



ENERGY ABUNDANCE

How America Can Lead the World in Energy Production
While Creating a Better, Cleaner Environment

Gabriella Hoffman with Carrie Sheffield



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FOREWORD

This report is a must-read for anyone following the rise of American energy dominance and the positive outcomes it creates for both people and the planet.

With clear policy analysis and robust, well-sourced data, Independent Women torches environmental extremism and makes a powerful case for the abundance mindset. They illuminate how strategic energy development can drive economic growth, enhance national security, and protect the environment, offering a clear-eyed, optimistic vision for a thriving, sustainable future.

This report comes at a key moment in America's energy story as President Trump continues to implement his promise of American energy dominance. It compellingly argues that domestic energy production, conducted under balanced environmental protections, not only meets rising demand but also delivers better environmental outcomes than reliance on foreign energy from nations like China, Iran, and Russia, where lax regulations often lead to ecological harm.

By maximizing reliable energy sources and rejecting unfounded hysteria about fossil fuels, the U.S. can reduce global environmental degradation while fostering economic prosperity. This report is a clarion call to pursue energy policies that strengthen America's economy and environment, proving that we can thrive without sacrificing either.



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EXECUTIVE SUMMARY

U.S. demand for energy is rising, thanks to the growth of manufacturing, technology, transportation, air conditioning usage, and construction of artificial intelligence (AI) data centers.

Legacy environmentalists have suggested that increased energy consumption will lead to climate catastrophe. They argue that increasing energy usage and production will inevitably harm the environment. They paint the picture of a hotter, barren world, stripped of natural beauty in which human beings struggle to access adequate clean water and fresh air.

Yet reality is much more encouraging.

We can increase our energy production and use without compromising the environment. In fact, greater domestic energy production can result in better environmental outcomes, not worse, because American energy production is done in compliance with rigorous protections that minimize harm. This leaves the United States and the world less dependent on countries like China, Iran, and Russia, which degrade the environment in pursuit of cheap energy.¹

As this report details, pursuing energy abundance in the United States—maximizing the production and consumption of reliable energy sources and rejecting hysteria about fossil-fuel-based energy production—can lead to better environmental outcomes while also contributing to a flourishing economy. Instead of subtracting energy options, energy abundance celebrates the addition of reliable and secure energy sources. An abundance mindset will allow the U.S. to meet our energy needs without sacrificing conservation of the environment.



I. INTRODUCTION

Energy is integral to everyday life in the United States. Fulfilling basic human needs like electricity, food, and water for our entire population depend on the availability of reliable, affordable energy.

Today, much of the discussion involving energy assumes that as more energy is consumed, the worse off the environment will be. That's a false choice.

Before the Industrial Revolution, people relied on wood, whale blubber, and manure to heat their homes and cook their food and water. They also depended on animal-powered carts as modes of transportation. Not only did this mean a lower living standard, these sources are also inefficient and environmentally damaging sources of energy.

As society advanced, certain industries employed practices that led to the depletion of natural resources. The demand for wood-based fuel, sadly, invited deforestation. Whales were nearly driven to extinction until the discovery of oil and petroleum.² Increased consumption of these resources frequently led to shortages, as there were no viable practical alternatives. Then came the transition to coal, a reliable carbon-based fuel, that improved human flourishing, made energy cheaper and affordable, and cut reliance on impractical energy sources.³

But today, developed, and emerging societies are consuming more energy without depleting air, water, and land resources.

As people become more prosperous and living conditions continue to improve, energy consumption increases. This improvement of living conditions and standards should be celebrated. But many falsely insist that this same energy consumption, and by correlation, increased prosperity, will hurt the environment. But should people and cultures be forced to regress and sacrifice their first-world living conditions to transition to a 100% renewable energy society that can't deliver the same quality of life?

Lawmakers and activists argue that transitioning to use clean energy sources—such as solar, wind, and electric vehicles (EVs)—rather than exploring reliable and abundant ones like coal, oil, natural gas, and nuclear energy will improve the environment while still allowing for development and greater prosperity. But recent experience across the globe suggests otherwise and that these renewable energy sources are simply not sufficient to meet demand. In this time of growing electricity demand, more reliable energy sources are needed to offset the high demand that is largely being driven by manufacturing, transportation, and artificial intelligence (AI) data centers.

The status quo of overregulation, red tape, and government picking energy winners and losers isn't working. That's where the abundance movement, with market innovations, comes into play.

An abundance agenda embraces technological improvements, economic prosperity, and maximizing resource development in order to improve human flourishing. With respect to energy development, abundance welcomes the addition—not the subtraction—of reliable and secure energy sources.

As abundance is achieved, society will recognize that increased energy consumption won't come at the expense of conserving the environment.

II. DEFINING ENERGY ABUNDANCE

Throughout our nearly 250-year history, the United States has innovated its way out of environmental problems when it prioritizes human well-being and economic growth and allows the free market to create solutions.

Our country is blessed with abundant natural resources. These can be stewarded responsibly to meet our growing energy needs, without despoiling the environment. The United States has already made tremendous strides in this process. We have made traditional energy sources cleaner, improved reliable clean energy (such as nuclear power), and continue to innovate and develop new ways to meet the growing energy demand of our nation. This approach celebrates abundant energy sources that comprise our diverse energy mix and uses them all to meet our nation's needs.

As we've continued to prioritize human flourishing over scarcity, environmental progress is a natural outcome of technological advancement. This is a reality—and future—that's the opposite of what climate activists, past and present, predicted.

Stanford University biologist Paul Ehrlich mainstreamed resource scarcity in his 1968 book, "The Population Bomb."⁴ Ehrlich, a radical environmentalist, predicted that population growth and overconsumption of natural resources would result in scarcity, famines, and environmental ruin:

Our position requires that we take immediate action at home and promote effective action worldwide. We must have population control at home, hopefully through changes in our value system, but by compulsion if voluntary methods fail. Americans must also change their way of living so as to minimize their impact on the world's resources and environment.

His dystopian predictions thankfully never panned out. In fact, the opposite is true.

Julian Simon, the late Cato Institute scholar and University of Maryland professor, successfully disproved Ehrlich's claims. His research found that as population levels increased, natural resources became more abundant, not scarce.

Today, his namesake Simon Abundance Index (SAI) shows that Earth is 518.4% more abundant than it was in 1980.⁵

Our Abundant Energy Today

Today, many of our energy sources and improvements have helped to save species and our climate, not despoil them. For example, fossil fuels—namely the discovery of petroleum by Edwin Drake in Pennsylvania in 1859⁶—are largely credited with saving sperm whales from mass extinction.⁷ Whale blubber was used for lighting, lubricants, margarine, and other uses until the advent of kerosene, coal gas, and electric lighting were pioneered.

Proved U.S. oil and gas reserves—economically viable areas of extraction with a 90% likelihood of available supply—have increased since 2000, thanks to horizontal drilling and fracking.⁸ There are 48.3 billion barrels of proved U.S. crude oil reserves. U.S. crude oil production reached an all-time high of 13.5 million barrels per day (b/d) in March 2025.⁹

The 2000s hydraulic fracturing (fracking) boom ushered in the transition from coal to natural gas. As of April 2024, there are 691 trillion cubic feet (Tcf) of proved natural gas reserves.¹⁰

Other commodities like coal, nickel, iron ore, logs, and fertilizer are more abundant today, as well.¹¹ Unfortunately, despite all these resources at our disposal, the federal government and the states have not always recognized the wisdom of an abundance approach to energy. As a result, they make energy less reliable, more scarce, and most ironically of all, may actually cause more environmental damage around the globe.

