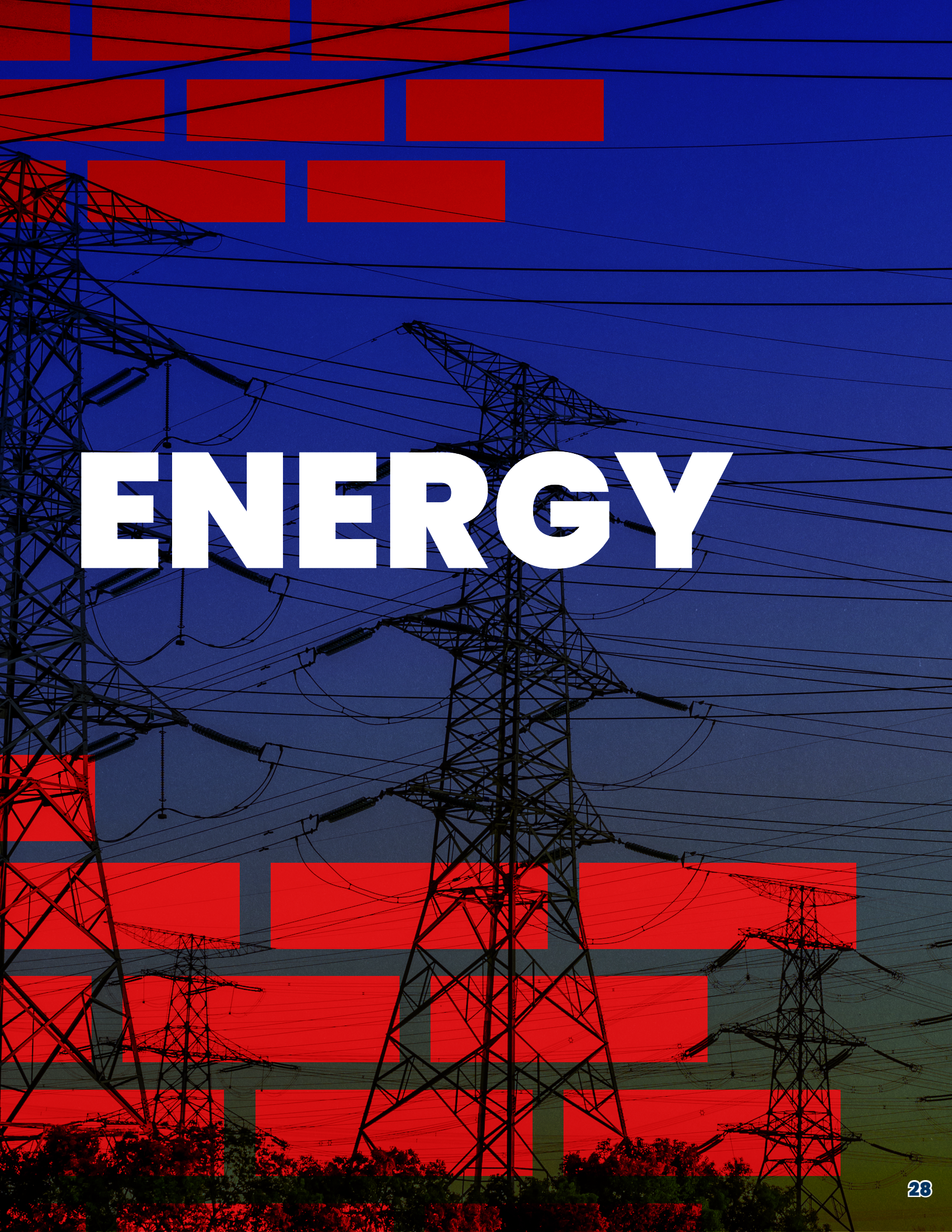




ENERGY

CHEAPER POWER

MORE ENERGY SUPPLY

A STRONGER GRID

LOWER ENERGY BILLS

Electricity powers nearly everything, from our homes and hospitals, to farms and factories, to the emerging industries that will define the future. But after nearly two decades of relatively flat demand, America needs a lot more power, and **our ability to produce and deliver it is not keeping pace.**

Families and businesses are already paying the price. Residential electricity prices are up more than 5% over just the past year and nearly 33% over the past five. As our grid grows more constrained, Americans will face even higher electricity bills and have less reliable access to power.

