



Statement of the U.S. Chamber of Commerce

ON: Energy Tax Policy in 2016 and Beyond

**TO: U.S. Senate Committee
on Finance**

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The Chamber's mission is to advance human progress through an economic,
political and social system based on individual freedom,
incentive, initiative, opportunity and responsibility.

The U.S. Chamber of Commerce is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations. The Chamber is dedicated to promoting, protecting, and defending America's free enterprise system.

More than 96% of Chamber member companies have fewer than 100 employees, and many of the nation's largest companies are also active members. We are therefore cognizant not only of the challenges facing smaller businesses, but also those facing the business community at large.

Besides representing a cross-section of the American business community with respect to the number of employees, major classifications of American business—e.g., manufacturing, retailing, services, construction, wholesalers, and finance—are represented. The Chamber has membership in all 50 states.

The Chamber's international reach is substantial as well. We believe that global interdependence provides opportunities, not threats. In addition to the American Chambers of Commerce abroad, an increasing number of our members engage in the export and import of both goods and services and have ongoing investment activities. The Chamber favors strengthened international competitiveness and opposes artificial U.S. and foreign barriers to international business.

Thank you, Chairman Hatch, Ranking Member Wyden, and members of the Committee. I am Karen Harbert, president and CEO of the Institute for 21st Century Energy (Institute), an affiliate of the U.S. Chamber of Commerce, the world's largest business federation representing the interests of more than three million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations, and dedicated to promoting, protecting, and defending America's free enterprise system.

The mission of the Institute is to unify policymakers, regulators, business leaders, and the American public behind common sense energy strategy to help keep America secure, prosperous, and clean. In that regard we hope to be of service to this Committee, this Congress as a whole, and the administration.

Introduction

The United States is at an energy policy crossroads. Much of our energy economy today is governed by laws and regulations that are many decades old and not suited to America's new-found energy abundance. While fiscal policy tends to be relatively nimble when compared to other aspects of energy policy, it also frequently fails to keep pace with market developments and outlives its usefulness, necessitating frequent review. This is especially true given how rapidly and drastically our energy landscape has changed in the last decade, and how much change is expected in the future. I applaud the committee for holding this hearing and contemplating today's energy tax policy and looking ahead to what it should look like in the future.

U.S. fiscal policy can aid in securing our energy future, but unintended consequences can also constrain economic growth, reduce economic and energy security, and weaken geo-political leverage.

Federal Role

While a tradition of federalism rightly reserves much, if not most, energy policy decisions to the states, the Federal government maintains a significant and growing role. When crafting energy policy of any stripe, however, it is important to determine what the Federal government's underlying role should be. Because of energy's vitality to our economy and everyday lives, it's crucial for Congress to consider policy that benefits U.S. energy security and ensures all Americans have access to a reliable, affordable, and diverse energy supplies. Moreover, federal energy policy must also enable our dynamic economy to maximize output, increase efficiencies, and promote, not hinder, economic growth and development. Additionally, federal energy policy must look to the future and allow technological evolution and commercialization.

Energy Security

To, "provide for the common defense," is clearly one of the Federal government's most fundamental and indisputable obligations. Securing America's energy future is a concomitant obligation. Not only are secure, reliable, and diverse energy supplies

essential to our military, they are equally essential to our economic well-being. Energy security is sometime hard to define, which is why in 2011 the Energy Institute published our first annual *Index of U.S. Energy Security Risk* to create an objective and uniform method for quantifying risk to our energy security across nearly 40 metrics. Each annual installment provides a moving trend that shows whether our energy security risk is increasing or declining.

Reliance on energy imports is a central aspect of “energy insecurity,” but it is certainly not the only measure. Inputs as varied as energy prices, efficiency, capacity, and even production of scientists and engineers are all important indicators of energy security. Most of these components are frequently overlooked when policy is formulated, to the detriment of the country. Our *Index* shows that the energy revolution has led to a sharp decrease in overall U.S. energy security risks. Indeed, just last week we released the international version of this index, and it shows how America, now ranked number 4 out of 25 other top energy users, has improved its standing since the “Shale Gale” first began to blow about a decade ago.

