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.

As we begin 2020, it is interesting to look back at some of the most ridiculous predictions from some “chicken little” climate scientists/activists. Modern doomsayers have been predicting climate and environmental disaster since the 1960s. They continue to do so today. None of the apocalyptic predictions as of today have come true. Yet, we continue to see wild predictions from notable people in government and science. The makers of failed apocalyptic predictions are individuals holding respected positions in government and science. While such predictions have been and continue to be enthusiastically reported by media eager for sensational headlines, the failures are typically not revisited.

In 1996, Paul Ehrlich said: “If I were a gambler, I would take even money that England will not exist in the year 2000.” Dr. Ehrlich has been predicting climate disaster since the 1960s. As you can see in this 1969 article, Dr. Ehrlich predicted humankind had 20 years to take drastic action to head off what he foresaw as a climate disaster.
A senior United Nations (U.N.) environmental official was quoted in an Associated Press climate report on June 29, 1989 saying entire nations could be wiped off the face of the earth by rising sea levels if the global warming trend is not reversed by the year 2000. Coastal flooding and crop failures would create an exodus of ‘eco-refugees,’ threatening political chaos, said Noel Brown, director of the New York Office of the U.N. Environmental Program (UNEP). He said governments have a 10-year window of opportunity to solve the greenhouse effect before it goes beyond human control.
In September 2019, the head of the world’s foremost weather science organization issued a surprise rebuke to climate alarmists marking what may be one of the most significant developments in the climate debate in decades. Petteri Taalas, the secretary-general of the World Meteorological Organization (WMO), told the Talouselama magazine in Finland that he disagrees with doomsday climate extremists who call for radical action to prevent a purported apocalypse. Taalas’s remarks are significant because he heads the WMO. The WMO is one of the two organizations that founded the Intergovernmental Panel on Climate Change (IPCC) in 1988. Since being formed, the IPCC has become the leading institution worldwide to promote the theory that human activity contributes to global warming.

Most recently we see ramblings from 16-year old climate expert, Greta Thunberg who would have you believe mankind is only a few ‘impossible burgers’ away from global calamity. Every child in the wealthy world should be taught to be grateful to the previous generations that have gifted them with unprecedented capabilities to flourish in this world.

In the name of science, several doom-and-gloom predictions about the climate impacts of business-as-usual have been made in an attempt to shock humanity into immediate legislative and regulatory action and lifestyle changes. It has not worked. Worsening their predicament, the perpetrators continue with their predictions. From their perspective, they remain the smartest guys in the room.

The executive director of the Center for Biological Diversity, an environmental activist group, recently said: “The core talent of a successful environmental activist is not science or law. It’s campaigning instinct.” He went on to say: “I’m more interested in hiring philosophers, linguists, and poets.” He described environmental activist strategies as all about taking “a terrible toll on agency morale” until environmental regulators “feel like their careers are being mocked and destroyed” and “become much more willing to play by our rules. Psychological warfare is a much underappreciated aspect of environmental campaigning.”

When political or moral ideologies are insulated from critique, they become dogmas. They become belief systems that are cleaved to, not because they have been tested and discussed in the public sphere, but because their adherents just know that they are right. These are the perfect conditions in which arrogance and intellectual hollowness can flourish, and in which defensiveness and fury become the default responses to any challenge from outside. That is what has happened to environmentalism.

For some, “climate change” has become the proxy for all things scary from severe weather events to rising tides, mass migration, and agricultural failure. Their climate conversation is fueled by outrage, which being fed by fear. It’s time we give ourselves a break, because we’ve been lied to. We have been manipulated by the supposed protectors of the
Most of us are good people and want to be environmentally friendly. Unfortunately, it’s that kindhearted nature that makes a soft target for eco-propagandists.

A 2019 report from the Global Energy Institute found that anti-energy activists have prevented at least $91.9 billion in domestic economic activity and eliminated nearly 730,000 job opportunities. In addition, state/local governments have missed out on more than $20 billion in tax revenue.

We have had enough hysteria over important environmental issues thanks to philosophers, linguists, and poets. We need to deal with the facts and the science.

**Latest Climate Change Reports**

The United Nation’s Intergovernmental Panel on Climate Change (IPCC) released its latest climate change report in October 2019. In case you hadn’t heard, we are all doomed. Yet, the world mostly yawned.

The IPCC’s models emphasize the need for people to change their lifestyle and consumption patterns to more sustainable alternatives, specifically in areas they can control, like modes of transportation, the buildings they inhabit and their dietary preferences.

While the 133 report authors are undoubtedly well accomplished in their scientific fields, they fail to understand the unintended consequences and high taxpayer and consumer costs that come with climate action. They want to drastically cut carbon emissions worldwide to limit global warming by 1.5 degrees over the next few decades. In order to meet the 1.5 degree goal, the IPCC envisions a future where people travel less using buses, trains, hybrid and electric cars. And in order to overhaul agricultural and land-use practices, the IPCC suggest eating less meat. Going all in to limit warming to a degree and a half would mean bilking the poor around the world while increasing other environmental harms.