The Federal Situation

Before the second Trump administration entered office on January 20th, 2025, the Biden-Harris administration pivoted the country's energy focus on achieving 100% solar, wind, electric vehicles, and battery storage, in order to achieve its goals of "net-zero" carbon emissions.¹²

These goals, which aligned with the Paris Climate Accords, would have required the United States to reduce carbon emissions by upwards of 95% by 2050.¹³ However, net-zero policies demanding that society phase out fossil fuels have proven to be economically and environmentally unrealistic—despite trillions in global spending allocated for clean energy development. Intermittent renewables can't adequately replace the cheap abundant energy sources that undergird our energy mix. Spending bills like the Inflation Reduction Act (IRA) distorted the markets to favor unprofitable, unviable clean energy company beneficiaries, but still failed to meaningfully alter our energy mix.¹⁴

Thankfully, the second Trump administration is already turning things around. In a January 20th executive order on "Unleashing American Energy," the Trump-Vance administration embraced abundance as its North Star for energy and natural resource development policy:

America is blessed with an abundance of energy and natural resources that have historically powered our Nation's economic prosperity. In recent years, burdensome and ideologically motivated regulations have impeded the development of these resources, limited the generation of reliable and affordable electricity, reduced job creation, and inflicted high energy costs upon our citizens. These high energy costs devastate American consumers by driving up the cost of transportation, heating, utilities, farming, and manufacturing, while weakening our national security.

It is thus in the national interest to unleash America's affordable and reliable energy and natural resources.¹⁵

The State-Level Situation

States aren't immune to adopting a scarcity mindset with respect to energy policies either. In fact, blue states like California and New Jersey have taken more extreme steps to expedite an energy transition to 100% renewables by a deadline of 2035.

California

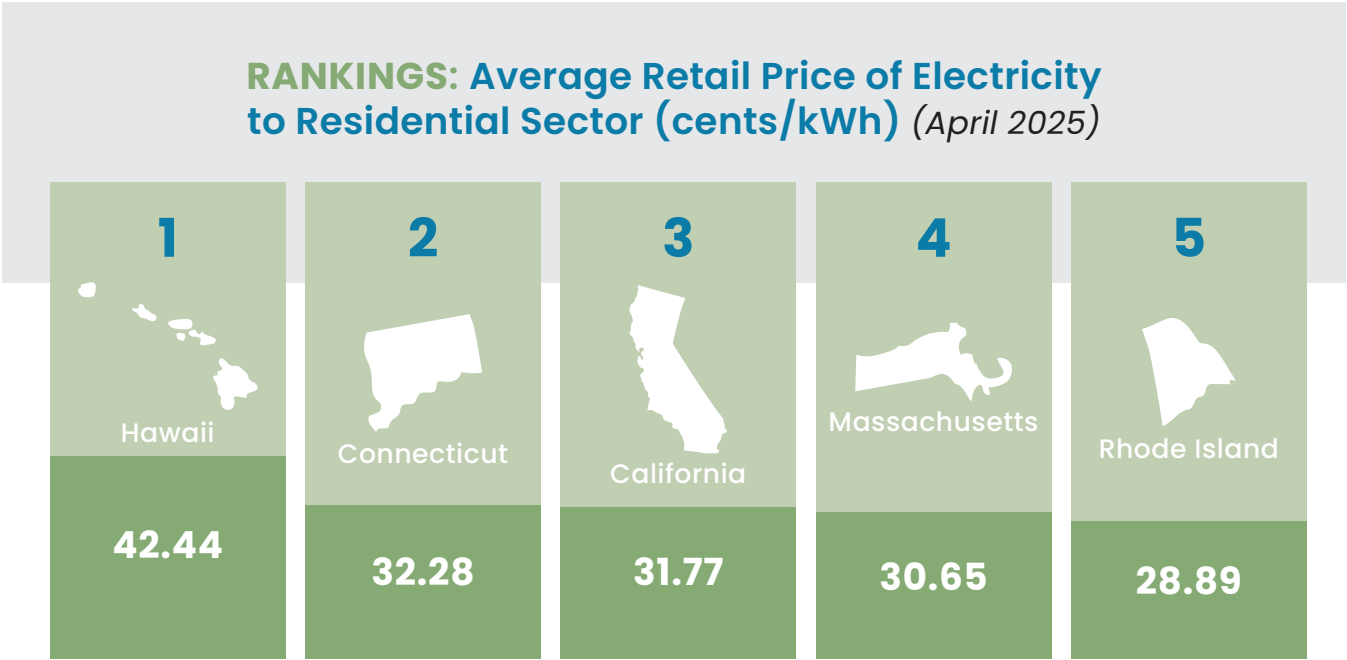
The Golden State is fully committed to removing coal, oil, gas, and even nuclear from its grid by 2045. But the state is facing real growing pains due to the unreliability of solar and wind, with temporary oversupply from these sources being as disruptive as when too little energy is produced.¹⁶

In May 2025, the Energy Information Agency (EIA) detailed how grid operators are having to reduce wind and solar power during periods of congestion and oversupply.¹⁷ Congestion occurs when transmission lines have more electricity generated by solar and wind plants than there is a demand for energy at that time.¹⁸ Grid operators lack the ability to store this energy and ultimately choose to curtail it—meaning this energy goes wasted. Solar, in particular, accounted for 93% of curtailments in 2024.

Nearly 840,000 curtailments of wind and solar power were observed in April 2024—the highest level of curtailments observed since the California Independent System Operator (CAISO) first documented these occurrences, starting in May 2014.

Due to these solar and wind curtailments, California won’t ever reach its net-zero goals.¹⁹ In fact, utility companies are expected to distribute reliable electricity — namely natural gas—to consumers for decades.²⁰

It’s unsurprising that California boasts the nation’s third-highest residential electricity price, 31.77 cents per kilowatt hour (cents/kWh), as of April 2025.²¹ This figure is nearly double the national average cost of residential electricity.



Moreover, the possible closure of two oil and gas refineries by the end of 2026 could invite more energy insecurity in the Golden State—including \$8/gallon gasoline.²²

The EIA attributes these high gas prices to several factors: state taxes and fees, environmental requirements, special fuel requirements, and isolated petroleum markets. The agency adds that Californians pay the highest gas tax of any state,

amounting to \$0.90 per gallon levied by local, state, and federal taxes.²³ It's no surprise that California's climate policies, including the 2015 cap and trade law and Advanced Clean Cars II Electric Vehicle (EV) mandates equally contribute to higher gasoline prices.

A recent University of Southern California report concluded California's gas crisis is "self-created."²⁴ In 1982, California produced 62% of its petroleum needs. Today, 60% of California's petroleum is imported from foreign nations like Iraq, Saudi Arabia, Brazil, and Guyana.

All net-zero goals do is drive up costs for residents without reducing emissions in a meaningful way.

New Jersey

Garden State residents were facing a 20% hike on energy bills starting June 1st, 2025, thanks to the state policy designed to force consumers into using renewable energy, or cutting back on power use entirely.²⁵ Some customers already pay over \$500 a month.²⁶ Unsurprisingly, the Board of Public Utilities (BPU) is rewarding bad policymaking by delaying the rate increase through September 30th, 2025.

While it's easy to scapegoat the regional grid operator and artificial intelligence (AI) data centers that are increasingly gobbling up power supply for skyrocketing energy bills, the blame falls squarely on Governor Murphy's net-zero climate policies born out of his Energy Master Plan.