That's why **our plan is to produce more of the energy America needs and make better use of the grid we already have.** That means expanding our supply of power by bringing new sources of energy online. It means moving more power onto and through the grid. And it means finally fixing the permitting process that can leave new energy projects waiting for years before construction can even begin.

Together, these steps can **help supply keep up with demand, make our grid more reliable, and lower energy costs for Americans.**

1

REDUCE PERMITTING DELAYS

MODERNIZE ENVIRONMENTAL
REVIEW

ENSURE PERMITTING
CERTAINTY

GET PERMITS ONLINE

2

MOVE MORE POWER ONTO AND THROUGH THE GRID

MODERNIZE THE
INTERCONNECTION PROCESS

GET MORE POWER OUT OF
THE GRID WE ALREADY HAVE

CONNECT AMERICA'S
REGIONAL GRIDS

3

BUILD THE NEXT GENERATION OF AMERICAN POWER

SCALE THE TECHNOLOGIES
THAT ALREADY WORK

FIX FEDERAL FINANCING FOR
FIRST-OF-A-KIND PROJECTS

STREAMLINE NUCLEAR
REGULATION

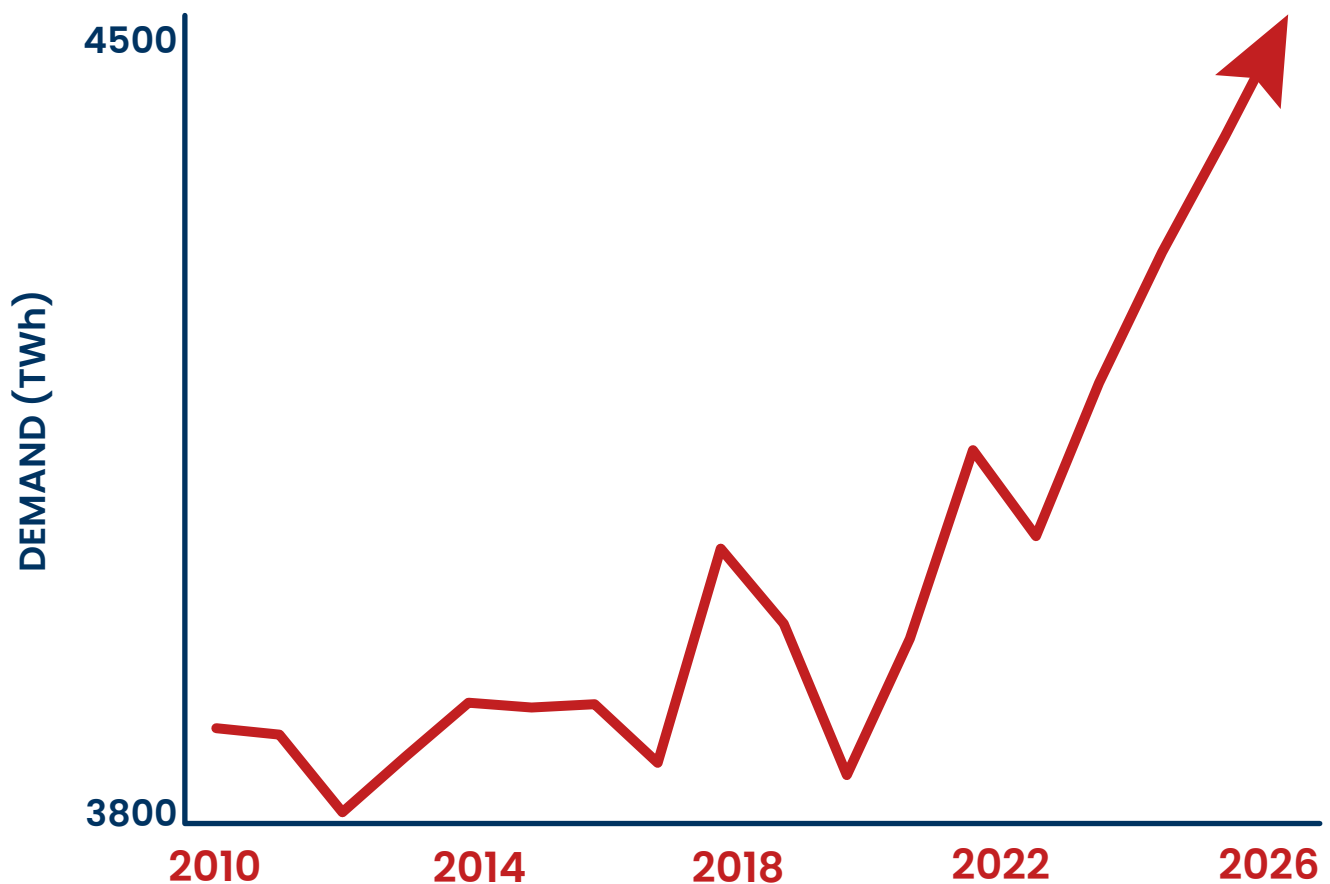
DEVELOP NEW SOURCES OF
ENERGY

1

REDUCE PERMITTING DELAYS

The federal permitting process is slow – driving up costs, deterring investment, and causing builders to abandon projects that would bring new energy online. Environmental reviews for routine projects can still take months, and for more complex projects they can take years. **In the worst cases, it can take longer to clear the permitting process than to build the project itself.** We can increase energy production and protect the environment at the same time by making the process more efficient and ensuring that once a permit is issued, it isn't stalled by endless litigation or canceled by a future administration with different priorities. In addition, bringing the systems that manage the permitting process into the digital age will also help bring new energy projects online faster and cheaper without sacrificing real environmental protection or public input.