**COP25 Climate Talks** – The UN completed the COP 25 climate talks in December 2019 in Madrid, Spain. None of the largest emitting countries managed to agree on even non-binding greenhouse gas reduction commitments. The talks can best be summarized as UN officials agree on nothing again. The delegates at the talks faced the realization that whatever they agreed to had little relevance to developments in the world. Citizens around the world don’t see climate change as a threat demanding personal sacrifices. The rebellion is global. Green energy plans were repudiated by voters in Australia. Voters in the state of Washington and Arizona rejected November 2018 ballot measures aimed at reducing CO₂ emissions. In addition, over 200 civil rights leaders have filed suit against the California Air Resources Board. Green policies, they say, are saddling the poor with higher living costs. Citizens around the world will continue to reject climate policies that cost them personally, either by direct taxation or by undermining the competitiveness of their own economies.
Climate Plans

President Obama unveiled his vast anticarbon energy agenda in June 2013. The goal of the plan was said to be to reduce carbon emissions in the U.S. to control global climate change. However, data indicates that U.S. carbon emissions have been declining since 2007. According to new EPA data released in October 2019, oil and gas methane emissions dropped by 14% from 1990-2017. The EPA also found that methane emissions from hydraulic fracturing fell 81% from 2012-2014.

Methane (CH₄) is a more potent greenhouse gas than carbon dioxide (CO₂), though CH₄ is far less prevalent than CO₂ and has a much shorter atmospheric life. The real reason methane has become an obsession of environmental activist groups is that it sometimes leaks in nominal amounts when extracting or transporting oil and especially natural gas. Thus methane can be a pretext for interfering with and raising the costs of drilling. But this means willfully ignoring the plunge in U.S. methane emissions. Methane emissions from oil and gas operations declined by 8% in 2018 marking the sixth consecutive year that the oil and gas sector’s methane emissions have declined. According to the EPA today, oil and gas methane emissions account for only 1.22% of total U.S. greenhouse gas emissions.

These facts and studies are welcome news for those interested in protecting the environment. The activist fear-mongering about emissions have been exposed as fraudulent by the most comprehensive research on the subject to date. We often hear professional environmental organizations cite studies from researcher/activists from Cornell University or Duke University and others. But these are stale arguments that have been debunked by numerous university, research groups, federal government agencies, and more.

The fact remains that because American industry is greatly improving its environmental practices and is proactively addressing the big problems, the only way the Obama Administration EPA was able to stay relevant was to find little problems and inflate them into issues of tremendous importance. Combine with a poorly understood concept of risk, a technically ignorant mainstream media, and a public that has been conditioned to equate the word “chemical” with “deadly poison” and you have the conditions that sounds like it will require the services of a public relations firm rather than a team of scientists. The environmental movement has been comfortable working in this manner for decades.

Obama’s climate action plan was imposed by executive order. Crucial to pulling off this plan was a decision the administration made in May 2013 to change the way it accounts for carbon emissions, significantly raising what it calls the “social cost of carbon”. This change tilted rulemaking against products and industries that use carbon energy.
Social Cost of Carbon - The concept of the “social cost of carbon” is not objective or scientific. It is based on subjective human decisions on what to include in the model, the discount rate to apply to future costs and benefits, and how to deal with uncertainty. This model keeps pushing carbon-cost estimates up. A larger value for the “social cost of carbon” basically means that efficiency standard or air pollution regulation that reduces carbon dioxide emissions will have higher benefits assigned to it. That makes it easier for stricter standards to pass a cost/benefit analysis. Under President Obama, federal agencies apparently were permitted to pick and choose what perspective to take and which benefits and costs to count. As a result, federal agencies engaged in cherry-picking whereby agencies count global effects that are favorable to the Obama Administration’s agenda and ignore global impacts that put the Obama administration’s concerns in an unfavorable light.

Where are we at today? - The Trump administration and the 116th Congress have been working to reset the harmful energy policies of the last administration. Greenhouse gas emissions continue to plummet, according to new EPA data released in October 2019. The EPA found that greenhouse gas emissions, mostly carbon dioxide, fell 2.7% from 2017 to 2018. This downward trend is occurring even as U.S. oil and gas production grows dramatically. The EPA found that oil and gas methane emissions dropped by 14% from 1990-2017 while oil and natural gas production increased by 80% and 51% respectively.

The EPA also found that methane emissions from hydraulic fracturing fell 81% between 2012-2014. Methane emissions from the oil and gas sector declined by 8% last year, marking the 6th consecutive year of decline. Studies show that the proposed Obama EPA methane rules would only reduce global warming by 4 one-thousandths of one degree (0.004) by the year 2100.
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 23% fewer energy-related carbon emissions in 2015 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.

Go look at the countries that are still in the Paris agreement and see what their CO₂ emissions were. It’s one thing to sign a document; it’s another thing to actually change your behavior.
A new research report released in October showed that deaths related to air pollution exposure in the U.S. decreased by about 47% from 1990 to 2010. These improvements in air quality and public health in the U.S. took place despite increases in population, energy and electricity use, and vehicle miles traveled.

Also, the findings of a recent environmental study published in the journal *Environmental Hazards* reinforces previous findings that when economic growth is taken into account, disasters like hurricanes and wildfires are less costly to society than in the past. The study found that the cost of disasters has actually fallen as a percentage of economic output since 1990.

While many are concerned about climate change, it is essential to balance the statistical uncertainty that the IPCC admits in its report with the well-tested and known dangers of forcing flawed government programs on a growing economy. The best path forward in addressing both the economic prosperity and environmental preservation is to remove government barriers to competition in the energy sector and beyond.

The Trump administration and the EPA have been working hard to bring science, fact, and due process back into oil field regulations. However, virtually every action the EPA takes is met with ferocious opposition from anti-oil activists. Today, the EPA continues to work through the challenges to bring some common sense back to the federal regulatory framework.

The EPA announced on August 29, 2019 changes from the Obama-era methane regulations including the change of the regulated emission from methane to volatile organic compounds (VOC). The August 29th EPA announcement was supported by KIOGA because it would be far more cost effective with regard to the breadth of emission sources.