The Murphy Energy Master Plan, an executive order signed in 2023, mandates the Garden State achieve 100% clean energy by 2035 through solar, wind, electric vehicles, and batteries.²⁷

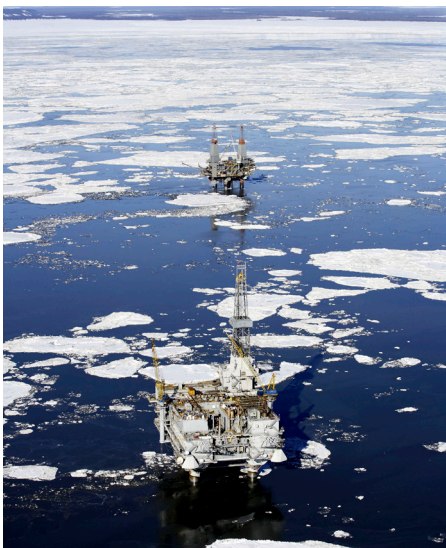
Unsurprisingly, New Jersey isn't on track to meet this goal. The BPU recently canceled an offshore wind project bid, citing the Trump administration's executive order that paused leases for renewed or new offshore projects.²⁸ In late 2023, Ørsted canceled two offshore wind projects in the Atlantic Ocean.²⁹ New Jersey is also behind on its energy storage goal. As of May 2025, there are 10 operating battery storage projects with a combined operating capacity of 110 megawatts (MW)—well below the 2021 goal of building 600 MW of energy storage.

The Murphy administration's forced closure of six reliable power plants has led to higher energy costs. Since 2017, five coal plants and the Oyster Creek nuclear power plant—producing 20% of the state's electricity capacity—have shut down.³⁰

As a result, New Jersey increasingly relies on imported electricity from out of state, namely from fossil fuel sources. According to the Energy Information Administration (EIA), New Jersey is chiefly powered by natural gas (49%) and nuclear (42%) for electricity generation.³¹ Renewables, including solar energy, barely account for 8%.

Thankfully, not all states are so hyper-focused on renewables-only policies. Alaska and Utah, two states with resource-dependent industries and sectors, are thriving with their energy abundance approach.

Alaska



Alaska is a great model for the rest of the United States to follow. The largest U.S. state by territory, the Last Frontier delicately balances energy development, particularly oil and gas, with true conservation efforts. The 49th state is also an outdoor enthusiast's paradise with bountiful hunting, fishing, hiking, and recreational activities.

Over 90% of Alaska is federally or state-managed land, yet the state generates the highest percentage of total economic contributions from oil and gas exploration of any U.S. state. Per the most available data, \$19.4 billion from the energy industry made up nearly 36% of Alaska's gross domestic product (GDP).³²

Alaska's dedication to balanced use of natural resources is frequently misconstrued by those in the Lower 48, who want it to be a wilderness area off limits to human contact. But this very notion goes against the state constitution. The Alaska State Constitution has two amendments pertaining to sustainable resource development, with Article 8, Section 2 stipulating:

The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the state, including land and waters, for the maximum benefit of the people.³³

If the Alaska model of maximizing resource use were despoiling the environment, there would be a corresponding decimation of wildlife and fish species. Yet that is not the case.

Critics of Alaska oil and gas exploration claim development in Alaska’s Northern Slope—including Alaska National Wildlife Refuge (ANWR)—will imperil caribou populations, particularly the Porcupine herd. However, only 8% of the area of contention, Section 1002 of ANWR, would be open to oil and gas activities.

A 2000 Wildlife Society report studying another caribou herd, the Central Arctic herd, in Alaska’s Prudhoe Bay Oilfield found there’s no negative correlation between exploration and herd numbers:



Although oil field development may impact individual caribou through disturbance or impedance of movements, herd-level impacts of the oil fields are not apparent.³⁴

The Porcupine caribou herd numbers, in fact, are at historically high levels. A July 2017 Alaska Department of Fish and Game (ADFG) photocensus revealed its population is strong at 218,000 animals—the highest number observed since the 1970s.³⁵

ConocoPhillips, Alaska’s largest oil and gas operator behind the Willow Project in the National Petroleum Reserve-Alaska (NPR-A), actively collaborates with the ADFG and the North Slope Borough to track the migration habits of two major caribou herds. The company specifically funds radio telemetry collars that are placed on caribou to track their movements and see if they’re impacted by factors like oilfield activities.³⁶

Utah

Similar to Alaska, Utah is a state rich with abundant natural resources for multiple uses, including energy development and outdoor recreation.

Per the most available data, Utah boasted 85,163 energy workers—1% of U.S. energy jobs.³⁷ Most of the Beehive State is public lands, with 68% managed by either the federal or state government.³⁸ There are five National Parks and 23 million Bureau of Land Management (BLM) acres of public lands open to fishing, hunting, and recreational shooting sports.³⁹

An early adopter of energy abundance posturing, Utah has made this official state policy. The legislature codified the State Energy Policy Act of 2024 that ensures energy resources are “adequate,” “reliable,” and “dispatchable” in line with free markets and human flourishing:

Utah will develop its energy resources and plan its energy future with a focus on human well-being and quality of life, recognizing that reliable access to energy is vital for human health, adaptation, economic growth, and prosperity ...⁴⁰

Utah is equally desiring to become America's next-generation energy hub,⁴¹ especially in advanced nuclear and geothermal.⁴²

During the 2025 legislative session, Utah lawmakers passed several landmark bills to catalyze reliable, abundant, secure energy sources and to expedite the approval of energy infrastructure projects.⁴³

Regarding state permitting reform efforts, state officials stressed expedited project approvals won't come at the expense of "high environmental and public standards."⁴⁴

The Bottom Line

By prioritizing human flourishing, energy-rich societies—including the United States—can allocate resources to conserve land, water, and air without upending economic growth.

The most recent available data from the Yale Environmental Performance Index (EPI), measuring 180 countries on their environmental performance, consistently observes a positive correlation between an individual country's wealth and high environmental performance.⁴⁵ As such, there is no such thing as a low-energy high-income country.⁴⁶

If policymakers craft laws and regulations that discourage energy abundance, consumers will pay the price with higher electricity rates—an estimated 19% increase by 2028.⁴⁷ There is a better path forward that will continue the United States on a path of good environmental stewardship without compromising America's security and quality of life.

Our country can achieve energy security and cease relying on foreign nations for fuel, electricity generation, and critical minerals by adopting abundance as its guiding principle—more energy from more sources, not picking energy winners and losers.

III. ENERGY ADDITION, NOT SUBTRACTION

Using more energy is actually good for the environment. As societies become more economically prosperous, as measured by per capita income, and consume more energy, the environment equally improves.⁴⁸ Residents of countries struggling to get enough energy to survive day-to-day rarely invest in environmental protection as prosperous countries like the United States do.

Unfortunately, federal energy policy has assumed that we need to reduce energy demand and phase out carbon-intensive energy like coal, oil, and natural gas to be replaced by supposedly less carbon-intensive alternatives like solar and wind. This approach also extends to consumer products, household appliances, and modes of transportation that have been equally deemed too carbon-intensive or wasteful of energy. Regulators at the Department of Energy and the Environmental Protection Agency (EPA) under Democratic administrations finalized rules to phase out incandescent lightbulbs, gas-powered stoves, furnaces, clothes washers, and dryers. These “green” standards only lead to higher consumer costs, not meaningful improvements to air or water quality.⁴⁹



This feeds into the scarcity mindset that calls for consuming less energy, to the detriment of human flourishing. For instance, federal energy efficiency standards for cars and household appliances are frequently justified as reducing energy consumption as well as carbon emissions.

The Land and Water Conservation Fund is entirely funded by offshore oil and gas royalties, at no cost to the taxpayers. \$900 million in royalties annually goes to improving public lands and expanding outdoor recreational opportunities across the U.S.



