossil fuels, nor will they ever be until they embrace nuclear energy. Sooner or later, the people will figure this out.



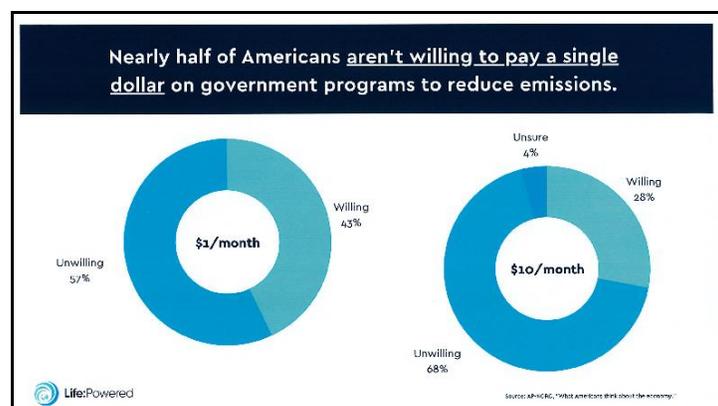
Regardless of the urgency, or lack thereof, of the climate issue, the GND is not something America can remotely afford to implement.

Inexpensive energy is necessary for economic advancement by the world's poor and for recovery from the staggering economic effects of COVID-19. Ideological opposition to fossil fuels is an anti-human stance that views ordinary people not as problem-solving sources of ingenuity but as only mouths to feed, producing environmental damage.

Americans who have observed stay-at-home orders or quarantined themselves at home this year need to look around and think about what their lives would be like if they no longer had ample and affordable power, or natural gas to use to cook their meals. Because, make no mistake about it, that is what Biden is really proposing.

The choices policymakers make in 2021 and beyond will determine whether we build on America's energy progress or shift to foreign energy sources with lower environmental standards. You can't address the risks of climate change without America's oil and natural gas industry, which continues to lead the world in emissions reductions while delivering affordable, reliable, and cleaner energy to all American.

Carbon Tax – Taxing carbon to tackle climate change is one of those big ideas that have long held a kind of bipartisan sway. President Biden's climate action plan would cost \$16 trillion – or about \$55,000 for every American. However, a nationwide survey conducted in late 2020 indicated Americans don't place high priority on climate change. Moreover, when asked how much they are willing to pay to address climate change, the median response was consistently between \$25 and \$50 a year. Public support for climate action appears to be broad, but it is shallow. Addressing climate change enjoys widespread approval, until climate action comes with a tangible price tag.



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. For those who prefer higher taxation to spending cuts, having an entirely new source of revenue is appealing. However, taxing carbon only takes more resources from the private sector to support swelling state and federal government.

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 suggests 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.

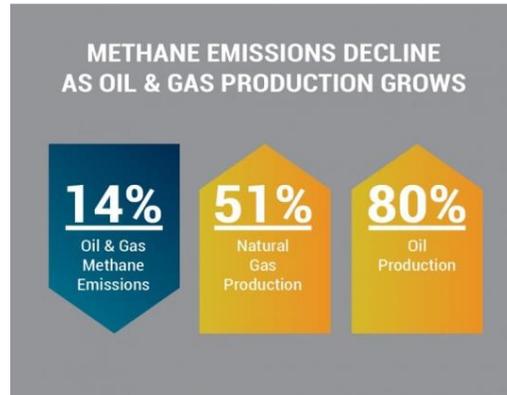
Price hikes like these can only mean lower standards of living and less opportunity. Families that spend a bigger portion of their household income on transportation, utilities and household goods are hurt, not helped, by carbon tax schemes that make traditional forms of energy more expensive.

Recently, several major integrated companies who were once powerful skeptics of global warming, are now supporting a carbon tax. Clearly, this is just a ploy to stifle competition. Major integrated companies can pass along tax increases to consumers while small companies that are not integrated from production through end-product do not have the ability to pass along tax increases.

The power to tax involves the power to destroy, and never more so than in the case of a carbon tax. That's because unlike other taxes, a carbon tax is designed to tax away the base on which it is levied.