The proposal to change the targeted emissions from methane to VOC gives EPA the opportunity to fully understand the potential consequences of future options and design those that are necessary to be fair and cost effective.
As the EPA works to revise its regulation of methane emissions from the oil and natural gas industry, environmental activists have upped their game in spreading false information, often relying on misguided studies like those from the Environmental Defense Fund (EDF).

KIOGA submitted comments to the EPA on November 22, 2019 during the official comment period for the EPA proposal to regulate emissions from VOC instead of methane. KIOGA highlighted four key issues to consider in support of the EPA proposal.

1. **Understanding the Scope of Methane Emissions and How They’re Measured** - Limiting methane emissions is no doubt an important piece of the overall greenhouse gas (GHG) emissions issue. But the fact is regulations targeting only the U.S. oil and natural gas industry can have little global impact, given the industry’s relatively small contribution to worldwide emissions.

   According to the [National Oceanic and Atmospheric Administration](https://www.noaa.gov) and the [Global Carbon Project](https://www.globalcarbonproject.org), wetlands are the world’s largest source of methane emissions. Natural sources make up 40% of all emissions. The remaining 60% are related to human activities including agriculture. *Fossil fuel production and use account for 20% of global methane emissions.*

   In the United States, that share is even smaller. The EPA’s greenhouse gas reporting data show that the aggregate share of the inventory for oil and natural gas is about 3% and, importantly, the production share is just 1.22% of U.S. GHG emissions.

   And that percentage is likely higher than the real figure, given the outdated factors used to estimate emissions from various equipment and components used in oil and natural gas production. It’s quite an understatement to say technology and leak detection has improved since emission factors and estimated failure rates for equipment were developed in the 1990s.

   U.S. methane emissions are falling even as production of both oil and natural gas are skyrocketing. Methane emissions from onshore U.S. oil and natural gas production fell 14%, while oil and natural gas production rose 80% and 51%, respectively, from 1990 to 2017, according to data from the EPA and the Energy Information Administration.

2. **A 100-Year Timeframe is Crucial for Accurate Emissions Measurements** - Because different greenhouse gases absorb heat at varying rates while remaining in the atmosphere for varying amounts of time, scientists and regulators developed a measurement tool called the global warming potential (GWP) to more accurately compare GHGs.

   The standard timeframe used to calculate GWP is 100 years, according to the EPA and other agencies. Methane emitted today will last for about 10 years, and has a 100-year GWP of between 28 and 36.

   In an attempt to overstate methane’s role in warming the atmosphere, environmental interests have moved to calculating GWP on a 20-year timeframe, which as EPA states,
“prioritizes gases with shorter lifetimes, because it does not consider impacts that happen more than 20 years after the emissions occur.” Using that shorter timeframe, methane’s GWP jumps to 84-87.

This inflated number better fits with the activist narrative in their push to claim natural gas has the same climate impact as coal. But using a 100-year timeframe generates a more accurate picture, given the long-term benefits of natural gas.

A brief published by the Washington D.C.-based environmental think tank Resources for the Future (RFF) notes:

“If more than about 4% of the natural gas produced in the United States is emitted as methane (rather than being burned), the climate benefits of gas’s displacement of coal disappears over a 20-year time frame. If the time frame is 100 years, the leakage rate would have to be more than 8% for natural gas to be a climate loser relative to coal.” (emphasis added)

3. Relying on EDF’s Studies is Not a Sound Basis for Policy Decisions - A series of EDF-sponsored studies that over-estimated methane emissions from the industry have found their way into many discussions around EPA’s methane rules. The studies’ flaws, however, should exempt them from those discussions.

Notably, the EDF study that found methane leakage rates of 2.3% – 60% higher than the EPA’s published rate of 1.4% was debunked last year (2018). In fact, multiple other studies have shown methane leakage rates to be between 1.1% and 1.65%.

The inflated number is very likely due to EDF’s questionable methodology and poor data quality. The EDF study relied on remote sensing of emissions – and not the “bottom-up” onsite measurements that groups like the National Academy of Sciences recommend – which means it could not differentiate between fugitive losses and permitted emissions.

EDF also used data from other studies, which was collected before many in the industry had begun updating their operations with lower-emitting technologies – updates that actually preceded implementation EPA’s 2012 rule that targeted methane as a “co-benefit.” Using the data it had, EDF took the unusual step of ignoring any sites that had no measurements of emissions, and arranging the remaining sites into a bell curve that assumed a distribution of varying levels of emissions.

This is not good science, and should not serve as the basis for policy decisions that could impact small businesses all across the country.

4. The Majority of High-Producing Wells Are Already Regulated - On methane, there have been two major regulatory movements from the U.S. EPA over the past decade. The first occurred in 2012, which actually targeted emissions of volatile organic compounds (VOCs).
Since the technologies available to capture VOCs also typically capture methane, the 2012 rule has colloquially been identified as EPA’s first “methane rule.”

The second push came in 2016, when the EPA formally targeted methane under what’s known as Subpart OOOOa. This is the rule that the Trump administration has proposed to update; the 2012 rule targeting VOCs remains intact.

Because production from oil and gas wells declines over time – and rapidly in the early years – a look at the lifecycle and related production levels of the industry’s well inventory will greatly inform the emissions discussion.

There are about one million oil and natural gas wells in operation around the United States, of which around 770,000 are classified as “low-producing wells.” These wells produce, on average, 2.5 barrels of oil per day or 22-24 thousand cubic feet (mcf) of natural gas daily.