ELECTRICITY DEMAND IS RISING



MODERNIZE ENVIRONMENTAL REVIEW

Anytime the federal government plays a role in developing a project, it can trigger environmental review under the National Environmental Policy Act (NEPA). Even minimal federal action can result in review, so each year, agencies end up reviewing tens of thousands of projects. The vast majority are unlikely to have significant environmental impacts and are cleared with a categorical exclusion, the simplest form of review. But for some projects, even this review can take months. And even when it doesn't, the volume of reviews to clear – including activity as simple as an agency picnic – can stretch agency resources and pull staff time away from more consequential work.

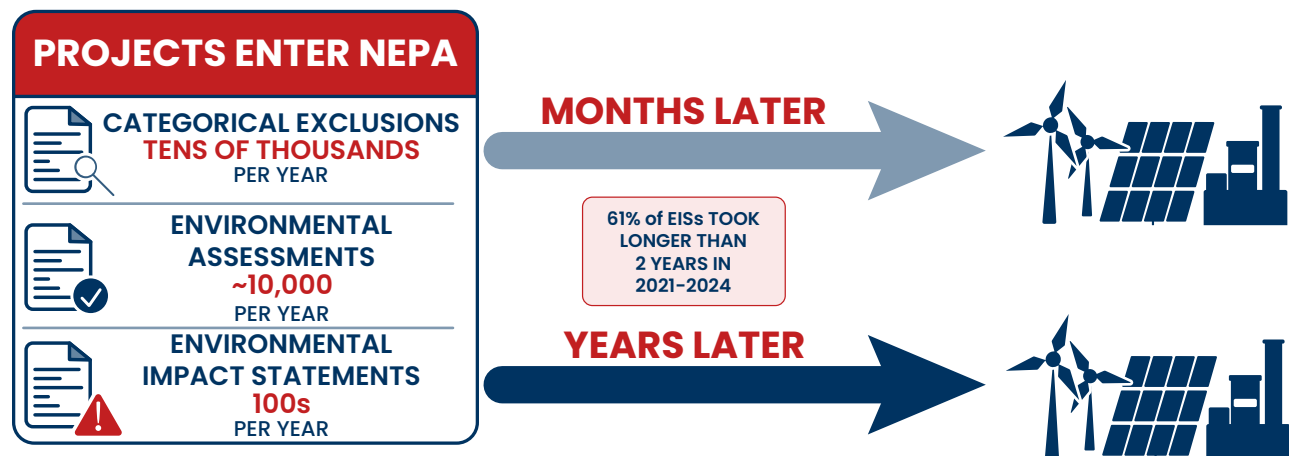
For projects that are expected to significantly affect the environment, preparing an environmental impact statement (EIS), the most in-depth form of review, can take years. This is in part because project approvals can later be challenged in court, so agencies are incentivized to spend more time and effort preparing exhaustive records designed to withstand litigation. But **these delays can mean millions of dollars in added costs and years before needed infrastructure and services are delivered.**

2.4

median years
to complete an
EIS between 2021
and 2024

3.8

average years
to complete an
EIS between 2021
and 2024



OUR SOLUTION

Speed up reviews by clarifying which projects need them, streamlining review for low-impact projects, and enforcing agency review deadlines.