However, as energy technologies become more advanced, they tend to invite more consumption of a resource, not less. This was recognized in 1865 by an economist who observed that more efficient steam engines would not decrease the use of coal in British factories, but increase it as coal became cheaper and ubiquitous.⁵⁰

On this token, climate-first energy policies that place an outsized emphasis on energy efficiency and reducing energy consumption might, ironically, increase carbon emissions in the long run due to increasing energy demand.⁵¹

It's no wonder natural gas and coal, with the technologies behind them having undergone innovation, have endured as energy sources and now make up nearly 60% of the United States' current energy mix.

We must tap into more abundant, reliable, and secure energy sources to maximize resource development and cut our reliance on imported energy sources and raw materials.

Onshore and Offshore Oil

The United States is the global leader in crude oil production, accounting for 18.6% of global production.⁵² There are, at least, 48.3 billion barrels of proved crude oil reserves in the U.S.⁵³ Therefore, increasing domestic oil production, both offshore and onshore, has many innumerable benefits, including to our environment.

American crude oil produces fewer carbon emissions compared to other oil-producing countries. This can be examined by measuring the carbon intensity of oil production, measured in kilograms of carbon dioxide-equivalent per barrel of oil (kg CO₂e/bbl).⁵⁴ One figure found U.S. crude oil, producing 89 kg CO₂e/bbl, has lower upstream emissions, or indirect emissions from production or transportation, compared to the global average of 95 kg CO₂e/ bbl.⁵⁵

The Institute for Energy Research found that restrictions on domestic oil and gas production shift production to countries with worse environmental track records than the United States:

Reductions or limitations on domestic U.S. oil production must be made up elsewhere in the remaining major oil producing countries, which have far lower environmental standards than the U.S.⁵⁶

Another inherent benefit to offshore oil development is the permanent funding of a longstanding environmental program called the Land and Water Conservation Fund

(LWCF). The LWCF is entirely funded by offshore oil and gas royalties,⁵⁷ at no cost to the taxpayers.⁵⁸ \$900 million in royalties annually goes to improving public lands and expanding outdoor recreational opportunities across the U.S. In 2020, President Trump signed the Great American Outdoors Act, the most seminal conservation bill in a century, into law to permanently fund LWCF so Americans could enjoy spaces like national parks, trails, national forests, and historical and cultural sites.⁵⁹

Natural Gas



Natural gas is the most plentiful energy source in the United States today, accounting for 43.1% of our current energy mix.⁶⁰ There are at least 691 trillion cubic feet (Tcf) of proved reserves available to safely tap into in the U.S.⁶¹

It's a clean-burning fuel with manifold uses, including residential heating and electricity generation. Natural gas emits about 50% less carbon emissions compared to coal.⁶² With respect to methane emissions, a 2024 Environmental Protection Agency (EPA) study found increased natural gas production between 2015 to 2022 resulted in a 37% decrease in emissions.⁶³

Given how reliable natural gas is, it'll be essential for powering artificial intelligence (AI) data centers and meeting growing electricity demand—not a “bridge” to solar and wind, but a replacement. As David Rotman writes in MIT Technology Review:

The fossil fuel is already the country's chief source of electricity generation, and large natural-gas plants are being built around the country to feed electricity to new and planned AI data centers. While some climate advocates have hoped that cleaner renewable power would soon overtake it, the booming power demand from data centers is all but wiping out any prospect that the U.S. will wean itself off natural gas anytime soon.⁶⁴

As the U.S. approves more liquefied natural gas (LNG) export terminal projects, energy prices are expected to decrease, not increase.

Nuclear

Despite accounting for only 20% of current U.S. electricity generation, nuclear power is the most reliable and environmentally friendly power source. Thanks to innovation and technological improvements, today, a 1,000-megawatt nuclear plant, for instance, produces near-zero emissions for 93% of the year and is the least land-intensive project, only requiring about a square mile of land.⁶⁵

Contrary to popular belief, nuclear plants are secure, safe, and laser-focused on preventing any accidents that would spill nuclear waste or spent fuel into our waterways or air.⁶⁶ New nuclear reactor models are smaller and modern to ensure that the plants themselves are not eyesores, but structures that blend better with the environment. Spent nuclear fuel, or nuclear fuel used in reactors, is safely stored and can be repurposed to fuel small nuclear plants like small modular reactors (SMRs) and microreactors.⁶⁷



The recently completed Plant Vogtle in Georgia, the largest constructed nuclear power plant project in decades, is actively involved in wildlife habitat restoration efforts surrounding its facilities.⁶⁸ For example, Plant Vogtle's efforts have resulted in conserving 1,000 forest acres for various species. Georgia Power, the utility overseeing Plant Vogtle, has also worked with the U.S. Fish and Wildlife Service (USFWS) to bolster habitat for a growing and thriving gopher tortoise population on protected property adjacent to the plant.⁶⁹

Coal

American coal, the third-largest source of U.S. electricity generation, is much cleaner than coal produced by other countries. After natural gas and nuclear power, coal accounts for 16.2% of U.S. electricity generation.

The Department of Energy notes new U.S. coal plants boast pollution controls that reduce "nitrogen oxides by 83%, sulfur dioxide by 98%, and particulate matter by 99.8% compared to plants without controls."⁷⁰ This oft-vilified source is also gaining newfound appreciation to help back up artificial intelligence (AI)-powered data centers.⁷¹

When coal sites are decommissioned, they can be suitable habitat for deer and elk during coal reclamation efforts.⁷²

Geothermal



After nuclear power, geothermal energy is the second most reliable power that operates optimally between 77% and 90% of the time.⁷³ Geothermal currently accounts for 0.4% of electricity production in our country.⁷⁴ If fully harnessed, however, it could one day account for 10% of our overall electric capacity by 2050.⁷⁵

Geothermal power plants use hot water from the Earth's crust to generate steam to power a turbine for electricity generation. Electricity generated from geothermal plants is available 24/7 and isn't weather-dependent, making it a reliable baseload power source, unlike other renewables.⁷⁶ Compared to solar and wind, geothermal fields typically occupy one to eight acres per megawatt (MW).⁷⁷

According to the Department of Energy, geothermal power plants emit no greenhouse gases and have a lifecycle impact that is four times lower than solar photovoltaic (PV).⁷⁸

Solar and Wind

Renewables like solar and wind, while intermittent energy sources, could play some role in our energy mix. While they'll never replace coal, natural gas, or nuclear power, they could be supplements where appropriate.

For these renewables to be viable, generous green subsidies must be phased out. So far, these projects have struggled to thrive in the free market without subsidies and don't have sufficient battery storage to back them up.⁷⁹

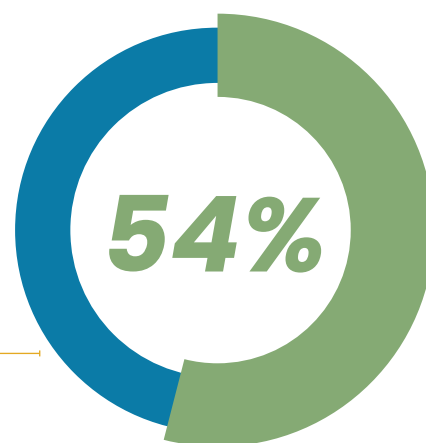
How to Support Energy Addition

With this plethora of energy options available, the government can often get in the way of innovative and clean energy. But there are clear steps that will help us continue to add to our energy abundance.

Environmental Deregulation

Deregulation won't lead to the decimation of the environment. And more Americans believe the two goals of streamlining government red tape while conserving the environment aren't mutually exclusive.