That means that more than 75% of the wells in America account for just 10% of U.S. oil production and 11% of natural gas. As low-producers, they account for an insignificant share of leaks or emissions.

Of the remaining 230,000 higher-producing wells, approximately 125,000 were completed from 2012 to 2017 under the current requirements for new sources (enacted in 2012) and another 20,000 to 30,000 will be completed from 2018-2019. As noted above, many wells were completed by companies who voluntarily switched to lower-emitting technologies before EPA’s 2012 rule was completed.

This essentially means that by the time any additional regulations are completed to cover existing sources of emissions, which is what the rule in question aimed to do, most if not all wells that are not low-producers will already be covered by EPA’s 2012 rule.

This highlights the folly of attempts to bolt on additional regulations, and likely explains why activists wanted to use the 2016 update to target low-producing wells. Because such wells are economically vulnerable and more likely to be operated by small businesses, additional costly regulations would overwhelm their owners and eliminate their production.

The EPA realizes the important role natural gas plays in both powering the American economy and providing environmental benefits. Revising its methane rules will help strengthen both aspects in a more efficient way.

**Methane Emission Marginal Well Field Investigations** – In 2019, researchers invited participation from Kansas oil and gas producers in a confidential survey assessing emissions from marginal oil and natural gas wells. Specifically, data was sought on methane emissions from America’s marginal wells in order to address critical knowledge gaps and supply valuable information used to develop industry regulations. This project was funded by the U.S. Department of Energy’s (DOE) Office of Fossil Energy and in-kind contributions.
The Kansas oil and gas industry joined the Michigan oil and gas industry, Illinois oil and gas industry, and Indiana oil and gas industry to participate in the U.S. Department of Energy (DOE) study [*Quantification of Methane Emissions from Marginal (Small Producing) Oil and Gas Wells* (DE-FE0031702)] to quantify and compare methane emissions at marginal and non-marginal wells. We believe that unbiased, representative and appropriate results are necessary to respond to recent and future proposed amendments to EPA’s New Source Performance Standards (NSPS, 40 CFR Part 60, Subpart OOOOa) methane emissions rules.

GSI Environmental, Inc. is the EPA/DOE approved contractor employed to conduct the study. GSI agreed to include a survey of methane emissions from marginal wells of the type found in Michigan, Kansas, Illinois, West Virginia, and Indiana in the study.

While the EPA is currently reconsidering segments of the NSPS for the oil and gas sector, including provisions relating to low production well sites, more comprehensive data on marginal oil/gas production sites is needed to improve the understanding of emissions from marginal wells and could help shape rules promulgated by the government in the future.

The methane emissions survey being conducted by GSI Environmental, Inc. is progressing. GSI has completed a desktop review of 75,000 wells from 40,000 sites across the U.S. including many here in Kansas and have also completed field investigations. GSI conducted field investigations at hundreds of oil and gas well and facility sites in West Virginia, Kentucky, Indiana, and Kansas to measure methane emissions from wells and tank batteries. GSI conducted measurements in Kansas in December 2019. Initial results showed very few leaks and indicated no quantifiable or measurable releases of VOCs in any of the field site investigations in any of the states visited. GSI plans to have a final report ready by the end of May 2020.

**What about climate change?**

Although global temperature has risen about one degree Celsius since the start of the industrial revolution, this has not wholly been caused by industrial warming gasses linked to the economic growth that has increased the world’s wealth, health, and life expectancy so dramatically. Atmospheric physicists on both sides of the debate over potential climate catastrophe agree that the first half of the rise, before 1945, was largely caused by natural sources like long-term cycles or solar fluctuations. At that point, emissions were too low to have much of an impact. The substantial feedback warming that many climate models have predicted from fossil-fueled heat in the form of increased humidity and hence water vapor, the primary natural warming gas, has not yet been observed.
**Emission Facts** - Carbon dioxide emissions from U.S. energy consumption will remain near current levels through 2050, according to projections in the Energy Information Administration’s (EIA) Annual Energy Outlook 2019 (AEO 2019). The AEO 2019 projects that U.S. energy-related carbon dioxide (CO$_2$) emissions will be 5,019 million metric tons in 2050, 4% below their 2018 value.

Using the temperature assumptions put out by the IPCC and the Green New Deal, if the U.S. eliminated all CO$_2$ emissions immediately, it would avert 0.07 degrees of global warming by 2050 and 0.2 degrees by 2100. If Kansas alone eliminated all CO$_2$ emissions immediately, it would avert 0.001 degrees of global warming by 2050 and 0.0023 degrees by 2100. How many lost jobs is that worth?

Climatology is mostly guesswork. There is no way to conduct a controlled experiment to ascertain scientific validity. Climatologists have learned a lot about climate and weather in the past century, but actually controlling the climate is something else entirely.

Climate science conventional wisdom is flawed, relies on alarmist scenarios, and exaggerates economic impacts.

In a lecture in 2018, Massachusetts Institute of Technology (MIT) meteorologist Richard Lindzen said the oceans and the air in the atmosphere are in constant reaction with each other and the land, causing what we experience as storms and temperature changes. Variation in the sun’s radiation and the rotation of the planet plays parts as well. And yet, he said, climate modelers claim that only one tiny component of this enormous churning mass, CO$_2$, controls the planet’s climate.

The *Times London* reported in May 2017 that:

“There is little doubt that the damage being done by climate-change policies currently exceed the damage being done by climate change, and will for several decades yet. Hunger, rainforest destruction, excess cold weather deaths, and
reduced economic growth are all exacerbated by the rush to biomass and wind. These dwarf any possible effects of worse weather, for which there is still no actual evidence anyway.”