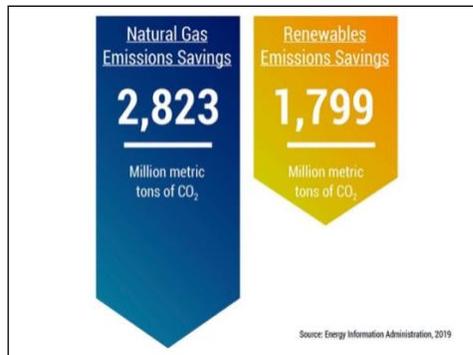
U.S. Doesn't Need a Carbon Tax – Even if the U.S. imposed some kind of carbon tax, it would not make a difference to global climate. In 2018, U.S. carbon emissions were around 5,100 billion metric tons from all sources, an almost 20% drop below emissions in 2007. While U.S. greenhouse gas emissions have been falling in recent years, world carbon emissions keep increasing by an average of more than 300 gigatons each year for the last decade, driven primarily by China's and India's increasing demand for energy. Together, these two countries now account for one-third of world carbon emissions. China and India are not going to impose a carbon tax on themselves. Doing so would increase their energy costs and reduce their economic growth. Neither will Russia, nor countries in the Middle East, nor developing nations whose primary concern is improving the economic well-being of their citizens.

Emissions - According to EPA Greenhouse Gas (GHG) reporting data, oil and gas methane emissions account for only 1.22% of total U.S. GHG emissions. The EPA found that U.S. GHG emissions fell 2.7% from 2017 to 2018. This downward trend occurred even as U.S. oil and natural gas production grew dramatically.



Source: U.S. EPA, U.S. EIA 1990-2017

The fact is our nation's 21st century oil and gas renaissance has made domestically produced oil and gas economical and abundant. This market-driven success has helped our nation to achieve significant emission reductions. The U.S. emitted 12% fewer energy-related carbon emissions in 2018 than 2005. The oil and gas industry played a significant role in reducing U.S. greenhouse gas emissions by over 20% over the last decade.



The latest Energy Information Administration (EIA) data (2019) show natural gas is responsible for 2.8 billion metric tons of carbon dioxide emission reductions since 2005. That represents 61% of overall power sector reductions during that time-frame and 57% more than reductions attributable to renewables.

In the latest report from the Energy Information Administration (EIA), U.S. carbon emissions are the lowest they have been in nearly seven decades. Even more interesting is the fact that U.S. carbon emissions dropped while emissions from energy consumption for the rest of world increased by 1.6%. The U.S. emitted 15.6 metric tons of CO₂ per person in 1950. After rising for decades, it has declined in recent years to 15.8 metric tons per person in 2017, the lowest measured levels in 67 years. European emissions rose 2.5% and Chinese emissions rose 1.6% along with Hong Kong's 7% surge. **America leads the world in environmental quality.**

The men and women of the oil and gas industry reject the stale mindset of last century's thinking peddled by some that oil and gas production and environmental stewardship are not compatible.

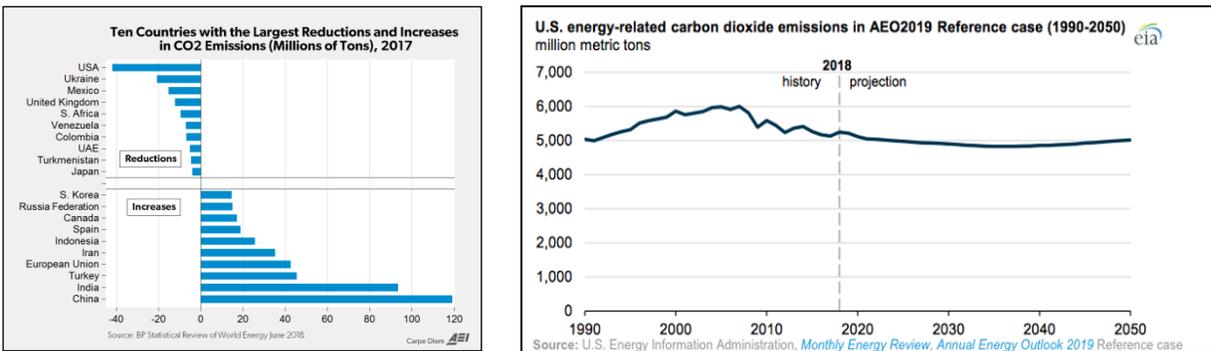


Figure 4

Figure 4 illustrates the significant decline in U.S. greenhouse gas emissions

Fair Access to Bank Services, Capital, and Credit

In November 2020, the Office of the Comptroller of the Currency (OCC) proposed a rule to ensure fair access to banking services provided by national banks, federal savings associations, and federal branches and agencies of foreign bank organizations.

