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Energy Security

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HIGHLIGHT

With increasing electricity demand, America must prioritize domestic energy production to power our electric grid, insulate our infrastructure from potential threats, and maintain our first-world living standards. Energy security can be achieved by harnessing energy and related derivatives from reliable power sources—not replacing them with intermittent renewables. Net-zero climate policies will invite outages and scarcity, jeopardizing U.S. energy security.

INTRODUCTION

To have energy security, a nation must be capable of safely producing and harnessing sufficient domestic natural resources to support the country's energy needs without relying on foreign nations. The U.S. 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.

Rather than prioritizing energy security, the Biden-Harris administration has focused on

pivoting the country's energy portfolio to 100 percent solar, wind, electric vehicles, and battery storage, in order to achieve its goals of "net-zero" carbon emissions. These goals, which align with the Paris Climate Accords, would require the U.S. to reduce carbon emissions by upwards of 95 percent by 2050. However, net-zero policies demanding that society phase out fossil fuels have proven to be economically and environmentally unrealistic—despite billions in federal spending allocated for clean energy development.

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. Emissions decreased nine percent during the last year of the Trump administration

If policymakers craft laws and regulations that discourage energy abundance, consumers will pay the price with higher electricity rates—an estimated 19 percent increase by 2028.

Regardless of claims to the contrary, intermittent renewables can't adequately replace the cheap abundant energy sources that undergird our energy mix. Spending bills like the Inflation Reduction Act (IRA) are distorting the markets to favor unprofitable, unviable clean energy company beneficiaries.

If policymakers craft laws and regulations that discourage energy abundance, consumers will pay the price with higher electricity rates—an estimated 19 percent increase by 2028. 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.

ENERGY SECURITY

Energy security and environmental progress are achievable in the U.S. when driven by market solutions and true conservation practices. The federal government must take the necessary steps to cut red tape, impose

even with its abundance mindset of seeking energy from multiple sources.

The Rapid Shift to Renewables Invites Energy Insecurity

Hasty federal and state net-zero emissions targets are destabilizing the electric grid and raising costs for households and industry alike.

Electricity has to be used as it is produced. For instance, when you return home at the end of a workday and switch your lights on, there is a power plant generating electricity at that moment for your use. Because utility-scale solar and wind power only operate when the sun shines and the wind blows, these power sources can't always meet demand and need reliable baseload power as a backup. When the backup baseload power is insufficient, communities experience blackouts, like those that rolled across the western U.S.—especially California—in 2020. Ironically, in 2023, U.S. wind generation saw its first decline since the 1990s, due to slower wind speeds, even though the country added 6.2 gigawatts (GW) of new wind capacity the previous year.

Despite becoming cheaper in recent years, the cost of electricity generated by renewable power has risen due to inflation and supply chain issues.

Solar and wind power plants suffer from low generation capacity—meaning they don't operate at maximum power 100 percent of the time. Solar facilities just operate 24.6 percent of the year, while wind turbines only function 36.4 percent of the year. Aside from planned outages for maintenance, natural gas plants operate 56.6 percent of the time and nuclear plants run 93 percent of the year. Solar and wind don't produce much electricity compared to fossil fuels or nuclear, accounting for merely 3.9 percent and 10.2 percent of utility-scale electricity generation in the U.S., respectively.

Relying on these still inherently unreliable energy sources has led to significant problems and real hardships for states and their citizens.

Enact Permitting Reform to Unleash Energy Projects

Lawmakers can ensure that Americans have access to more abundant, cheap, safe energy sources by getting serious about permitting reform and modernizing laws that streamline project approval and construction.

All projects that may have an environmental impact undergo a review process under the National Environmental Policy Act (NEPA). Companies undertaking energy development must invest significant time and money

CASE STUDY #1: CALIFORNIA CURTAILING RENEWABLE POWER

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 these energy sources, with temporary oversupply from these sources being as disruptive as when too little energy is produced.

In October 2023, the Energy Information Agency (EIA) detailed how grid operators are having to reduce wind and solar power during periods of congestion and oversupply. Congestion occurs when transmission lines have more electricity generated by solar and wind plants than there is a demand for energy at that time. 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 95 percent of curtailments in 2022 and 94 percent during curtailments through July 2023.

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. In fact, utilities are expected to supply "firm power"—namely natural gas—to consumers for decades.