Recent research from the University of Waterloo published in the *International Journal of Modern Physics B* in May said ‘Conventional thinking says that the emission of human-made non-CFC gases such as carbon dioxide has mainly contributed to global warming. But we have observed data going back to the Industrial Revolution that convincingly shows that conventional understanding is wrong,’ said Quing-Bin Lu, a professor of physics and astronomy, biology, and chemistry in Waterloo’s Faculty of Science. ‘In fact, the data shows that CFCs conspiring with cosmic rays caused both the polar ozone hole and global warming.”

Proponents of man-made global warming are being challenged more and more by scientists who don't buy into the climate catastrophe scare. The arguments used to dismiss the challengers range from calling the non-believers names to attempting to marginalize the challengers by citing the various branches of government and scientific organizations that have issued proclamations about their belief in man-made global warming.

Many proponents of man-made climate change call scientists and others who challenge their view “deniers”. But what is a denier? A denier denies certainty on a complex and still young scientific subject. A denier questions assumptions about the near irrelevance of solar, oceanic, and other anthropogenic influences on temperature. A denier prefers evidence to model projections and tests alarming predictions against actual observations. A denier is a genuine seeker of scientific truth.

Large institutions such as the National Oceanic and Atmospheric Administration (NOAA) the National Climatic Data Center (NCDC) the National Aeronautics and Space Administration (NASA) the National Science Foundation (NSF) the National Academy of Science (NAS) the American Meteorological Society (AMS) and the Intergovernmental Panel on Climate Change (IPCC) along with many other government and academic institutions and societies have all issued statements touting their commitment to the man-made global warming theory.

All of these organizations have stated that man-made global warming is real and is caused by burning fossil fuels. Based on their unanimity we are supposed to believe they are correct. By quoting the statements from these well known organizations we are supposed to believe that because they are large and well-funded they are therefore exempt from making mistakes. Of course this is not true. As an example, in 2006 NASA predicted sunspot cycle 24, the current cycle we're in now, would be the strongest in 300 years. The reality is that it will be the weakest in 100 years. They could not have been more wrong. Computer models from the 1990s predicted that global average surface temperature would continue to increase after the year 2000. They were wrong. There has been no measured temperature increase since 1998.
Actually, large institutions may be more likely to be wrong more often than individuals. Large institutions have giant budgets that must be fed making them vulnerable to political agendas. They have enormous institutional inertia that makes it very hard for them to change direction. Individuals can change direction on a dime if new evidence indicates the old way of thinking was wrong.

The truth is that we really don't know what the thousands of people who make up large government agencies, organizations and institutions think of global warming. The department heads of government agencies and the boards of directors of academic institutions and societies may claim that their respective organizations support the man-made global warming theory. The problem is that they never asked the people who actually make up these various entities what they think.

The bottom line is that using declarative statements from large organizations, that have a vested interest in maintaining their massive funding from the federal government to study man-made climate change, have no real meaning. Until someone actually polls the members of these entities we will never know just what the rank and file members actually believe about man-made global warming.

Global surface temperatures measured by thermometers are flawed. Recording stations come online and offline at random. The time of day when the high and low temperatures for the previous 24 hours are recorded varies, often changing at the same station. This has a demonstrable biasing effect on high or low readings. Local conditions can further bias temperatures. What is the effect of a free-standing tree 100 feet away from a station? And the ‘urban heat island’ can artificially warm readings from population centers with as few as 2,500 residents. Neighboring reporting stations can diverge significantly from each other for no known reason.

Many Scientists Challenge Political Activist Claims that Humans Cause Most of the Increase in Greenhouse Gases - Not all scientists are panicking about global warming. A top climate scientist from the Massachusetts Institute of Technology (MIT) lambasted the latest Intergovernmental Panel on Climate Change (IPCC) report that blamed mankind as the main cause of global warming and whitewashed the fact that there has been a hiatus in warming for the last 15 years. “I think that the latest IPCC report has truly sunk to the level of hilarious incoherence,” said Dr. Richard Lindzen. “They are proclaiming increased confidence in their models as the discrepancies between their models and observations increase.”

When the failure of its predictions become clear, climate activists always come back with new models that soften their previous warming forecasts. After these changes, the models tend to agree better with the actual numbers, but the forecasts for future temperatures have continued to be too warm. The modelers insist that they are unlucky because natural
temperature variability is masking the real warming. However, when a batter goes 0 for 10, he or she is better off questioning their swing than blaming the umpire. The models mostly missed warming in the deep atmosphere, from the earth’s surface to 75,000 feet, which is supposed to be one of the real signals of warming caused by CO₂. Here, the consensus ignores the reality of temperature observations of the deep atmosphere collected by satellites and balloons, which have continually shown less than half of the warming shown in the average model forecasts.

The extent of human’s influence on climate change is not “settled science”. Only 0.3% of 12,000 papers published in learned journals claimed that recent warming was manmade. The scientific community’s peer-reviewed results overwhelmingly fail to endorse the narrow view that recent warming was predominantly manmade. Several scientists have stated that activists advocating man-made global warming are reflecting not scientific truth but “quasi-religious dogma and totalitarian error.”

Scrutiny of man-made climate change arguments reveal why they are failing. Nature is showing us that carbon dioxide concentrations are not ruling global temperature. Since 1998 twenty eight percent (28%) of all carbon dioxide emissions released into the atmosphere since 1850 have occurred yet there has been no warming. World-wide hurricanes are not increasing in number or strength. Hurricane Harvey and Hurricane Irma in 2017 were the first major hurricanes, rated category 3 or higher, to strike the U.S. soil in 12 years. Over the last year, in the United States, we had the fewest number of tornadoes since modern record keeping began. Polar Bear populations are at record highs. Computer model temperature predictions are much too warm and the difference between them and measured temperature is increasing each year. Man-made climate change arguments are failing because they are wrong.