The proposal would codify more than a decade of OCC guidance stating that banks should provide access to services, capital, and credit based on the risk assessment of individual customers, rather than broad-based decisions affecting whole categories or classes of customers.

The proposed rule would ensure that banks meet their responsibility to provide their services fairly since they enjoy special privilege and powers because if the system fails to provide fairness to all, it cannot be a source of strength for any.

Despite the OCC's statements and guidance over the years about the importance of assessing and managing risk on an individual customer basis, some banks continue to employ category-based risk evaluations to deny customers access to financial services.

In June 2020, the Alaska Congressional delegation sent a letter to the OCC discussing decisions by several of the nation's largest banks to stop lending to new oil and gas projects in the Arctic. The letter noted the critical importance of the energy sector to the U.S. economy, as well as the jobs, state revenue, and diplomatic and national security benefits attributable to the oil and gas industries targeted by the banks' actions. In the letter, the authors described as unfair the effects of this decreased lending on the population of Alaska as a whole. The letter also stated that, although the authors believed that the banks' rationale was political in nature, the banks had ostensibly relied on claims of reputation risk to justify their decisions.

The OCC requested information from several large banks to better understand their decision-making. The responses received indicate that, over the course of 2019 and 2020, these banks had decided to cease providing financial services to one or more major energy industry categories, including coal mining, coal-fired electricity generation, and/or oil exploration in the Arctic region. The terminated services were not limited to lending, where risk factors might justify not serving a particular client (e.g., when a bank lacked the expertise to evaluate the collateral value of mineral rights in a particular region or because of a bank's concern about commodity price volatility). Instead, certain banks indicated that they were also terminating advisory and other services that are unconnected to credit or operational risk.

On December 14, 2020, Alaska Governor Mike Dunleavy announced his administration will introduce legislation at the start of the 32nd Alaska Legislature that requires state departments and agencies to end existing relationships and partnerships with financial institutions that have chosen to stop financing oil and gas exploration and development in the arctic.

“For over 40 years, the United States has benefited greatly from exploration and development of our arctic resources,” said Governor Dunleavy. “It makes no sense for Alaska to allow financial institutions to benefit handsomely from Alaska’s financial activities on one hand, while working against our interests on the other. Oil and gas exploration in the arctic has created thousands of jobs and billions of dollars in revenue benefiting Alaskans and the country as a whole.”

ESG Reporting



Environmental, Social, and Governance (ESG) reporting is a dominant topic of industry discussions and market evaluation criteria. While this may seem daunting and arbitrary to some, many oil and gas operators, service companies, and individuals are navigating this new landscape to elevate the good already being done. ESG is not going away anytime soon.

“ESG is nothing new for the oil and gas industry. Independent operators are good stewards of the land, value a diverse and talented workforce, and put accountability first with every handshake or deal signed,” said Edward Cross, KIOGA President. “The Kansas oil and gas industry and KIOGA value the tools that allow for operators to tell their story of fueling the American economy with innovation and hard work but firmly oppose tests and efforts designed to put an end to domestic oil and natural gas production.”

An ESG minded company may attract more investment, as well as send a positive message. A Sustainable, Responsible, Impact (SRI) investment strategy is based on the belief that a commitment to the principals of Corporate Social Responsibility (CSR) will generate long-term competitive financial returns, as well as positively impact our society. For investors and lenders, reducing the risk associated with sustainability of performance is immensely important.

Corporate Social Responsibility (CSR) goes beyond the law. It is about self-regulation and reveals a company’s guiding principles, operating philosophy, and behaviors toward all stakeholders. The goal is to ensure a company’s actions positively impact all stakeholders. CSR includes programs, policies and practices related to employees, suppliers, customers, and society.

A sustainability report is an attempt to engage and communicate a company’s performance to a diverse set of stakeholders including investors, banks, consumers, communities where we work, employees, and policymakers.

For producers, a couple of key areas to focus on are emissions management, water management, safety, and community involvement. Sustainable, Responsible and Impact Investing (SRI) are used to make investment decisions. Transparency on the issues of environment, social responsibility and corporate leadership are becoming more important.