It's unsurprising that California boasts the nation's second-highest residential electricity price, 32.99 cents per kilowatt hour (cents/kWh), as of June 2024. This figure is nearly double the national average cost of residential electricity. All "net-zero" goals do is drive up costs for residents without reducing emissions in a meaningful way.

CASE STUDY #2: 2021 TEXAS ERCOT DEEP FREEZE

Texas, the nation's top energy-producing state, also invested in intermittent wind and solar electricity generation. The state boasts nearly 52 gigawatts (GW) of electricity capacity and has installed the most wind turbines of any U.S. state—supplying 26 percent of the state's electricity generation.

But in winter 2021, four million Lone Star State residents were left without power for several days due to rolling blackouts caused when these renewable sources failed to produce enough energy when residents needed it most. ERCOT, Texas' primary grid operator, failed to "account for the increasing likelihood that an event combining record demand with low wind and solar generation would lead to blackouts," wrote former Rep. Jason Isaac at the time.

In response to this failure, ERCOT proposed a rule change requiring solar and wind operators to avoid going offline during storms or power outages. That will be little help if the wind isn't blowing and the sun isn't shining and these systems are simply unable to produce sufficient energy to meet people's needs. Regardless of rules governing power regulation, people need access to energy, especially during extreme weather. Texas lawmakers responded last year by ditching renewable development for more fossil-fuel power plants.

Texas still relies heavily on fossil fuels—the majority coming from natural gas (56 percent). During a January 2024 cold snap, natural gas supplied 78 percent of the supply to keep homes and businesses powered.

Instead of intermittent renewables, the state is eyeing more nuclear energy development with small modular reactors (SMRs) to prevent a repeat of winter 2021.

into each project, and the cumbersome and uncertain process discourages many from taking it on. Industry experts have suggested NEPA inaction has resulted in 40 years of delayed projects. One study found litigation delays energy project implementation by four years.

The expected timeline to secure permits to construct new energy and mining projects is vague and must be streamlined. Americans agree it's unacceptable for new project approvals to take 7 to 10 years. Bipartisan members of Congress agree permitting reform is integral to energy security. A recently introduced bill, if passed, would expedite the judicial review process, offer more offshore and onshore leasing opportunities, and cut red tape, for instance. However, opposition from radical environmental groups and their powerful lawyers stand in the way of this progress.

Some policymakers have pursued needed regulatory reform. The Trump NEPA Modernization Rule of 2020 aimed to "reduce paperwork, to reduce delays, and at the same time to produce better decisions [that] further the national policy to protect and enhance the quality of the human environment." Unfortunately, the Biden administration undid the rule and crafted the misleading Bipartisan Permitting Reform Implementation Rule that prioritizes obtuse criteria like environmental justice and Indigenous Knowledge for project approval.

CASE STUDY #3: BIDEN-HARRIS COMMITS TO NET ZERO BY 2050

Since the Biden-Harris administration took office, energy costs have skyrocketed—a consequence of whole-of-government, net-zero climate policies that don't prioritize energy security.

Overall energy prices are up 37.7 percent since January 2021. The Bureau of Labor Statistics (BLS) also shows home heating oil prices rose 32.9 percent, gasoline prices increased 45.8 percent, and electricity spiked 30.7 percent between January 2021 and August 2024.

Energy insecurity concerns have similarly been exacerbated by federal spending measures like the Green New Deal-lite "Inflation Reduction Act" which promised to increase U.S. competitiveness in clean energy development. However, foreign companies with ties to South Korea, Japan, and China received more than 60 percent of the $369 billion allocated for IRA climate provisions.

If made permanent, IRA subsidies will cost taxpayers $1.8 billion across a decade and benefit the government's preferred green companies that produce intermittent, unreliable energy. This is not helpful for the millions of Americans—particularly those with lower incomes—who face high energy costs and the potential for shortages.

Few Americans support phasing out fossil fuels entirely, preferring a healthy energy mix. Those residing in swing states overwhelmingly favor more domestic oil and gas production.

It's expected this new rule will further delay the approval of critical energy projects.

Double Down on Conventional Energy Development

Conventional energy sources—coal, oil, and natural gas—still account for 83 percent of the U.S.'s existing energy mix. To keep costs down and promote energy abundance, U.S. policymaking can't punish domestic production of these critical sources.

Policies must allow for the fair bidding on oil and gas leases in places like the Gulf of Mexico and in the Arctic National Wildlife Refuge (ANWR)—not give federally-subsidized solar and wind companies an unfair advantage with an 80 percent discount in developer fees.