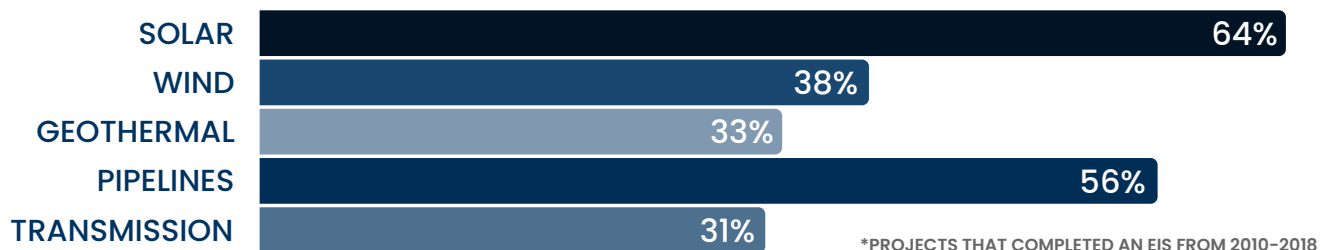
ENSURE PERMITTING CERTAINTY

Even after an energy project is permitted, legal challenges – including by litigants who never meaningfully participated in the public review process in the first place – remain possible for years after agency review is complete, and can add years of additional delay to the process. A fully approved permit can also be revisited or revoked by a future administration, something developers have experienced under both parties. That uncertainty inflates the risk and cost of investment and can significantly delay projects even after they clear environmental review.

20

median months
of litigation for
challenged
energy projects

ENERGY PROJECT LITIGATION RATES



OUR SOLUTION

Protect final approvals from drawn-out litigation and arbitrary reversal by future administrations on a technology-neutral basis.

GET PERMITS ONLINE

Delays in the permitting process are compounded by the antiquated infrastructure used to run it. Too many applications still rely on paper forms and PDFs, reviews that span multiple agencies are not centralized, and there is no single hub applicants can rely on to see where their project stands. Digitizing information, transitioning to a cloud-based system, and sharing data between agencies can shave weeks off the time it takes to review a permit, improve the experience for applicants, and save staff hours currently spent on manual and uncoordinated processes.

OUR SOLUTION

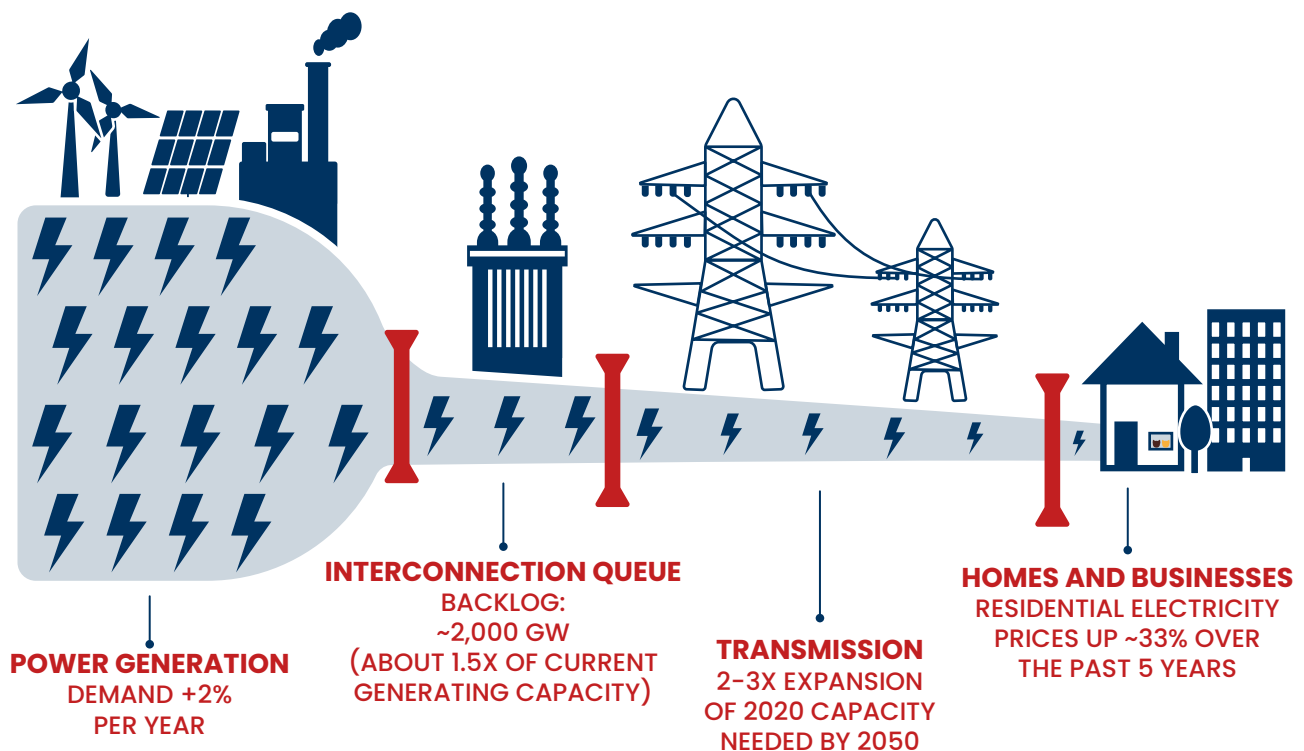
Bring federal environmental reviews online and make them trackable.