Economic Growth

Through both fiscal and monetary policy, the Federal government can foster economic growth. Energy is the lifeblood of an economy. America’s dominant energy resource base, the largest in the world, has provided the foundation for industrialization and dramatic improvements to our environment and our quality of life. In recent years, however, federal energy policy has also hindered further economic growth by constraining accesses to energy resources, implementing punitive fiscal policies, and issuing byzantine and outsized regulations. When considering future energy tax policy, it is important to ensure that it encourages economic growth rather than constrain it.

Technology Development

Within the balance of federalism and private sector investment, the Federal government’s size and resources give it a unique role in shepherding and spurring energy technology development. Research, Development, and Demonstration has been, and should continue to be, a driving focus of federal energy policy while tax and other policies need to continue to play a central role in breaking down barriers to commercialization.

RD&D

The United States continues to maintain some of the highest quality and important energy research and development laboratories in the world. While rooted in developing defense technologies, they have evolved to create or improve nearly every energy technology we use today. This role is as important today as ever. With a growing focus on public-private collaboration, the Department of Energy’s National Laboratories must continue to be central to developing the energy technologies of tomorrow. While the U.S. is blessed with the largest energy resource base in the world, it is the technologies

developed by the National Labs, the private sector, and academia that will ensure we are able to continue harnessing this resource to provide cheaper, cleaner, and more reliable energy for the country.

While the National Labs have a central and coordinating role, federal tax policy provides a necessary tool in incentivizing private sector development of energy technology. Making the Research and Development Tax Credit permanent last year was an important and foundational step in lifting a private-sector barrier to developing the future energy technologies.

Fiscal Policy

When considering tax policy more broadly, energy tax policy cannot be considered in a vacuum. All changes to the Internal Revenue Code must be considered in the context of much needed comprehensive tax reform, which ultimately must lower rates for all businesses, shift to a more internationally competitive system, reduce the cost of capital, and decrease complexity. While there could be new tax policy that would benefit the country's energy economy, we believe Congress should avoid undertaking tax reform on a piecemeal basis.

To the extent that Congress does tackle energy tax policy within the context of comprehensive tax reform, there are some tenets it should rely on. Foremost, it should be results oriented and not proscriptive. The Federal government has a checkered history of technology development prediction. Who could have guessed how the emergence of hydraulic fracturing, horizontal drilling, and advanced seismic imaging would lead to the energy revolution now underway. It was not that long ago that "peak oil" was all the rage. No one's speaking about peak oil anymore, and all because of a technology revolution that took most analysts in and out of government by surprise. Who can say what technology surprises the future has in store? It is because we do not know that answer to that question that any energy tax policy must be technology neutral and focused on the underlying desired result.

Moreover, taxing one industry in an effort to support another is a recipe for higher prices, less economic growth, and diminished energy security. The U.S. greatly relies on energy diversity and attempting to tax one or more forms out of existence puts the country on a path to a much less secure energy future.

Unintended Consequences

All too often, the Federal government has lacked the foresight to see the unintended consequences of well-intentioned policy. The Section 45 Production Tax Credit (PTC) was first enacted in 1992 and designed to incentivize investment in electricity generation from wind and close-loop biomass. Originally set to last seven years, it has since been extended 10 times. In 1992, it was not fully anticipated that many states would deregulate their electricity markets in favor of greater competition.

One of the intents of the PTC was to diversify the U.S. generation portfolio and to increase renewable generation. To that end, the PTC has been successful. In conjunction with various state mandates, wind generation has increased from negligible net generation to nearly 200,000 gigawatt hours last year, bringing it from nothing to 4.7% of total U.S. net generation.

If the sole intent of the PTC is to incentivize more wind generation, then it has been successful. However, another justification for the PTC cited with increasing frequency is the desire to increase generation from emissions-free sources. In this respect, the PTC has produced an unintended consequence that is actually producing the opposite intent. While wind capacity has been growing rapidly because of the PTC and other incentives, U.S. electricity demand has been stagnating owing to the recent recession. In many electricity markets additional wind generation often creates gluts of electrons. Since the electricity grid must precisely balance supply with demand, it cannot accept more electricity than what is being used. When supply outstrips demand, prices actually go “negative,” that is, the grid operator requires an electricity generator to pay it to take additional electrons, creating severe market dislocations.