**What about the Trade-offs?** – Climate alarmists rarely consider trade-offs that arise from their solutions. Electric cars are a good example. The manufacture and disposal of car batteries is not exactly eco-friendly.

Apart from blighting the landscape, windmill blades kill birds and insects that pollinate fruit-bearing trees. Furthermore, as wind and solar grow their share of electricity production; many more connections to the electricity grid are occurring. These connections are using the most powerful greenhouse gas known to humanity – Sulphur hexafluoride (SF6). Cheap and non-flammable, SF6 is a colorless, odorless, synthetic gas used to insulate electrical installations and is widely used across the renewable energy industry. SF6 is 23,500 times more warming than CO₂. Just one kilogram of SF6 warms the earth the same amount as 24 people flying roundtrip from New York to London. It also persists in the atmosphere for a long time, warming the earth for at least 1,000 years. SF6 is within wind turbines specifically.

Going vegan may be good for bovines (and possibly humans as well), but it would require chopping down forests to make room for millions of acres of croplands, and no
synthetic fertilizer. What are the effects on welfare when massive subsidies for solar power raise electricity prices, which weigh more heavily on the poor?

The California electric blackouts in 2019 were a result of political failure to hold PG&E accountable after the $21 billion bail-out. The failure stemmed from decades-long focus on climate/renewables instead of fortifying electric grid.

During 2019, we saw several global warming demonstrations across the U.S. and the world. These demonstrations were less a protest than a public demonstration of costumes and dance moves. No rational person would view that circus and think: “You know, this event convinces me that I must do more to protect the environment.

Faith can move mountains, but politics is about costs and consequences.

Congressional Action

In 2013, President Obama said; “What we do know is the temperature around the globe is increasing - faster than was predicted even ten years ago.” U.S. Senator Barbara Boxer (D-CA), Chair of the U.S. Senate Environment & Public Works Committee, held a hearing on climate change in 2013. Democrat selected hearing witnesses were asked: “Can any witnesses say they agree with Obama’s statement that warming has accelerated during the past 10 years?” After an awkward silence, the witnesses tried to change the subject by saying that we need to be looking at longer time periods than 10 years and then, ultimately, acknowledged that warming has slowed, not accelerated. A few minutes later, Senator Jeff Sessions (R-AL) repeated Obama’s claim and asked: “Do any of you support that quote?” Again silence. The Ranking Republican Committee Member, Senator David Vitter (R-LA), said: “The America people should not be kept in the dark regarding the scope of the actions this Administration is taking under the guise of controlling our climate – actions that have the potential to negatively impact employment, job creation, and our national debt.”

This same type of uninformed, misguided thinking continues into 2020. U.S. House Democrats are increasingly embracing a sweeping progressive plan to tackle climate change that includes massive increases in government spending. While it is unlikely to become law, we can expect the plan to permeate the 116th Congress and 2020 presidential campaign. The plan is more a shift in messaging than actual policy in response to activists’ failure to advance climate change policy though other efforts.

Life is Just a Fantasy, Can You Live This Fantasy Life - In January 2019, Democratic freshman U.S. Representative Alexandria Ocasio-Cortez (D-NY) speaking about climate change said that millennials understand that we only have 12 years or ‘the world is going to end.’ Prominent climate scientists pushed back against the hype promoted by activists and media that we have
only 12 years to act on climate change or face an existential threat to humanity saying we have a diverse array of choices before us in terms of how soon the make emissions cuts. Media embraced Ocasio-Cortez’ position and have been peddling her ideas via fear-mongering and chicken-little style climate predictions. Shallow, apocalyptic reporting on climate change encourages acceptance of poor climate policies.

**A swing and a miss** – Representative Alexandria Ocasio-Cortez (D-NY) said:

“Our planet is going to hit disaster if we don’t turn this ship around and so it’s basically like, there’s a scientific consensus that the lives of children are going to be very difficult. And it does lead, I think, young people to have a legitimate question, you know, ‘Is it okay to still have children?’”

Rep. Alexandria Ocasio-Cortez has zero expertise at any of the things she pretends to know.

**The American People Deserve to Know** – The political left has said Americans need to do something urgently about climate change. In February 2019 Representative Alexandria Ocasio-Cortez (D-NY) and Senator Ed Markey (D-MA) introduced a nonbinding resolution (Green New Deal) that calls for a ‘10-year national mobilization’ to exorcise carbon from the U.S. economy. The plan calls for generating 100% of power from renewables and removing greenhouse gas emissions from manufacturing and transportation. Members of both parties have called the idea unrealistic. Senator Markey said climate change should be “the highest of Congressional priorities”, and stressed that time was of the essence.

Republican Mike Simpson of Idaho, who sits on the House Appropriations Committee, said it was ‘looney’, and John Barrasso, Republican Chairman of the Senate Committee on Environment and Public Works labeled it an ‘absurd socialist manifesto’. Even House Speaker Nancy Pelosi (D-CA), failed to bless it.

Senate Majority Leader Mitch McConnell (R-KY) said:

“It’s clear what we have here. It’s the far-left’s Santa Claus wish list dressed up to like serious policy. Now, bad ideas are nothing new. Silly proposals come and go. But the philosophies and the ideas behind this textbook socialism are not just foolish. They’re dangerous.”