2 MOVE MORE POWER ONTO AND THROUGH THE GRID

Expanding America's energy supply isn't just about generating more power. We also have to get that power onto the grid and move it to the people and businesses that need it.

But today, **new generation projects can wait for years before they can connect to the grid, and new transmission lines can take more than a decade to permit and build** and involve costly and contentious land acquisition. At the same time, weak links between regional grids can strand power in one region while another runs short. Addressing each of these constraints – including by modernizing the interconnection process, upgrading existing lines and grid technology, and better connecting our regional grids – will unlock more power and make the grid better able to deliver it where and when it is needed.

A BROKEN GRID LIMITS OUR POWER



MODERNIZE THE INTERCONNECTION PROCESS

New power projects can take around five years to actually connect to the grid and deliver electricity to customers. In recent years, federal regulators have taken meaningful steps to address one major source of the delay: the way new applications are processed and prioritized. But the technical review needed to determine how a project will affect the grid can still be slow and labor-intensive. Many grid operators rely on manual processes, even as new automation tools show considerable promise in reducing the time it takes to complete these studies. At the same time, rules for reusing existing grid connections for new energy projects remain inconsistent. Updating these rules and making technical reviews more efficient would dramatically accelerate how quickly new power reaches the grid.

OUR SOLUTION

Automate and standardize interconnection studies with guardrails to ensure consistent results.

GET MORE POWER OUT OF THE GRID WE ALREADY HAVE

Transmission lines carry large amounts of electricity from power plants to the communities where it is used. But building new lines to meet growing demand is expensive and slow: on average, it takes about a decade to complete the process. In many cases, it can be significantly cheaper and faster to upgrade and replace the lines we already have. Grid-enhancing technologies – software and equipment upgrades that help utilities manage lines more efficiently – **can increase the capacity of existing lines by 10 to 40%**, and replacing older wires with advanced conductors can roughly double the power they can carry over the same rights-of-way. **Yet utilities are incentivized to build expensive new infrastructure rather than use technology upgrades** to get more out of the grid we already have. As a result, some of the cheapest and fastest ways to move more power go unused, while customers are left paying for costlier new construction.

OUR SOLUTION

Incentivize utilities to build cost-effective upgrades that increase capacity and lower costs.

