



# Energy

## Summary and Key Talking Points

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### Policy Proposals

1. End ineffective regulations that increase the cost of energy while doing little to improve air quality or reduce pollution.
2. Eliminate government subsidies for all energy resources and technologies.
3. Curb government energy efficiency mandates that override consumer preferences.
4. Make it easier to introduce alternative energy sources such as nuclear energy, a proven source of safe and clean energy.

### Quick Facts

1. The U.S. is the world's number one producer of petroleum and natural gas.
2. Federal energy subsidies cost American taxpayers \$15 billion in FY 2016, with over \$6.5 billion going to renewable energy.
3. The U.S. generates almost 20 percent of its electricity from 97 nuclear power plants, representing over 55 percent of America's emissions-free electricity.

### Power Phrases

#### Fueling Our Lives

- Energy is essential to every product and service Americans use and every activity we engage in, from heating our homes and running our schools and hospitals to fueling our vehicles and producing the goods we buy.

#### Empowering Americans, not Bureaucrats

- It is not the government's role to promote one energy source over another or force people to use a particular type of fuel. Energy policy should be consumer-centric, not Washington-centric.
- Allowing energy choice empowers American families and businesses, rather than bureaucrats, lobbyists, and politicians, to make decisions.

## The Issue

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**E**nergy is essential to nearly every product and service Americans use and to every activity in which they engage. Whether with electricity, energy technologies, or fuels, energy heats homes and meals, runs schools and hospitals, powers businesses that create jobs, and fuels vehicles that connect people with products that use energy resources as basic feedstock—products as wide-ranging as cosmetics, athletic equipment, pharmaceuticals, paints, and pipelines. Affordable, reliable energy is worth continuing to strive for and should be enjoyed unapologetically.

Perhaps because energy is so intertwined with the economy, politicians routinely meddle in energy markets to micromanage for preferred outcomes. Big government approaches to energy policy aim to centrally plan, actively manage, and pre-condition energy choices in order to serve political agendas. Unnecessarily burdensome laws and regulations have driven up energy costs, reduced those choices, and opened the door to cronyism.

Subsidies through the tax code, grants, guaranteed market share, loans and loan guarantees, and government-funded research and development have become popular ways to implement energy policy. This has wasted billions of taxpayer dollars and distorted private sector investments. Politicians, bureaucrats, and companies with effective lobbying arms not infrequently also use the regulatory process to block access to some resources and technologies or hedge out competitors.

While subsidies may appear to benefit the recipients, advantages are short term at best. When government insulates technologies or certain companies from the prospect of failure or competition, it removes healthy forces that drive creativity and solutions in the long term. Government subsidies also create barriers to entry for innovative, unsubsidized energy companies that must compete for customers against companies backed by the government and U.S. taxpayers. Further, although government experts might appear to know how best to plan energy resources and use for the future, they are often wrong, slow to adapt, and incapable of complete knowledge of a dynamic global sector. Indeed, almost no one anticipated the oil and gas boom in America created by hydraulic fracking, which has fundamentally transformed global energy markets.

Relying on free enterprise and the private sector's ability to innovate to meet America's diverse energy needs is a far better approach. Fuel and technology-neutral competitive markets allow prices to communicate accurate information to producers and customers about the value and cost of energy. This allows the endless creativity of people to anticipate and meet customer energy needs and preferences. Ultimately, competition to meet consumer preference in energy services empowers American families and businesses, rather than bureaucrats, lobbyists, and politicians, to make decisions. Congress should focus on reducing ineffective and economically harmful regulations, opening access to resource development, and eliminating subsidies for all energy resources.

## Recommendations

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**Stop the regulation of greenhouse gases.** The Obama Administration implemented a suite of greenhouse gas emissions executive orders and regulations under the Clean Air Act<sup>1</sup> that have unnecessarily driven up energy prices and eliminated choices, while having no meaningful climate impact. President Trump rightly directed agencies to reconsider and withdraw some of these rules. However, lasting leadership and change must come from Congress. Congress should prohibit the federal government from regulating greenhouse gas emissions and clarify that the Clean Air Act never intended to regulate greenhouse gases.