In March 2019, a procedural vote to take up the Green New Deal failed in the Senate. Not even the Senator who sponsored the bill (Ed Markey) voted in favor. The Green New Deal’s sponsors exhort us to pay any price and bear any burden to combat climate change. But when given the chance to show their dedication to the cause, voting for their own bill is somehow too great a personal sacrifice.

Polls show climate change still lags behind health care, jobs, immigration, and the federal budget deficit among voters’ priorities. But Democrats are under pressure from
activists on the left. Democrats are challenged by the divisive risk of climate change. The more Democrats prioritize climate change over workers and wages, the more they risk sending a message to the working middle class that they don’t really care about your priorities any longer.

**Trump Abandons Global Climate Accord**

President Trump announced on June 1, 2017 that he would pull out of the Paris climate agreement. “I am fighting every day for the great people of this country,” said Trump. “Therefore, in order to fulfill my solemn duty to protect America and its citizens, the United States will withdraw from the Paris Climate Accord.”

Trump said the agreement disadvantaged the U.S. “to the exclusive benefit of other countries,” leaving American businesses and taxpayers to absorb the cost. The White House said the Paris Accord was negotiated poorly by the Obama Administration and signed out of desperation. The U.S. is already leading the world in energy production and doesn’t need a bad deal that will harm American workers.

What the agreement really meant was the U.S. would have raised energy costs immediately and developing nations would have a meeting in future decades to discuss what actions they may or may not take. Trump said he would be willing to reenter an international climate deal if he could secure better terms for the U.S. Angry European leaders from France, Germany, Italy, and the United Nations immediately rejected the idea of renegotiating the Paris accord. Withdrawing from the Paris Climate Accord made the most sense and protects U.S. energy producers and manufacturers from regulatory warfare for decades to come.

One reason why many people don’t take climate change seriously is that the people who are constantly telling us it is a crisis never actually act like it is a crisis. They jet around the world as a statement of the importance of fighting climate change. They are all-in for sacrifices by other people, but never seem to make much in the way of sacrifices themselves.

**Climate Alarmists Try to Generate Hype in Aftermath of U.S. Withdrawing from Paris Climate Accord** – Many environmental activists attempt to generate media hype around climate change and have been using a willing media to paint a dire picture of climate change. But, the picture still has to be plausible and accurate. Most of the hype is presenting worst-case scenarios that might not be realized. “climate change” has become the proxy for all things scary from severe weather events to rising tides, mass migration, and agricultural failure. Their climate conversation are fueled by outrage, which is being fed by fear.
Role of Climate Change Shrinking in Government Decisions

The Trump Administration has dramatically shrunk the role climate change plays in decisions across the government. The previous Obama Administration energy policy was to overregulate, pick winners and losers in the marketplace, and make American energy increasingly expensive and uncompetitive. The Trump Administration has taken every opportunity to lift the oppressive Obama Administration regulatory burdens and promote a pro-growth approach to American energy production.

Free-Market Approach to Energy Policy - The Trump administration is gutting Barack Obama’s climate legacy. The Trump administration’s free-market approach to energy policy has been missing in the U.S. for decades. By prioritizing competitive energy markets instead of attempting to pick winners and losers, the Trump administration is helping revitalize the industries that helped to build America into the economic giant it is today.

Unsettling Developments for “Climate Consensus” - In 2006, environmentalist James Lovelock said that thanks to global warming, man was all but doomed. By the end of the 21st century ‘billions of us will die and the few breeding pairs of people that survive will be in the Arctic where the climate remains tolerable.” Then in 2010 he said that climate change was so serious a threat that democracy might have to be put on hold. Within two years, he had a remarkable change of heart. “All right, I made a mistake,” he told MSNBC. He still believed, and continues to believe, that manmade carbon dioxide is a problem that needs addressing. “But we’ve plenty of time to do something about it before any dangerous effects are felt, and in any case, the cures being advanced by green zealots are often worse than the disease itself.”

On September 18, 2017, a group of prominent scientists said humanity could have considerably more time than previously thought to avoid a ‘dangerous’ level of global warming. The upward revision to the planet’s influential ‘carbon budget’ was published by a number of researchers who have been deeply involved in studying the concept, making the report unexpected. Environmental activists and climate alarmists immediately began working to discredit the report.

In September 2017, the Intergovernmental Panel on Climate Change (IPCC) said the frequency of 100 year floods are projected to increase in some areas of the world and decrease in other areas. They also said changes in flooding over time can be influenced by natural variability in the ocean/atmosphere system. The IPCC concluded that globally there is no clear and widespread evidence of changes in flood magnitude or frequency in observed flood records.

On October 9, 2017, former Australian Prime Minister Tony Abbott delivered a lecture to the Global Warming Policy Foundation. Abbott told the group the ostracisation of those who
do not accept climate science was ‘the spirit of the inquisition, the thought-police down the ages.’ He said the ‘so-called settled science of climate change was absolute crap.’

**Energy Policy**

The U.S. currently has a better, more sensible approach to energy development than any other country in the world, both for the short-term and long-term. 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. An American energy policy that values innovation over regulation can turn energy policy challenges into great opportunities for economic growth and energy security.

America’s newfound status as a global energy superpower has created economic opportunities and a cleaner environment her at home as well as stability around the world. The oil and gas industry is leading the way in technology developments and innovative solutions to find new and better ways to produce and use energy. In order to harness our abundant natural resources and spur innovation, we need elected officials who support forward-looking policies. Pro-energy elected officials will ensure the oil and gas industry has the opportunity to improve all Americans’ access to abundant, affordable energy and to provide hundreds of thousands of new high-paying jobs across the nation.