In these cases of negative pricing, wind generators are often able to pay the grid operator to take wind-generated electricity. It is not often a business can pay its customers to take its products, but wind generators are able to recoup a profit on the back-end thanks to the PTC.

However, in pushing prices negative, every other generator also is forced to pay the grid to take their respective electrons or power down, but they are not made whole via the PTC. Not only does this harm other generators like coal and gas, but it specifically hurts nuclear.

Nuclear generation provides nearly 20% of total U.S. generation and the nuclear fleet operates in excess of a 90% capacity rate, by far the highest of all sources. More importantly in the context of the PTC, nuclear generation provides more than 60% of all emissions-free generation, making it the king of emissions-free energy. Yet when prices go negative, nuclear generators have little choice but to pay the grid to take their generation because shutting down the reactor is a very complicated undertaking that could result in it going offline for several days to several weeks, something no nuclear facility can afford.

Even when prices are not negative, the PTC-induced wind generation is glutting many power markets, depressing wholesale power rates. While these lower wholesale rates rarely result in lower retail rates paid by end-users, they are artificially distorting some power markets and Regional Transmission Organizations (RTO) making a significant number of nuclear reactors much less competitive. According to the Nuclear Energy Institute, eight reactors have either closed or are scheduled to close, and up to 17 are vulnerable to premature closure. Nuclear plants have closed or are likely to close in Illinois, California, Massachusetts, New Jersey, New York, Vermont, and Wisconsin.

The average wind turbine being built today in the United States today is rated at about 2 megawatts, and typically a U.S. turbine operate about 32% of the time. Shutting down a 1 gigawatt reactor that operated at an industry-average capacity factor of 92% and replacing it with wind would require the construction some 1,450 wind turbines. But even then it is not a realistic comparison because the wind turbines produce electricity only under certain conditions whereas the power produced at a nuclear reactor is “base load” and available on demand. So in a practical sense, then, intermittent wind power cannot really “replace” nuclear power. Ultimately, the PTC is a leading contributor to these reactor closings, inherently reducing the net-generation from non-emitting sources, running counter to one of its primary intents.

Making Markets

When developing all energy policy, including tax policy, it is also important for the Federal government to be wary of creating markets. If a technology or application is favored via policy, it has a tendency to crowd out competition, which disadvantages consumers and harms energy security. Congress should avoid policies that create or dislocate markets.

Concessionary Financing

While it lies beyond the jurisdiction of this Committee, it is important to mention another tool the Federal government can and should wield when designing energy policy. Concessionary financing has the potential to provide a necessary bridge to bring energy technology from the laboratory to the market. To be clear, the Federal government should not look to create a market or select technologies for the country; the market will always do that more efficiently. However, by using existing and potentially new mechanisms, the Federal government can help bridge the proverbial “valley of death,” that too often prevents markets from ever entertaining new technologies.

Breaking Down Regulatory Barriers

Similarly, another tool the Federal government has used to unintentionally hamper technology development and investment in energy and infrastructure is the ever-increasing regulatory burden businesses must shoulder and navigate. Reforming both structural as well as specific regulatory regimes can be accomplished while maintaining the safeguards they were intended to establish. Without such reform, capital investment will continue to lag threatening our energy future.

Energy Reality

Largest Resource Base

America’s energy resource base is truly one of its greatest assets. We currently are blessed with technically recoverable resources that at current consumption rates would supply 120 years of natural gas, 200 years of oil, and over 450 years of coal. That is

energy we know where to find and can extract today with existing technology. Even more remarkable, the U.S. has in-place resources—energy we can find but have yet to develop technology to extract economically—that would provide over 580 years of natural gas, 530 years of oil, and over 9,800 years of coal.

According to the Congressional Research Service, the U.S. maintains the largest fossil energy resource base in the world. While Russia is a close second, every other country has less than half that of the U.S. This plentiful and diverse resource base provides a tremendous competitive advantage as well as a much-needed safety net. Increasing taxes on energy production will only serve to make foreign energy cheaper and increase imports into the U.S., and export jobs and economic growth abroad.

Fossil Backbone

When contemplating the energy tax policy of the future, it is important to appreciate the energy disposition of today, as well as tomorrow. As we sit here today, the U.S. derives 81% of its energy needs from oil, natural gas, and coal. According to the Energy Information Administration's *Annual Energy Outlook 2016*, by 2040 we will still rely on these sources for 78% to 80% of our energy needs, that's even if the President's Clean Power Plan is implemented as written.