A June 2025 Pew Research poll found a majority of Americans—54%—believe the government can eliminate some environmental regulations while maintaining clean air, water, and lands.⁸⁰



During the first Trump administration term, 98 environmental rules were successfully rolled back,⁸¹ in alignment with a January 2017 executive order on “Reducing Regulation and Controlling Regulatory Costs.”⁸² The order stipulated that for every new regulation created, two must be eliminated. Even with deregulation, emissions precipitously dropped between 2017 and 2021.⁸³

Building on first-term successes, the second Trump administration unveiled a 10-to-1 deregulation initiative in January 2025 to unleash more deregulation that's not at odds with environmental stewardship.⁸⁴

Regulations, particularly the National Environmental Policy Act (NEPA), should only require project applicants to prove there's no direct negative environmental impact, not prioritize indirect factors like environmental justice and climate change (often used to block projects). Environmentalists have repeatedly sued government agencies to stall progress—even so-called clean energy projects.⁸⁵ In June 2025, the Supreme Court of the United States (SCOTUS) unanimously limited the scope of NEPA environmental review for energy infrastructure projects going forward. Justice Brett Kavanaugh authored the majority opinion, writing that the goal of NEPA “is to inform agency decision-making, not to paralyze it.”⁸⁶

Permitting Reform

With increased electricity demand and the need for reliable domestic energy and critical minerals, the United States must build and approve more energy infrastructure projects. This includes more baseload power plants (natural gas, nuclear, and coal), pipelines, and liquefied natural gas (LNG) export terminals. Due to bureaucratic red tape and frivolous lawsuits, it often takes seven to ten years to complete environmental reviews before construction begins.⁸⁷

Reforming and modernizing the permitting process will spur economic growth and make us energy-independent without despoiling the environment.

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One reform would introduce an improved “permit by rule” process to streamline and expedite the approval of new power plants, pipelines, and liquefied natural gas (LNG) export terminals.⁸⁸ Permits, under this new approach, would be approved in a timely manner unless a permit applicant has failed to abide by necessary certifications. The permit by rule process will reduce bureaucratic bloat and compliance costs and invite market innovation without despoiling the environment.

Modernizing the permitting process will spur economic growth and make us energy-independent without reducing environmental quality.

Restructure the Nuclear Regulatory Commission (NRC)

A majority of Americans, including 51% of women, now support nuclear energy projects.⁸⁹ Yet, the most reliable energy source available can’t be harnessed effectively due to incompetence and red tape plaguing the Nuclear Regulatory Commission (NRC). The NRC is the agency responsible for licensing and regulating commercial nuclear power plants. Sadly, it has contributed to the delay of new nuclear power plant construction in the U.S.



The Government Accountability Office (GAO) reports it takes about 10 to 12 years to “plan, license, and build” new nuclear power plants, with four years accounting for NRC licensing review.⁹⁰ The recently completed Vogtle Power Plant in Georgia, specifically Units 3 and 4, took nearly two decades to produce electricity, becoming fully operational in July 2023 and April 2024, respectively.⁹¹ Before that, Watts Bar Unit 2 nuclear reactor in Tennessee, initially built in 1973, was finished decades later and was running by 2016.

Although the United States has the most nuclear power plants of any nation, 94 active nuclear power plants, our country is falling behind adversaries like China and Russia in approving and constructing new nuclear projects. As of this writing, China is building 32 new reactors,⁹² while Russia has seven new reactors under construction.⁹³

The NRC's bureaucratic shortcomings prompted the Trump-Vance administration to restructure and reform the beleaguered agency in May 2025:

The NRC, working with its DOGE Team, the Office of Management and Budget, and other executive departments and agencies as appropriate, shall undertake a review and wholesale revision of its regulations and guidance documents, and issue notice(s) of proposed rulemaking effecting this revision within 9 months of the date of this order. The NRC shall issue final rules and guidance to conclude this revision process within 18 months of the date of this order.⁹⁴

This directive, coupled with two nuclear-focused executive orders, aims to deploy 400 gigawatts of new nuclear energy capacity by 2050.⁹⁵

Keep Reliable Power Plants Open

The Biden-Harris administration, in line with its net-zero policies, crafted an EPA rule known as Clean Power Plan 2.0 that mandated the premature closure of reliable existing coal and new natural gas power plants unless they installed carbon capture technology at facilities. CPP 2.0 was in direct conflict with the landmark 2022 *West Virginia vs. EPA* Supreme Court ruling that barred EPA's ability to regulate greenhouse gas emissions (GHG) from reliable power plants under the Clean Air Act.⁹⁶

This rule posed a great threat to grid stability, as natural gas and coal cumulatively supply about 60% of the current net U.S. electricity generation.

On June 11th, 2025, EPA Administrator Lee Zeldin announced CPP 2.0 would be rescinded,⁹⁷ and an improved rule would be proposed to prevent the closure of reliable power plants if there are no adequate replacements.⁹⁸

Allow Consumer Choice

The Biden-Harris administration not only tried to decarbonize energy sources, but also consumer products like household appliances and vehicles.

Concerning household appliances, the last administration strayed from the Energy Policy and Conservation Act, a guideline for energy efficiency standards, by prioritizing fully electric appliances that are more expensive and consume more energy than conventional ones. It targeted over 15 appliances, including gas stoves, clothes washers and dryers, furnaces, and more.⁹⁹ Had these regulations not gone unchallenged, the average American family was expected to spend over \$9,000 to make their homes more "climate-friendly."¹⁰⁰

The Biden administration's EPA forcibly enacted electric vehicle mandates in two ways: federal tailpipe emissions rules and issuing a Clean Air Act waiver to California to set its own standards.

The costliest regulation implemented by Biden-Harris,¹⁰¹ the EPA tailpipe emissions rule for light and medium-duty vehicles, would have mandated that 67% of new cars sold by 2032 be electric.¹⁰² The Golden State's California Air Resources Board (CARB)'s Advanced Clean Cars Program (ACC) is more extreme. It mandates that 100% of new vehicles made by 2035 be electric. On June 12, 2025, President Trump signed a congressional resolution into law revoking CARB's EV mandate.¹⁰³



American drivers are rightfully concerned about EV charging, limited driving range, and perceived environmental benefits. Due to the heavier weight of an EV, EV brakes and tires release approximately 1,850 times more particulate pollution than internal combustion engine (ICE) tailpipes.¹⁰⁴ A November 2023 Consumer Reports determined that new EVs are 79% less reliable and plug-in hybrid electric vehicles (PHEV) are 146% less reliable than ICE vehicles, respectively.¹⁰⁵ Despite EV mandates, only 1.4% of vehicles driving on the road today are EVs.¹⁰⁶ That's hardly a sign of a transition.

The Trump-Vance administration is reversing course here by crafting energy regulations that prioritize human flourishing and allow for manifold consumer choices. For the next few years, Americans won't have to sacrifice their preferred cars or household appliances to care about the environment.¹⁰⁷

The Bottom Line

As the U.S. maximizes the production and consumption of reliable domestic energy sources, the resulting human flourishing won't come at the expense of conserving nature and wildlife. In fact, Americans will be more incentivized to care about the environment without feeling guilty for enjoying first-world living standards made possible by our energy mix.

IV. RENEWABLE ENERGY ISN'T ABUNDANT ENERGY

There's been an overreliance on renewable energy, namely part-time energy sources like utility-scale solar and wind, in the United States in recent years. The Biden-Harris administration gave undue advantages to these mature industries through climate grants and green energy tax credits under laws like the American Rescue Plan, Bipartisan Infrastructure Act, and the deceptively-named Inflation Reduction Act (IRA).