The American public agrees. Recent polling shows 66 percent of respondents support continuing the domestic production of oil and natural gas—including 63 percent of respondents aged 30 and under.

The good news is that American oil and natural gas supplies remain plentiful. There are 48.3 billion barrels of proven oil reserves and 691 trillion cubic feet (Tcf) of proven gas reserves, respectively. As a result, the U.S. became a net-exporter of energy for the first time in 75 years during the Trump administration—leading his Department of Energy to dub liquified natural gas "molecules of freedom." After the Biden-Harris administration paused new LNG export terminal projects in February, a federal judge unpaused the projects, ruling that these infrastructure projects are in "the public interest" under existing law.

Likewise, rulemaking shouldn't force the premature closure of reliable coal and

natural gas plants that cumulatively supply almost 60 percent of the U.S.'s electricity supply. To meet the growing demand for electricity for artificial intelligence (AI)-powered data centers, a natural gas boom—coupled with nuclear energy—is necessary to prevent shocks in our grid.

Go Nuclear

Nuclear energy's role in creating lasting energy security can't be overstated. Although nuclear accounts for just 18.6 percent of utility-scale electricity generation, nuclear is the most scalable and efficient clean energy source that can complement oil, natural gas, and coal.

Nuclear power is the most reliable baseload source today because it is powered almost 24/7, even accounting for maintenance, and works 93 percent of the year. These facilities boast a low environmental footprint, needing just one square mile of land to produce one gigawatt (GW) of energy. Utility-scale solar and wind projects, in contrast, require 75 and 360 times more land, respectively, to produce the equivalent amount of electricity. Being a carbon-free energy source, nuclear power is as equally beneficial for air quality as solar and wind power.

It's no surprise a growing share of Americans—56 percent—support the construction of new nuclear power plants. Red tape and misinformation, however, have held back this technology's potential for decades—despite the U.S. pioneering it back in 1942. Our adversary, China, is rapidly constructing new nuclear facilities. This led President Biden to sign the bipartisan ADVANCE Act into law to increase nuclear deployment.

A September 2024 Department of Energy (DOE) report found that 41 currently operating or recently retired nuclear power stations could supply 60 GW of nuclear power to help meet growing electricity demand and reduce carbon emissions. This report came after the Georgia Vogtle Power Plant became fully operational earlier this summer.

Vogtle isn't the only nuclear plant to come online. On September 20, 2024, it was announced Three Mile Island Nuclear Power Plant Unit 1 would be restarted five years after permanently closing. Constellation Energy, TMI's owner, brokered a deal with Microsoft to power the latter's AI-powered data centers. The relaunch is expected to pump $16 billion back into the Keystone State's economy across the 20-year plan which tentatively starts in 2028. In response, major bankers have expressed interest in financing similar projects in the wake of wind and solar shortcomings.

CONCLUSION

Energy is integral to all facets of life—from our economy to national security to everyday products. Overregulation and red tape have severely hindered the U.S.'s ability to domestically source and harness conventional energy, nuclear power, and critical minerals. The infusion of billions in federal spending from the IRA has contributed to environmental-inflation (en-flation), resulting in rising costs for everyday Americans.

Pushing 100 percent renewables, namely solar and wind, is in conflict with energy security. It has made the U.S. dependent on our adversaries for energy and minerals and creates rising costs for consumers.

Our hope for this year's National Energy Appreciation Day (NEAD) celebration is to see policymaking that puts true energy security ahead of ambitious climate goals by arbitrary deadlines.

WHAT YOU CAN DO

Get Informed

Learn more about energy security, visit:

- Commonwealth Foundation | A New Vision for Energy
- EIA: U.S. Energy Facts Explained
- National Energy Appreciation Day

Talk to Your Friends

Help your friends and family understand these important issues. Share this information, tell them about what's going on, and encourage them to join you in getting involved.

Become a Leader in the Community

Start an Independent Women's Network chapter group so you can get together with friends each month to talk about a political/policy issue (it will be fun!). Write a letter to the editor. Show up at local government meetings and make your opinions known. Go to rallies. Better yet, organize rallies! A few motivated people can change the world.

Remain Engaged Politically

Too many good citizens see election time as the only time they need to pay attention to politics. We need everyone to pay attention and hold elected officials accountable. Let your Representatives know your opinions. After all, they are supposed to work for you!

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