Don't Tear Down One to Build Another

The overriding focus of any energy tax policy should be to avoid damaging one technology or industry in the pursuit of elevating another. The United States is blessed with an incredibly diverse energy portfolio, especially when compared to other countries. This diversity creates competition and thus lower prices for consumers. Diversity also insulates against supply disruption, which helps insulate consumers and businesses from price shocks. This predictability encourages greater capital investment from the private sector.

As the largest economy in the world, we must continue to rely on and encourage further diversity within our energy supply if we are to maintain that status. Fiscal policy that seeks to penalize one form of energy or energy production detracts from our diversity, decreasing competition and increasing prices and price volatility. This is detrimental to economic growth and energy security.

We need not look too far in our history to see the detrimental impacts of punitively taxing energy production. The Windfall Profits Tax (WPT) implemented in 1980 operated as an excise tax on domestically produced oil and provides a solid historical reference to judge the impacts of recently proposed new taxes and fees.

In 2006, the Congressional Research Service estimated that implementation of the WPT resulted in as much as an 8% decline in domestic crude production and as much as a 13% increase in imports. In 1986 imported oil as a share of total U.S. consumption jumped from 32% to 38% from the previous year. This 19% increase is one of the largest

annual increases on record and one of the primary reasons the WPT was ultimately repealed in 1988.

Yet countless proposals included in each of the president's proposed budgets as well as dozen of bills proposed in Congress would create new taxes and fees while repealing several long-standing tax rules for companies that incur significant economic risk in exploring for oil and natural gas without any guarantee of cost recovery.

The elimination of these tax rules is not about "closing loopholes," as some have suggested. These provisions—which are similar to rules that apply to other industries and are not targeted for elimination—were specifically crafted by Congress to create and preserve American jobs and to increase the country's energy security by supporting greater domestic production. Thus, the new tax changes being proposed would disproportionately target one industry but harm the entire country.

Efforts to raise taxes on energy production foreshadow a less secure energy future. History has demonstrated that arbitrary tax increases that raise the costs of doing business in this country are counterproductive, forcing increased oil imports, significant job losses, and more expensive energy bills. These detrimental impacts are magnified at a time when the oil and gas industry is still suffering from its own success in producing more American oil and gas than anyone had ever predicted, causing a precipitous price decline. While this has marginally benefitted some sectors of the economy, it has resulted in an estimated 150,000 direct jobs lost in addition to another 50,000 to 100,000 indirect jobs.

The number of drilling rigs currently active has declined 78% percent since the end of 2014 to the lowest level in half a century. Taxing energy production is always bad policy, but doing it now is exponentially more so. Rather, energy tax policy should focus on achieving a targeted objective, while allowing the technologies or applications to compete in the market to fulfil that objective.

Oil & Gas are the Country's Economic and Security Lifeblood

Oil and natural gas not only provide a growing competitive advantage and are increasing U.S. energy security, but they also literally and figuratively lubricate our economy. Taxing oil and natural gas serves to increase production costs domestically, making foreign production cheaper. Because oil is priced globally, taxing its production domestically will not impact global prices, and therefore have no impact on domestic consumption. Instead, increasing taxes on domestic oil production only changes where the oil we consume is produced. The less oil we produce for our own consumption, the fewer jobs will be created or supported, the less economic growth we will realize, the less government revenue will be collected, and the less leverage we will have geo-politically.

Densest, cheapest, & most plentiful

While wind has increased exponentially in the "2000s" and continues to grow at a brisk pace and solar generation is now increasing very fast, together they are projected to

provide less than 10% of U.S. primary energy consumption in 2040, even with the aid of the Clean Power Plan. This is not to say renewable energy is not important, but rather to demonstrate the size of the U.S. energy economy. It takes many decades of exponential growth to begin to truly impact our energy consumption ratios. Therefore, it is important to be tempered when estimating how impactful fiscal policy can be in advancing alternative energy sources. The simple reality is that fossil fuels are the most energy-dense, plentiful, and economical energy resources available.