Major utilities and grid operators have cautioned that the aging electric grid can't accommodate renewables like solar and wind. The North American Electric Reliability Corporation (NERC) warned in their 2025 Summer Reliability Assessment that too much reliance on solar and wind could invite power outages:

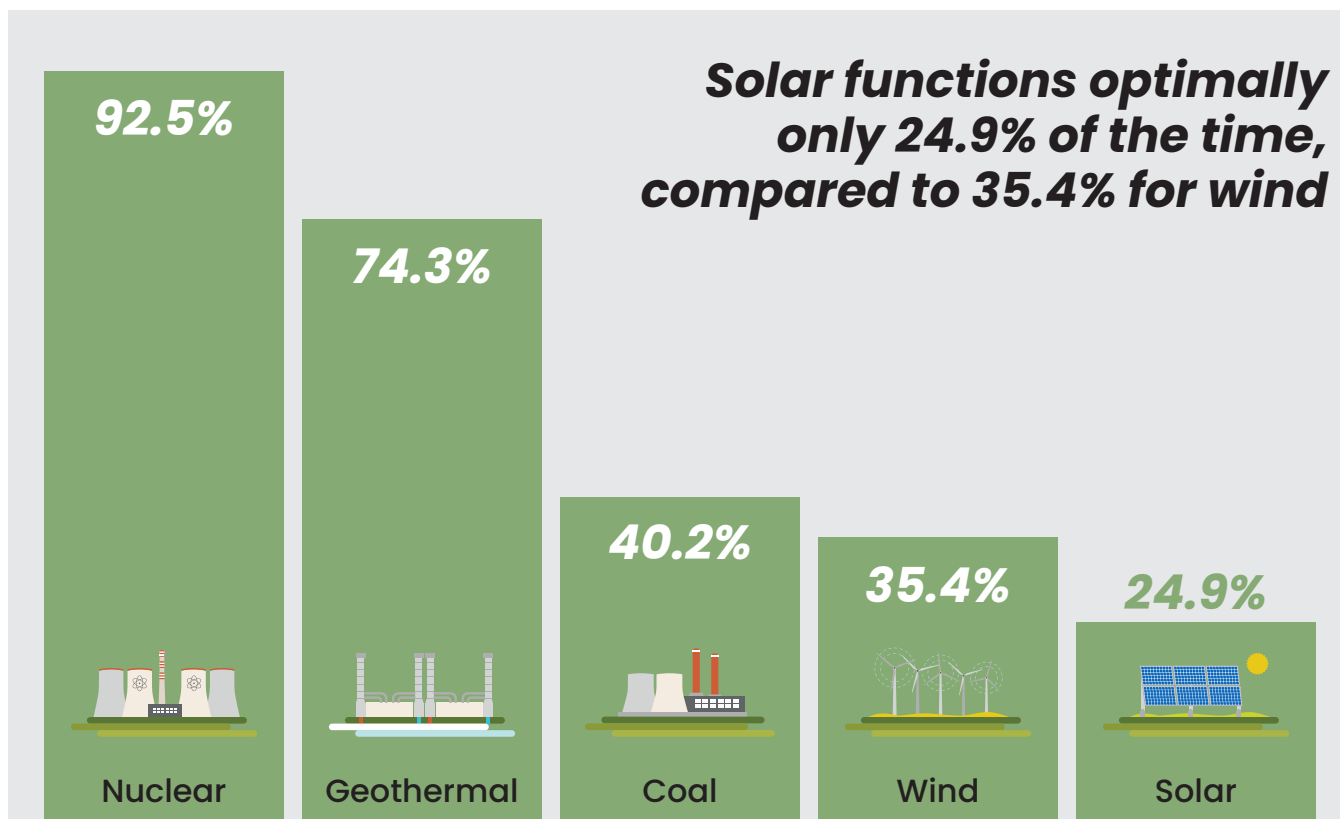
New resource additions—primarily solar and some batteries—are helping to meet surging load growth. However, these additions are offset by ongoing generator retirements and introduce more complexity and energy limitations into the resource mix.¹⁰⁸

With more solar and wind being integrated into the electric grid, power outages are 93% more likely to occur here in the U.S today.¹⁰⁹ If this trend holds, it spells trouble for ensuring energy supply keeps up with rising demand largely driven by the construction of artificial intelligence (AI) data centers.

Wind and Solar Are the Most Unreliable Energy Sources

Despite being touted as clean energy sources, wind and solar are weather-dependent, intermittent, and don't operate optimally for most of the year.

Solar is the least reliable energy source available, functioning optimally only 24.9% of the time, compared to 35.4% for wind.¹¹⁰ Battery technology could solve this problem, but the existing technology simply can't meet the current demand.



As a result, wind and solar are neither baseload nor dispatchable, so swapping them for existing infrastructure is a fool's errand.

Although the United States added more renewable energy capacity, namely solar, in 2024, conventional energy sources like coal, oil, natural gas, and nuclear are more viable options to power our future.¹¹¹

Mature Green Industries Shouldn't Be Subsidized by Taxpayers

Green energy subsidies have promised to spur clean energy adoption of utility-scale solar and wind. Yet, their effectiveness is highly debatable.

Despite decades of subsidies and investment, solar energy remains the least reliable electricity source available. Solar also needs at least 10 times more land, per unit of power produced, than a natural gas or coal-fired plant, which is land that can't be easily used for anything else.¹¹² The 2025 Iberian Peninsula solar power blackout, which left 55 million people without power, shows that transitioning to 100% renewables, as the IRA aims to do, threatens grid stability and undermines energy security.¹¹³

Despite adding 50 GW of new solar capacity last year, U.S. investment in solar fell 12% in the first half of 2024.¹¹⁴ Existing companies are going belly up, with over 100 solar companies declaring bankruptcy.¹¹⁵ SunPower, formerly a major domestic solar manufacturer, filed for bankruptcy late last year due to “reduced demand for residential solar” and high interest rates.¹¹⁶ Sunnova, the second largest rooftop installer, recently filed for Chapter 11 bankruptcy, citing rising interest rates, inflation, and tariffs for their downfall, despite receiving a Department of Energy (DOE) loan from the Biden–Harris administration.¹¹⁷

Even with the subsidy floodgate open, constructing solar is twice as expensive as natural gas construction, despite operating less efficiently than the latter.¹¹⁸

Wind energy, especially offshore wind, is weather-dependent and highly intermittent, producing electricity for about 45% of the year.¹¹⁹

Even with generous government subsidies, the industry struggles due to supply chain issues, rising interest rates, and opposition from local communities. In September 2023, several Northeastern governors asked for an offshore wind bailout from the Biden–Harris administration, alleging the wind tax credit didn’t go far enough.¹²⁰ By mid-2024, their goal to deploy 30 GW by 2030 was in jeopardy.¹²¹



Offshore wind energy isn’t cheap either. The levelized cost (LCOE) of offshore wind is expected to hit \$129/megawatt-hour (MWh) for commercial projects in 2025, making offshore wind one of the most expensive sources of electricity.¹²² In comparison, the LCOE of existing gas combined power is \$30/MWh, while existing nuclear power is \$32/MWh. These massive structures are expensive to build, even with subsidies, averaging between \$8 million for a 10 megawatt (MW) turbine and \$12.3 million for a 14 MW turbine.¹²³

Consider the Environmental Tradeoffs of Renewables

An inconvenient truth about utility-scale solar and wind projects is that both require large tracts of land to build facilities that ultimately generate intermittent electricity.



A typical 1,000 megawatt (MW) nuclear power plant occupies about 1.3 square miles.¹²⁴ In comparison, an equivalent wind energy plant needs 3,360 times more, between 260 to 3,360 square miles of land to generate the same amount of electricity.¹²⁵ The latter is larger than the size of Delaware and Rhode Island put together. A 1,000 MW solar plant occupies 75 times (or 45 to 75 square miles) as much land as a nuclear plant.¹²⁶

Wind advocates have also downplayed the negative oceanographic impacts of installed structures on endangered North Atlantic right whales that can't be mitigated across the project's lifespan.¹²⁷ There is also evidence, detailed by the Center of the American Experiment, that certain bird species that are slow to reproduce, such as eagles, vultures, hawks, and kites, as well as hornbills and herons, and shorebirds like waders, gulls, and auk, are disproportionately susceptible to land-based turbine strikes.¹²⁸

How to Unleash Energy Abundance

Several measures can be taken at both the federal and state levels to unleash energy abundance and move away from overreliance on expensive and unreliable renewable energy.