**End use of social cost of carbon in government cost-benefit analyses.** Federal agencies perform cost-benefit analyses for a wide range of regulatory and permitting decisions. Under the Obama Administration,

agencies began to incorporate a “social cost of carbon” in these analyses to assess the alleged social costs of an activity emitting carbon dioxide. The statistical models upon which the federal government relies offer significantly different results using other reasonable inputs, such that values are essentially arbitrary and are not credible tools for policymaking. Congress should prevent any agency from using regulatory analysis metrics with the “social cost of carbon” and the “social cost” of other greenhouse gas emissions in any cost–benefit analysis or environmental review. If federal courts force regulators into estimating the costs of climate change, they should assess climate impacts in terms of global temperature change as a result of the proposed project using a tool like the Model for the Assessment of Greenhouse-gas Induced Climate Change rather than using the social cost of carbon.

**Eliminate subsidies for all energy resources and technologies.** In 2015, Republicans and Democrats reached a compromise to extend wind and solar tax credits one more time and put them on a schedule to sunset. Congress should hold to that promise and wind down tax credits for *all* energy technologies. It should also reform the tax code to allow for immediate expensing for all capital investments. Relatedly, Congress should eliminate Department of Energy (DOE) subsidized research and development for commercial energy technologies. It is neither appropriate for taxpayers nor a necessary role of the federal government to fund or conduct such research. Furthermore, Congress should prohibit any further taxpayer-backed loans to private companies and eliminate the DOE’s loan-guarantee program.

**Reform offshore energy leasing.** America keeps the vast majority of its territorial waters off-limits to energy production, but that has not always been the case. Congress should open America’s coasts for offshore oil, gas, wind, and other energy resource exploration and development. It should eliminate the Department of Interior’s five-year leasing plans and authorize the Department of the Interior (DOI) to conduct lease sales, if interest for development exists, while considering the interests of states that would be most impacted by that development. Such a reform would allow the safe development of energy off America’s coasts and replace the lengthy and unnecessary planning process for a system that is more responsive both to price changes and to the needs and interests of states. Bidding on the leases would not be exclusive to energy companies but open to all parties, including those interested in environmental preservation rather than resource development. Reform should also include transferring environmental review and permitting process to the states, along with at least 50 percent of the revenues generated by onshore oil and natural gas production on federal lands.

**Eliminate government energy efficiency mandates.** Federal efficiency mandates, rebate programs, and spending initiatives too often assume either that all Americans use energy the same way, or that the government knows better how Americans should use energy. Congress should affirm the ability and freedom of Americans and businesses to make decisions that best meet their needs by eliminating all mandatory efficiency regulations and subsidies for vehicles, appliances, and buildings. At a minimum, mandates should be restructured as voluntary standards under which businesses and consumers can choose their level of participation.

**Overhaul nuclear energy regulation.** The regulatory system that licenses and permits nuclear reactors failed to keep up with technological innovations and overregulates existing nuclear technologies. Instead of addressing underlying government-imposed problems, policymakers have focused on mitigating the cost of those policies through subsidies, leading to a predictable path of failure: While such an approach may spur some commercial activity, that commercial activity is limited only to what is subsidized. Nuclear plants in America today continue to exhibit superior safety performance. Policy and regulations should reflect that track record. Congress should instill regulatory discipline at the Nuclear Regulatory Commission (NRC), direct the Environmental Protection Agency to right-size radiation-exposure standards, review foreign ownership caps, reform the NRC’s cost-recovery structure, and address the convoluted export regulatory regime.