Jobs

The oil and natural gas industry supports some 9 million jobs in the U.S. While many have been lost during the recent downturn, on average, they pay nearly double to U.S. median wage. During the energy renaissance of the last decade, areas of production have expanded from traditional places like Texas, Wyoming, and Utah to new hotbeds like Pennsylvania, Ohio, and Colorado, creating thousands of new, high-paying jobs. (It is fair to point out that even with these job losses, Bureau of Labor Statistics data show that employment in the oil and gas sector is still about 23% higher than it was at the end of 2007 while employment in the rest of the non-farm economy is just 5% higher. Clearly, the oil and gas sector has been, and continues to be, a bright spot in an otherwise dreary economic landscape.)

While we are cautiously optimistic that the labor market in the oil patch has stabilized, one of the quickest ways to create more pink slips is to raise taxes on oil and natural gas production.

Economy

The oil and natural gas industry contributes 8% of U.S. GDP. Punitive taxes that further decrease capital investment from such a large share of the economy are likely to have an outsized effect on growth. While we will not appreciate the full extent of the damage for some time, the current and prolonged decline in oil and gas capital investment is clearly contributing to anemic economic growth.

Government Revenue

In 2015, oil and natural gas production provided more than \$7.6 billion in government revenue through royalties, rents, and bonuses. This is in addition to the federal income and excise taxes paid, which was estimated to total over \$300 trillion in 2012. The industry averaged a staggering 44.5% effective tax rate from 2008 to 2013. Increasing taxes on the oil and gas industry will result in higher production costs, less production, and ultimately less government revenue.

Geo-political Considerations

Finally, while difficult to quantify, the import and export of oil and natural gas have a precipitous impact on the executive branch's ability to influence geo-political affairs

abroad. Since 2006, U.S. oil imports have declined by nearly one-third. Imports from OPEC countries have declined 44% with crude from Nigeria, Algeria, and Libya having been nearly eliminated. Not only has this insulated U.S. consumers from price shocks created by supply disruptions around the world, but it also lifts constraints on U.S. foreign policy.

Indeed, the changing geo-political equation has been nothing short of astonishing. It was not all that long ago, in March 2012, that President Obama declared in his weekly address to the nation, “But you and I both know that with only 2% of the world’s oil reserves, we can’t just drill our way to lower gas prices – not when we consume 20 percent of the world’s oil.” From the end of 2011, a few months before the president made that claim, to 2015, U.S. crude oil production jumped by 3.8 million barrels per day, an astonishing two-thirds higher, with production from Texas, North Dakota, Oklahoma, and Colorado leading the way.

This rising output from North America (Canada, too, increased its oil output substantially (about 800,000 barrel per day) over this time period) came during a time of rising tensions in the Middle East, supply disruptions, and increasing demand from large emerging economies like China that normally would squeeze spare global oil production capacity and send prices sky-high. Because of greater North American production, that didn’t happen. And while it is likely that we will see continued firming of oil prices over the next few months, it is unlikely that they will breach \$100 per barrel anytime soon simply because the U.S. oil and natural gas firms are so good at what they do. They are a national economic and geo-political asset.

The lifting of the ban on crude oil exports also will result in greater U.S. participation in global oil and natural gas markets on the supply side to limit the use of energy as a geopolitical weapon and smoothing out volatility. U.S. producers are now shipping domestically produced oil to Asia, Europe, South America, and Israel. Likewise, in 2016, domestic producers began shipping natural gas for the first time from the Continental United States, with shipments landing in Asia, South America, and soon to Europe. By providing an alternative source of oil and natural gas on the world market, U.S. producers are helping to deleverage energy states like Russia and Venezuela and thereby increasing U.S. foreign policy leverage.

However, increasing taxes on oil and natural gas production will quickly eliminate both of these advantages. If production costs increase domestically via higher taxes, domestic production will decline, hampering our export advantage and requiring increased imports that will increase our exposure to global uncertainty. Both will significantly harm U.S. geo-political leverage.

Conclusion

Federal tax policy can be a potent energy policy tool. If crafted as part of comprehensive reform, with a sober understanding of unpredictable outcomes, focused on discreet results while not selecting the technological path to that end, tax policy can

help secure our energy future. Conversely, punitive taxes that ignore history and economic realities will severely harm the country's economy, energy security, and global standing.