Some investors turn their backs on companies that don't offer this information. There is a need to "tell our story" to compete in the financial market. Most brokerage firms and mutual funds invest in companies that follow ESG criteria.

To be effective, an ESG report should generally include a company's impact on carbon emissions, water use, conservation efforts, anti-corruption policies, board compilation including how directors are elected and audit procedures.

Of course, safety measures, data protection, employee engagement including efforts for positive team dynamics and transparency from management to teams are all important metrics. Also include information about your company's community development, local corporate engagement and giving.

Companies should communicate their ESG analysis and plans to investors and the community at large.

Kansas oil and gas companies work to develop effective ESG plans that include: 1. Company-specific ESG philosophy and priorities. 2. ESG issues and data that are material to each specific company and to key stakeholders. 3. Scheduled publishing of an ESG or Sustainability Report once sufficient ESG information is available to report. 4. Incorporate ESG practices into operations, where appropriate, as well as management and board oversight. 6. Review and update the ESG/Sustainability report at least annually.

Prices

EIA Oil Price Forecast – The U.S. Energy Information Administration (EIA) Short-Term Energy Outlook (STEO) released December 8, 2020 expects U.S. crude oil production will decline to less than 11 million b/d in March 2021 before improving in the latter part of 2021. The EIA projects Kansas crude oil prices to average about \$37/bbl in 2021. This forecast reflects EIA's expectation that while inventories will remain high, they will decline with rising global oil demand and restrained OPEC+ oil production.



Signs of improving market conditions come against the backdrop of rising COVID-19 cases and chatter anew about implementing restrictions on economic activity, raising concerns about the sustainability of higher prices and rising demand. Fear exists on both sides of the oil ledger with concerns about slowing demand and swelling supplies. Until there is a resolution to the COVID-19 pandemic, crude oil prices will likely remain bearish. The crude oil market is fraught with uncertainty that creates volatility in crude oil prices.

Challenges on How to Price U.S. Crude Oil Emerging - Two companies have released price benchmarks for oil in the U.S., challenging West Texas Intermediate (WTI) crude as the standard indicator of the cost of the commodity. The two new benchmarks are measured on the Gulf Coast, where much of the action in the oil market takes place. S&P Global Platts created the Platts American GulfCoast Select and Argus Media launched the American Gulfcoast Select. Both were started in June 2020. U.S. oil companies have been producing so much oil in recent years that they have begun shipping nearly a third of it overseas. That's made the Gulf Coast a new central hub of the domestic oil market. But the way that oil is priced in the U.S. depends on a futures contract based at a landlocked hub in Cushing, Oklahoma.



What can be done to preserve America's affordable, reliable energy?

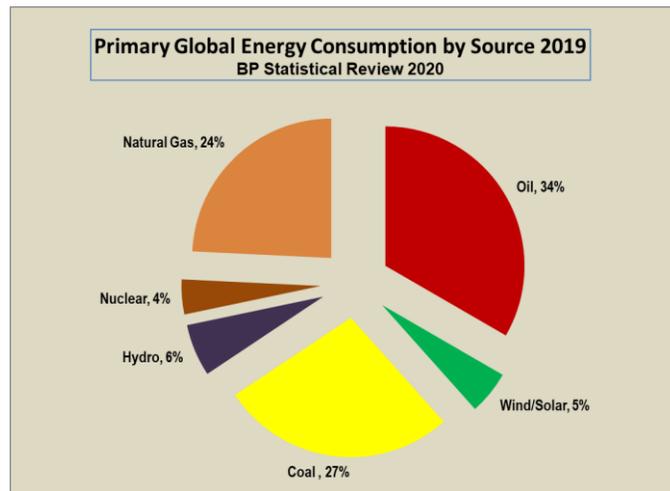
- Oppose extending or expanding subsidies that use our tax dollars to prop up unreliable, unaffordable renewable energy companies, many of which can't make a profit without them.
- Roll back burdensome regulations that tie the hands of America's responsible energy workers and give the upper hand to hostile, unstable, and polluting foreign countries.
- Fight "energy discrimination" and politically motivated investing that denies financing to energy producers.