Rollback Green Subsidies for Mature Clean Energy Industries

Continued reliance on green subsidies for mature clean energy industries invites distortions in energy markets, impairs the development of a reliable, robust energy infrastructure, and will saddle American taxpayers with trillions more in debt.

Before the IRA became law in 2022, the Congressional Budget Office and the Joint Committee on Taxation (JCT) projected green subsidies would cost approximately \$370 billion between 2023 and 2032.¹²⁹ By spring 2023, Goldman Sachs estimated the IRA's costs would triple to \$1.2 trillion over ten years.¹³⁰ In March 2025, the Cato Institute revealed that adjusted costs of IRA green subsidies would approach \$1.97 trillion between 2025 and 2034.¹³¹ Should Congress fail to reform the IRA's green provisions, their costs could balloon to between \$2.04 trillion and \$4.67 trillion by 2050.

The IRA green subsidies costs are expected to rise steadily. They removed the expiration dates of the previously existing tax credits, which the federal government can perpetually fund. These include the newly introduced Clean Electricity

Investment Tax Credit (48E) and the Clean Electricity Production Tax Credit (45Y), which boast contingent expiration dates tied to emissions reduction goals. One estimate suggests that solar and wind credits, if not repealed, would cost \$130 billion annually from 2025 to 2034.¹³²

The One Big Beautiful Bill (OBBB) Act, passed on July 4th, 2025, repeals many of the IRA green subsidies. The majority of wind and solar production and investment tax credits will sunset under a 2027 placed-in-service deadline. The OBBB also ended the \$7,500 tax credit for new electric vehicle (EV) purchases and \$4,000 tax credit for used EVs. As a result, taxpayers are expected to save nearly \$500 billion across the next decade under this rollback.¹³³

End State Renewable Portfolio Standard Mandates

Renewable Portfolio Standards (RPS) mandate that a certain amount of the electricity that utilities sell comes from wind, solar, and other renewable sources.¹³⁴ As of this writing, 28 states and Washington, D.C. have adopted this program.¹³⁵

State RPS promise to lower electricity costs, but have the opposite intended effect. Louisiana State University at Baton Rouge researchers found that states that adopted RPS programs saw electricity costs spike by 11%:

States with [renewable portfolio standards (RPSs)] have experienced increases in electricity prices and decreases in electricity demand relative to non-RPS states with similar economic, political and renewable natural resource characteristics. While both RPS and non-RPS [synthetic controls (SCs)] experienced increases in renewable energy generation over the sample time period, we do not find evidence that RPS states have experienced increases in renewable energy generation relative to SCs and weak evidence of emissions reductions.¹³⁶

The Bottom Line

Energy policies that fixate on phasing out, instead of adding, reliable energy result in higher energy costs, a burdened taxpayer base, and little environmental benefit with no substantial reduction in carbon emissions.

Regulators and lawmakers should, instead, adopt an abundance posture that invites cutting of red tape, permitting reform, and unleashing the free market that rewards viable energy projects.



V. ABUNDANCE IS INCOMPATIBLE WITH NET-ZERO

There's a concerted effort to align energy abundance with net-zero decarbonization goals. But the two ideas are in conflict with one another.

Net zero is defined as balancing out the amount of greenhouse gas (GHG) emissions by humans and industries with GHG removed from the atmosphere.¹³⁷ This policy leans heavily on energy subtraction through pushing the forceful transition from fossil fuels to 100% renewables by 2050. To achieve net zero, governments have mandated the full electrification of our grids, household appliances, vehicles, and lifestyles to stave off climate change. The cost of achieving net-zero emissions goals by 2050 comes with a staggering \$215 trillion price tag.¹³⁸

This is in stark contrast with energy abundance, which embraces all reliable baseload power sources, including carbon-intensive ones. And Americans aren't willing to sacrifice for these political ideals, nor do they need to.

Energy abundance is preferable to "all-of-the-above" (AOTA) posturing because it puts unreliable energy sources on par with reliable ones. As Commonwealth Foundation's Andre Beliveau and I argued at RealClearEnergy:

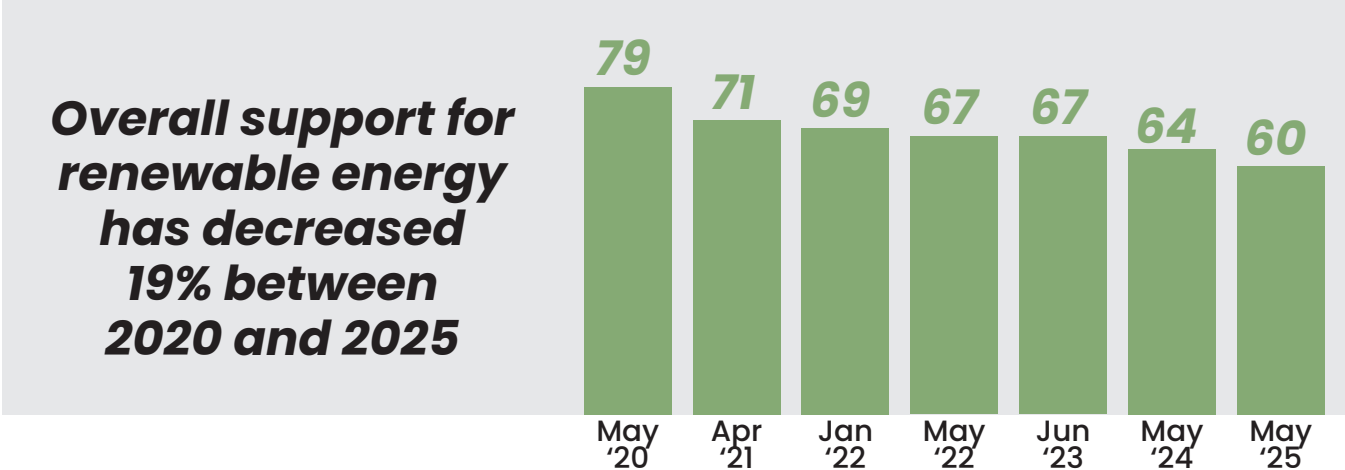
Energy abundance is preferable to "all-of-the-above" posturing because it puts unreliable energy sources on par with reliable ones.

AOTA is a hollow talking point that could enable the current "net-zero" energy doctrine, focusing on carbon emissions targets rather than reliability, affordability, and security. It makes energy policy climate-centric rather than people-first and ignores the realities of the electrical system and the needs of modern life.¹³⁹

Few Americans Support Phasing Out Fossil Fuels

Americans recognize that phasing out fossil fuels, especially without reliable replacements, will invite energy insecurity and diminished first-world living standards.