**Complete the review of Yucca Mountain, and introduce market forces into nuclear waste management.** Congress has failed either to change current law or appropriate the funds necessary for the NRC to review the DOE’s permit for a nuclear waste repository at Yucca Mountain. This unnecessary limbo has been

costly to taxpayers and has created problematic uncertainty for the current and future nuclear industry. Congress should provide enough funding to complete the license review to allow contentions to be adjudicated, and all of the information should be brought together for Congress, the State of Nevada, and the nuclear industry to make prudent decisions about next steps. Ultimately, Congress must introduce market forces in nuclear waste management for it to be a successful, dynamic part of the fuel cycle and nuclear industry. Nuclear waste management should be primarily a business activity, not an inherently governmental activity.

**Encourage choice in electricity markets.** Competitive electricity markets have served customers well. Some states have accomplished the transition from monopolies to competition more successfully than others, and additional free-market reforms are necessary to spur more entrepreneurial activity in electricity markets. However, when the underlying structure of competition is sound, the benefits to energy consumers are unambiguously positive. Competition in electricity services allows greater customer choice through the power of the consumers' own dollars rather than through the disconnected votes of a small panel of public utility commissioners. Consumer choice comes not only in the form of resource choice (renewables, conventional fuels, or a mix) but also in the form of financial choices (e.g., fixed rates, risk preferences, indexed rates, or short-term or long-term contracts).

In the end, because electricity providers have to work for their customers, prices are competitive and quality improves. States should fix anti-competitive energy policies like renewable energy mandates, which have wreaked havoc in the electricity sector by putting politics and special interests over customers. Similarly, the Federal Energy Regulatory Commission should work vigorously to uphold fuel and technology neutral competition in electricity markets.

**Repeal the Renewable Fuel Standard (RFS).** There is near universal agreement among energy, agriculture, food industry, and environmental groups that the RFS is bad policy and that it has had negative unintended consequences. Despite nearing the goal of the mandate to use 36 billion gallons of ethanol by 2022, this policy has proved unworkable. Tinkering around the edges will not rescue it. Moreover, the federal government should not mandate what type of fuel drivers use in the first place. Instead of attempting to reform the RFS, or continually calling on the EPA to waive or negotiate annual mandates, Congress should repeal the RFS to protect Americans from artificially higher food and energy prices, and eliminate unfair subsidies that go to a small set of special interests that benefit from the mandate.

## Facts and Figures

**FACT: Energy subsidies waste taxpayer money and actively prevent innovative energy technologies from thriving in the market.**

- Federal energy subsidies cost American taxpayers \$15 billion in fiscal year 2016. Renewable energy activities received 45 percent of this, more than any other sector. While this is a decrease from the record high from the Obama Administration's Recovery Act, the Energy Information Administration found that hundreds of energy subsidy programs still exist.
- Energy companies do not need government incentives. With the enormous value of the energy market (over \$6 trillion for electricity and transportation fuels), any innovative technology or company that could capture even a tiny sliver of this market would be enormously successful.
- There is no such thing as a perfect energy resource or technology. All have tradeoffs and benefits that should be weighed by investors and customers rather than politicians and bureaucrats. Subsidies muddle this rational decision-making process.

**FACT: 80 percent of energy consumed by American families and businesses came from coal, oil, and natural gas.**

- Three decades ago, proven world oil reserves were 645 billion barrels; at the end of 2018, it was more than 1.73 trillion barrels. Despite constant cries that the world is running out of oil, innovative technologies have allowed increased discoveries around the world. There is no shortage of energy resources, and attempts to limit access to energy only hurt Americans.
- The U.S. has an abundance of natural resources and is the world's number one producer of petroleum and natural gas. Since 2010, U.S. exports of crude oil and petroleum products have more than doubled. America also has nearly 500 years' worth of coal underneath its soil at current consumption rates.