Fossil Fuels Still Supply 84% of World Energy

In late 2020, BP released its *Statistical Review of World Energy 2020*. The Review provides a comprehensive picture of supply and demand for major energy sources on a country-level basis. This annual report is one of the most important sources of global energy data. It is a primary source of data for numerous companies, government agencies, and non-government organizations. Some highlights from the report include:

Primary energy consumption grew by 1.3% last year, which was less than half the rate of 2018 (2.8%). Nevertheless, this still represents the 10th consecutive year that the world set a new all-time high for energy consumption. The largest share of the increase in energy consumption, 41%, was contributed by renewables. Natural gas contributed the second largest increment with 36% of the increase. However, as an overall share of energy consumption, oil

remained on top with 33% of all energy consumption. The remainder of global energy consumption came from coal (27%), natural gas (24%), hydropower (6%), renewables (5%), and nuclear power (4%). Cumulatively, fossil fuels still accounted for 84% of the world's primary energy consumption in 2019.



China was responsible for three quarters of the world's energy consumption growth, followed by India and Indonesia. The U.S. and Germany posted the largest declines.

Oil consumption also grew to a new record, again led by demand from China. But global oil production fell for the first time in a decade, as growth in the U.S. was more than offset by OPEC production cuts. Given the impact Covid-19 is having on the world's energy markets, it looks like 2018 may stand as the high mark for oil production for at least a couple of years.

Natural gas consumption rose by 2% in 2019 as the share of natural gas in primary energy consumption rose to a record high of 24.2%. Natural gas production grew to a new record, with U.S. production accounting for almost two-thirds of this increase.

Renewable energy continued its growth streak. Wind was the largest contributor, but solar was close behind. China once again led all countries in consumption of renewables, followed by the U.S. and Japan. The share of renewables in power generation increased to 10.4%, surpassing nuclear power for the first time. Renewable energy remains too unreliable and expensive to be a primary energy source.

What will power the U.S. in the future? - The EIA estimates that 30 years from now fossil fuels will account for 69% of our country's energy consumption.

The International Energy Agency (IEA) projects that by 2050, world energy demand will increase by 50% and 69% of that demand will be supplied by fossil fuels. Even though the IEA projects world oil demand to plateau around 2030, oil and natural gas are expected to remain the primary energy sources through 2050.

The end of oil and gas has been predicted on a regular basis since 1885, yet today, we use more of both than ever before and no end is in sight. Figure 5 shows global primary energy consumption by energy source projected to 2050. Oil consumption grew by 35% from 1990 to 2015 and is projected grow by 14% from 2015 to 2035. Similarly, natural gas grew 77% from 1990 to 2015 and is expected to grow 37% from 2015 to 2035.

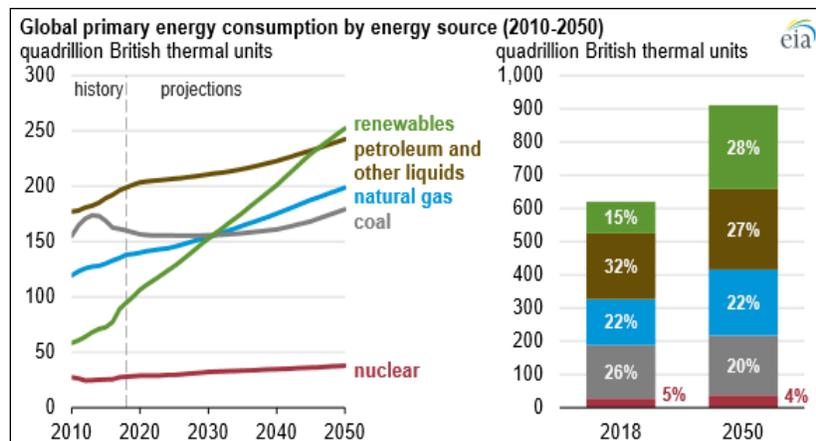


Figure 5

Fig 5 illustrates global primary energy consumption by energy source. By 2050, oil and gas are projected to supply more than 49% of global energy needs. Source: [Energy Information Administration \(EIA\)](#)

When looking at energy policy it is important to know that our nation is the worldwide leader in energy production. With the right energy policy, we can now move forward and build upon our nation's new era of energy abundance, self-determination, and global energy leadership. We need tax policies that don't compromise our ability to grow the economy and create jobs. We need regulatory reforms that don't add unnecessary layers of compliance burdens on top of existing protections. We encourage everyone to listen to the facts when it comes to energy policy discussions and focus on what's important: American jobs, American energy security, and American global energy leadership.