CONNECT AMERICA'S REGIONAL GRIDS

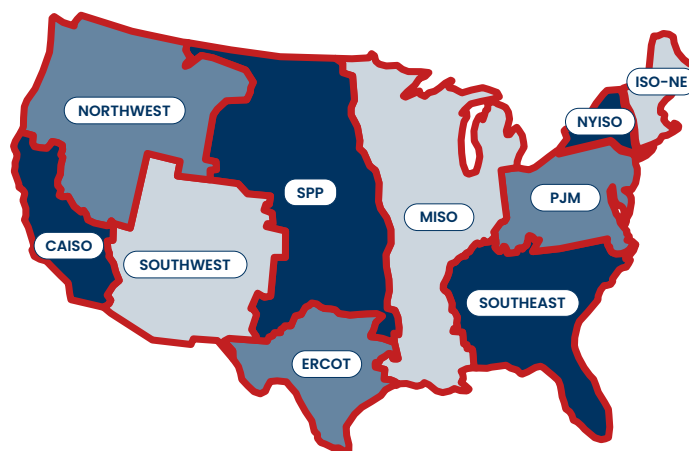
America's electric grid is divided into regional systems that plan energy projects to meet their own usage needs, but have limited ability to share power with one another. That means cheaper power in one region can't always reach consumers in another, which raises costs because regions have to rely more heavily on their own generation. The disconnect can also become dangerous in a crisis: one region can run short of electricity while its neighbor has power to spare.

But our ability to move power between regions hasn't meaningfully improved in recent years, despite federal rules requiring neighboring regions to coordinate. Part of the reason is that projects crossing state and regional boundaries are harder to plan and finance. Local projects often take priority, and regions struggle to allocate costs for their joint projects. The result is a grid that is less reliable in emergencies, and less efficient overall, because power can't always move to where it's needed most.

2%

of total transmission mileage added or upgraded each year between 2011 and 2020 that was interregional

AMERICA'S DISCONNECTED REGIONAL GRIDS



OUR SOLUTION

Require neighboring grid regions to plan together, share costs fairly, and increase transfer capacity.

3 BUILD THE NEXT GENERATION OF AMERICAN POWER

To keep up with America's growing energy demands, we have to bring new power online. That includes tapping proven but underused energy sources like nuclear, emerging ones like enhanced geothermal, and still experimental ones like superhot geothermal and commercial fusion. Each technology is at a different stage of development and faces different barriers. But the goal is the same: use federal policy and investment to help promising energy sources move from development to deployment so that they can be put to use powering American homes and businesses.

SCALE THE TECHNOLOGIES THAT ALREADY WORK

Enhanced geothermal moved quickly from pilot to commercial operation in under five years, with the first utility-scale project coming online in Utah this year. Over successive generations of wells, drilling time has fallen from 70 days to 21 or fewer, even as wells have gotten deeper, hotter, and roughly five times more productive. Gigawatts of enhanced geothermal energy are now ready for commercial development in the western United States – reliable, always-on power that can reach the grid this decade. Likewise, other emerging technologies, including advanced nuclear and long-duration energy storage, hold enormous potential to transform our energy system. But for each, financing the first wave of commercial projects before costs and risks fall enough to attract traditional investors can be a challenge. Without those first projects, industry loses the chance to learn by doing and make each new project cheaper and faster.

65M

Homes that could be powered by enhanced geothermal systems by 2050

OUR SOLUTION

Utilize tax and financing tools that accelerate the deployment of emerging technologies, and clear permitting and interconnection barriers that hold them back.