**FACT: Competition has been good for the nuclear industry; however, the industry is over-regulated and faces significant government-induced risk.**

- The U.S. generates almost 20 percent of its electricity from 97 nuclear power plants. In 2018, nuclear reactors generated over 801 million megawatt-hours of electricity—more than ever before. This power is reliable, safe, and free of air pollutants. Though many states do recognize nuclear energy in greenhouse gas emission mandates, nuclear energy also produces over 55 percent of America's emissions-free electricity.
- Since 2013, seven reactors have closed, in most cases before their operating licenses expired. This is due to a variety of reasons, some legitimate (like competing low natural gas prices) and others a result of government interference (unnecessarily high regulatory costs on the nuclear industry and subsidies for competitors).
- However, market pressure also has been good for the nuclear industry. A Nuclear Energy Institute initiative to find industry-wide operating efficiencies reduced costs by 19 percent, resulting in \$1.6 billion in savings.
- The federal government's inability to collect nuclear waste as stipulated by the law has cost taxpayers \$7.4 billion in legal damages to nuclear power plants. Today, the federal government remains liable for over 81,000 tons of commercial nuclear waste. The DOE projects future liability to be \$28.1 billion, but this is misleading because it assumes work on Yucca Mountain will restart in 2021. The nuclear industry estimates at least \$50 billion in liabilities.

**FACT: Renewable energy technologies supply a growing share of electricity; however, government intervention hides costs and harms competitiveness.**

- Renewable energy technologies supplied 17 percent of American's electricity in 2018, with 7 percent coming from hydropower, 6.5 percent from wind, 1.5 percent from solar, and the rest from biomass and geothermal. Costs continue to fall; however, subsidies prevent true costs and demand from being known.
- Policies like the wind production tax credit and solar investment tax credit create harmful dependency on taxpayers and boom and bust cycles based on political calendars rather than actual customer demand. Other government interventions like monopoly-run electricity markets and federal tariffs have rewarded failing companies at the expense of others, blocked access to customers, and prevented American companies from using competitive components in order to provide the best, most affordable service.
- Wind and solar energy impose hidden costs on other power plants, especially in states that mandate renewable energy use. Consistently reliable plants—usually coal, natural gas, or nuclear—must be available as backup power and consequently must run inefficiently to accommodate wind and solar. According to a study by the Institute for Energy Research, this imposes hidden costs of at least \$21 extra per megawatt-hour for solar, and \$24 per megawatt-hour for wind.

## Additional Resources

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Nicolas D. Loris, “No More Energy Subsidies: Prevent the New, Repeal the Old,” Heritage Foundation *Backgrounder* No. 2587, July 26, 2011, <https://www.heritage.org/environment/report/no-more-energy-subsidies-prevent-the-new-repeal-the-old>.

Katie Tubb, Nicolas Loris, and Rachel Zissimos, “Taking the Long View: How to Empower the Coal and Nuclear Industries to Compete and Innovate,” Heritage Foundation *Backgrounder* No. 3341, September 5, 2018, [https://www.heritage.org/sites/default/files/2018-09/BG3341\\_0.pdf](https://www.heritage.org/sites/default/files/2018-09/BG3341_0.pdf).

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Katie Tubb, Nicolas D. Loris, and Paul Larkin, Jr., “The Energy Efficiency Free Market Act: A Step Toward Real Energy Efficiency,” Heritage Foundation *Backgrounder* No. 3144, August 17, 2016, <https://www.heritage.org/environment/report/the-energy-efficiency-free-market-act-step-toward-real-energy-efficiency>.

Nicolas D. Loris, “Examining the Renewable Fuel Standard,” testimony before the Subcommittee on the Interior and the Subcommittee on Healthcare, Benefits, and Administrative Rules, Committee on Oversight and Government Reform, U.S. House of Representatives, March 16, 2016, <https://www.heritage.org/testimony/examining-the-renewable-fuel-standard>.

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## ENDNOTE

1. 42 U.S.C. §7401 et seq. (1970), <https://www.epa.gov/laws-regulations/summary-clean-air-act> (accessed November 8, 2019).