**What is the best energy policy going forward?** - Debate continues across the country on our nation’s energy future. What is our best energy policy going forward?

Even during periods when much of the world suffers economic stagnation, most of us would agree that we still have a very high standard of living. Compared to previous generations, we are wealthier, healthier, have better technology, more mobility, and many more opportunities for a better life.

Several factors contribute to a higher standard of living, but one of the most important is access to reliable and inexpensive energy. Affordable energy is essential for almost every aspect of our modern lives. Affordable energy is needed to run the hospitals and laboratories that improve our health. Affordable energy is required to deliver electricity to our homes and put fuel in our vehicles. And it supports the millions of jobs associated with all of these things.

**Concerns About Carbon** - In general, the most affordable forms of energy come from fossil fuels, such as oil, natural gas, and coal. Compared to these energy sources, alternative fuels such as solar and wind power are considerably more expensive and less reliable.

Burning fossil fuels to generate electricity or provide power necessarily releases carbon dioxide (CO₂) into the atmosphere. Carbon dioxide is a gas we exhale every time we breathe. Erupting volcanoes, decaying trees, wildfires, and the animals on which we rely for food all emit...
CO₂. This by-product, which is essential for plant life and an unavoidable aspect of human life, is at the center of today’s climate change controversies.

There is vigorous debate about what effects carbon emissions may or may not have on our future climate. Recent studies suggest that future warming is likely to be substantially lower than computer model-simulated projections on which many climate scientists rely. Using the temperature assumptions outlined by the United Nation’s Intergovernmental Panel on Climate Change (IPCC) and the Green New Deal, eliminating all CO₂ emissions in the U.S. immediately would only reduce global temperatures a negligible 0.07 degrees by 2050 and 0.2 degrees by 2100. But the damage to our economy and the well-being of American families would be enormous.

Those who believe that increased CO₂ emissions inevitably lead to global warming believe this change is directly attributable to the widespread use of fossil fuels. Because they believe further warming will have catastrophic effects, they have waged a war on carbon for many years. They advocate restricting carbon-based fuels in favor of subsidized alternative energy and encourage policymakers to make fossil fuels more expensive in hopes of discouraging their use.

**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. 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 suggested that such a tax would decrease household consumption, due to the increased cost of goods. The average household would 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.

Over the past 25 years, nearly 1.2 billion people around the world have been lifted out of poverty, while both malnutrition and the risk of death from air pollution have decreased. Taken together, these achievements are nothing short of a miracle. But, government’s pursuit of hugely-expensive climate mitigation policies are threatening to slow momentum in reducing poverty. The German government, for example, plans to spend $44 billion over 4 years to help the country cut its CO₂ emissions. Such measures will likely reduce the global rise in
temperature by 0.00018 degrees in a hundred years – an immeasurably small gain for such a huge cost. By contrast, spending the same amount on preventing tuberculosis in developing countries could save more than ten million lives. Policies that reduce poverty are climate policies. History has shown conclusively that making people richer and less vulnerable is one of the best ways to strengthen societies’ resilience to challenges such as climate threats.

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. Anyone who cares about our environment and climate recognize that cheap, plentiful, reliable energy is essential.

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 in 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.

Conclusion

EPA greenhouse gas regulatory proposals are a sweeping example of regulatory power that disproportionately harms low-income families across the U.S. Inevitably, energy costs radically rise as companies try to cope with the new costs associated with unrealistic mandates on emission levels. An increase in energy costs would most impact low-income families. These families would see larger percentages of their incomes lost to soaring energy bills.

Climate change is an appealing boutique issue for some liberal billionaires and some movie stars because “saving the planet” appeals to their vanity. But, if you are not a liberal billionaire, you’re trying to stay afloat not because the oceans are rising but because family incomes are flatlined. Climate change is a luxury issue most Americans can’t afford.

President Obama said global warming was our nation’s biggest threat. He championed his agreement with China on cutting carbon pollution, but all it really means is the U.S. begins to raise energy costs immediately and China agrees to have a meeting in 2030 to discuss what actions they may or may not take. President Obama used global warming as a distraction to dodge the real problems our nation faces and avoid critiques of his performance.
Activists have followed Obama’s lead and want to exercise control over the energy sources Americans use every day. Energy innovation drives American progress. Real growth comes from individual Americans figuring out more efficient and reliable ways of doing things, not from Executive Orders written in Washington, D.C.

The global climate debate remains a critical challenge for America. The EPA is desperately trying to unravel the overwhelming consequences of an ill-founded interpretation of the CAA. The Obama Administration’s misguided Climate Action Plan should be abandoned and the EPA should abandon their ill-conceived GHG regulatory approach and seek climate policies that provide America with the energy security and the industrial development it needs to provide for future jobs and economic growth.

Progress is being made. In October 2017, the EPA issued an order barring the agency from being drawn into court settlements that alter environmental outcomes to the liking of environmental and other special interest groups. “The days of regulation through litigation are over,” said the EPA. “We will no longer go behind closed doors and use consent decrees and settlement agreements to resolve lawsuits filed against the Agency by special interest groups where doing so would circumvent the regulatory process set forth by Congress.”

Today, the U.S. is not only the world leader in energy production, but we have some of the cleanest air in the world. From 1970-2017, the six major pollutants monitored by the EPA have plunged 73%, while the U.S. economy grew by 262%. The U.S. has a unique opportunity to show the world how energy abundance can be used as a positive force to lift people up, which different than a philosophy of embracing a zero-emissions world.