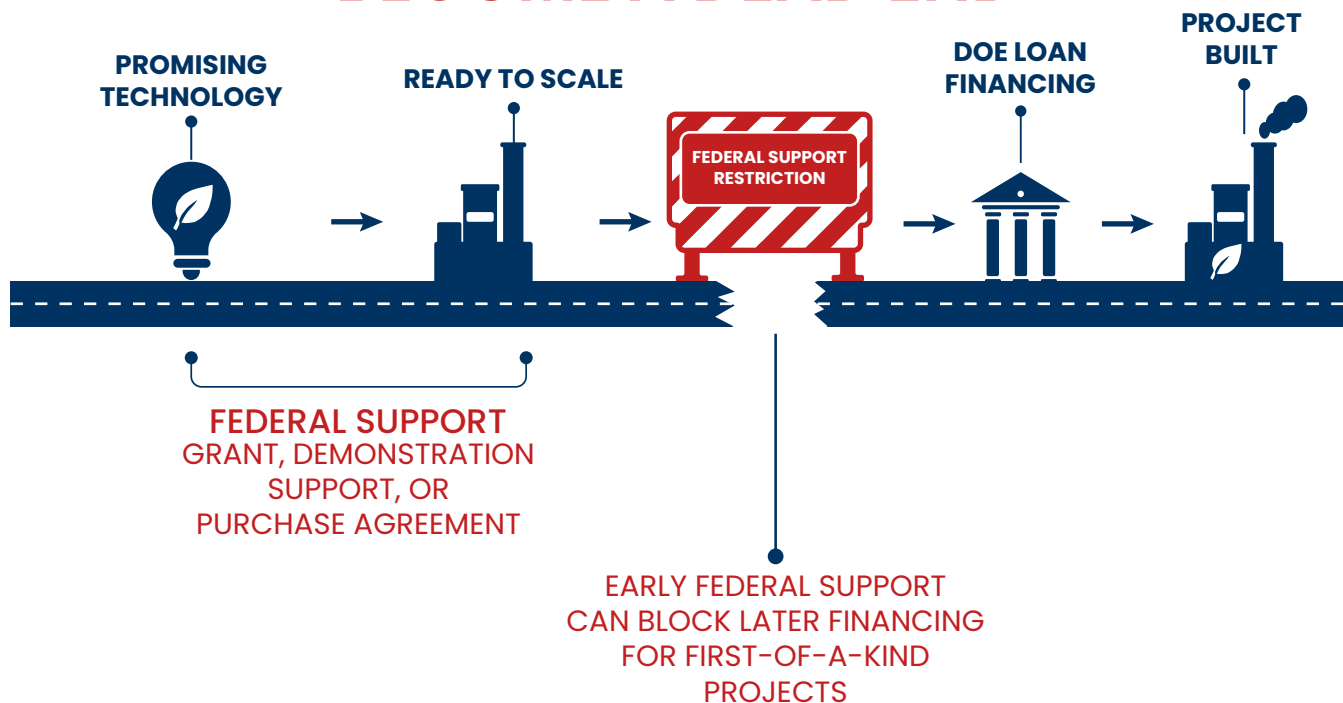
FIX FEDERAL FINANCING FOR FIRST-OF-A-KIND PROJECTS

The Department of Energy's Office of Energy Dominance Financing (EDF) exists to finance high-impact energy projects that private lenders consider too risky. Its investments have helped launch America's utility-scale solar industry and its leading electric vehicle maker, and are now financing the first-ever restart of a retired commercial nuclear plant. But federal rules can bar promising projects from accessing this financing if they have active federal grants, cooperative agreements, loans, or purchase agreements with federal agencies. This means that **an early federal vote of confidence in a project, including an agreement to buy the energy being produced, can later block access to the financing needed to actually get it built.**

2%

EDF's actual and estimated losses as a share of total disbursement

DON'T LET FEDERAL SUPPORT BECOME A DEAD END



OUR SOLUTION

Narrow when federal financing restrictions apply so that promising projects aren't unnecessarily held back.

STREAMLINE NUCLEAR REGULATION

Nuclear power can provide large amounts of clean, reliable electricity, but some regulations add to the cost of developing it without improving safety. For example, developers can be required to use specialized nuclear-grade materials – like nuclear-grade concrete, which is nearly 50% more expensive than commercial-grade – in non-safety structures of a plant where using commercial-grade materials would be just as safe. Because upfront construction costs can account for up to 70% of a nuclear plant's lifetime costs, bringing them down can significantly lower the overall cost of the electricity it produces. Likewise, federal law can subject new spent-fuel recycling facilities that use modern recycling methods to a multi-step licensing process that was designed for older technologies. Creating a streamlined pathway for these modern facilities would enable their development and allow the reuse of spent fuel that would otherwise just be stored.

OUR SOLUTION

Allow commercial-grade materials for non-safety-related construction and streamline the licensing process for modern fuel recycling facilities.

DEVELOP NEW SOURCES OF ENERGY

Superhot-rock geothermal could generate five to ten times more energy from a single well than conventional systems by tapping heat that's already available beneath much of the country. Commercial fusion could go even further, producing enormous quantities of reliable, clean energy. But despite their promise, private investors can be hesitant to take on the risk of proving that these technologies will work at scale. That's where the federal government can help. Over the past decade, a federal test site has helped demonstrate a commercial pathway for enhanced geothermal that private developers have continued to build on. We can take a similar approach here: back promising ideas while protecting taxpayer dollars by requiring each technical milestone to be met before funding the next.

OUR SOLUTION

Expand the federal test infrastructure and milestone programs needed to accelerate the development of new energy technologies.