There's been a 19% decrease in overall support for renewable energy between 2020 and 2025.¹⁴⁰ Support for phasing out coal, oil, and natural gas is at historic lows, with only 29% of Americans supporting this position.¹⁴¹

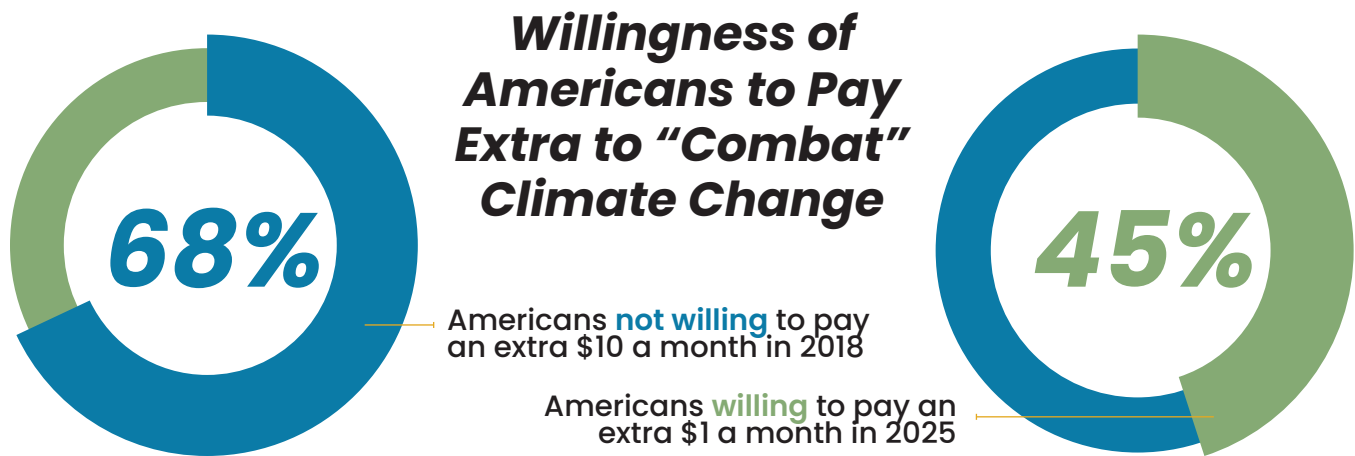


SOURCE: Brian Kennedy, et al. "Americans' Views on Energy at the Start of Trump's Second Term." Pew Research Center, Jun. 5, 2025. www.pewresearch.org/science/2025/06/05/americans-views-on-energy-at-the-start-of-trumps-second-term/#:~:text=Should%20the%20country%20prioritize%20renewable,be%20the%20country's%20bigger%20priority.

Americans Aren't Willing to Pay to Fight Climate Change or Go Net-Zero

Americans might nominally support renewable energy over fossil fuels in line with net-zero decarbonization goals. But when presented with options to personally pay to transition away from fossil fuels, support decreases. This has been consistently documented for years.

In an AP-NORC survey conducted in 2018, 68% of Americans said they would not be willing to pay an extra \$10 a month on their energy bills to combat climate change.¹⁴² Support for this dropped in the last five years. A 2024 University of Chicago Energy Policy Institute poll found that only 45% of respondents are willing to pay a monthly fee of one dollar to support net-zero policies, with a majority of respondents opposing this proposal.¹⁴³



A 2019 The Kaiser Family Foundation/Washington Post Climate Change Survey revealed most Americans, even those supporting climate-aligned policies, would not radically alter their lifestyle for this cause:

Six in ten are worried that government regulations and taxes aimed at addressing climate change will cause financial stress for ordinary Americans, and about half (51%) are worried such government intervention will hurt the U.S. economy. ... Few U.S. adults are willing to make personal sacrifices in the form of higher gas or electricity taxes in order to address climate change.¹⁴⁴

The U.S. Was Already on Track to Reduce Emissions Without Net-Zero Policies

The Biden-Harris administration tried to put the United States on a path to net-zero emissions by 2050 through executive action and the Inflation Reduction Act (IRA) green subsidies.¹⁴⁵

Ahead of becoming law in August 2022, the IRA—a softer version of the Green New Deal—was aggressively touted as a measure to reduce greenhouse gas (GHG) emissions. If the IRA hit its benchmarks, supporters argued there would be a 40% decrease in greenhouse gas (GHG) emissions by 2030 compared to 2005 levels, when our nation hit peak emissions.¹⁴⁶

An Energy Information Administration (EIA) chart examining all-sector emissions, cited by The Cato Institute, found emissions would only decrease 0.7% annually with IRA subsidies through 2050, compared to a 0.4% annual reduction in emissions without them.¹⁴⁷

Broadly speaking, any net-zero legislation crafted in alignment with the Paris Climate Accords, to prevent a 1.5 Celsius increase in global temperatures, will only produce modest reductions in carbon emissions.¹⁴⁸ The Heritage Foundation found that, at best, global temperatures will only decrease by 0.2 degrees Celsius, yet lead to a loss of \$7.7 trillion of gross domestic product (GDP) and the shedding of 1.2 million jobs by 2040.¹⁴⁹

Reject Global Climate Agreements



Former President Barack Obama signed an executive order in September 2016 formally entering the U.S. into the 2015 United Nations Climate Change Conference (UNCCC) Paris Climate Accords.¹⁵⁰ The Constitution, however, says treaties can only be ratified by a two-thirds majority of the U.S. Senate, not by presidential decree.¹⁵¹

The effectiveness of this climate agreement is highly debatable. Our participation hasn't inspired polluting nations, like China, to change their habits. Most participating countries aren't meeting the goals outlined in this international agreement.¹⁵²

The U.S.'s departure from the Paris Climate Accords will not imperil our environmental standards. During the first Trump administration, it was reported that carbon emissions declined 25% between 2011 and 2019.¹⁵³ This was largely attributed to natural gas exploration.¹⁵⁴

Mandy Gunasekara, the chief architect of the Paris Accords withdrawal in the first Trump administration, explained:

The United States withdrew because the Paris Accord was simply a bad, ineffective deal. It came with billions of dollars of direct and indirect costs to American taxpayers and the economy, while producing no meaningful impact on the environment or climate. Its range of virtue-signaling policies are designed to make our reliable fossil-based energy more expensive—prohibitively so ...¹⁵⁵

Oppose Carbon Taxes

Carbon taxes are a flawed measure to compel environmental action, like reducing our carbon footprint. They internalize the cost of carbon emissions on goods and

services by forcibly compelling individuals, companies, and governments to go carbon-free. This is to force a transition away from coal, oil, and natural gas across the economy.

Carbon taxes increase energy costs and diminish taxpayer incomes.¹⁵⁶

By penalizing carbon usage and production, these taxes drive businesses out of state and even overseas. Unsurprisingly, the burden ultimately falls on low-income households and those residing in energy-producing areas:

The impact of a carbon tax would differ among economic groups depending on the extent of energy price changes and on regional energy production and consumption patterns. Clearly, a carbon tax would fall more heavily on workers and investors in carbon-intensive industries as well as on regions that depend heavily on carbon-intensive fuels, particularly coal.¹⁵⁷

The Regional Greenhouse Gas Initiative (RGGI), an 11-state cap-and-trade initiative that claims to be a “market-based effort” to reduce carbon emissions from the power sector, is a case study for not adopting carbon taxes.¹⁵⁸

The RGGI has a negligible impact on carbon emissions reductions, with the initiative delivering only 1.4% in emissions reductions.¹⁵⁹

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The Bottom Line

Top-down climate policies, regardless of whether or not they’re crafted by the federal government or the United Nations, promise a clean energy future, but ultimately lead to higher energy costs, overregulation, and ironically, a greater dependence on fossil energy.

Instead, to address pressing environmental problems, policymakers can adopt an abundance mindset through deregulation, greater stakeholder input, and reliance on market innovations where red tape and bureaucracy have failed.



VII. CONCLUSION

Energy security and environmental progress is achievable in the United States when driven by market solutions and true conservation practices.¹⁶⁰ The federal government must take the necessary steps to cut red tape, impose fewer burdensome regulations on industry players, and allow equal access to leases on public lands and waters.

Following through with these actions will result in more energy abundance and lower associated costs, all while reducing our environmental footprint. Coal, oil, gas, and nuclear power produced here in the U.S. are much cleaner and more sustainable compared with supplies from other energy-producing nations like China and Russia, which don't adhere to the same environmental standards.¹⁶¹



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