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SEPTEMBER 2025

Climate Clarity: On the Future of Climate Action in the United States

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This publication can be downloaded at no cost at CarnegieEndowment.org.

Contents

Introduction

People in the United States who care about fighting climate change are shellshocked. After four years of insufficient, but nevertheless unprecedented, policy support for climate action, there has been a sudden, abrupt reversal. Under the headline of "Energy Dominance," President Donald Trump's administration has scrapped environmental regulations, taken a sledgehammer to the green industrial policy of its predecessor, and removed the United States from international climate diplomacy. Programs of every description addressing or even indirectly touching climate action have been cut, and congressionally appropriated funds for decarbonization and strengthening climate resilience have been cancelled, frozen, or delayed indefinitely. The gutting of IRA tax credits and other support for clean energy this July was a major blow to climate action in the United States, and the Trump administration has followed up by obstructing wind and solar projects, even some that were nearly ready to deliver crucial power to Americans.

This dramatic U-turn is the product of electoral outcomes, but it is also the result of an important shift in the battle of ideas, one that is playing out in the United States and also in other countries. Opponents of climate action have pivoted from simply denying that human activity is changing the climate and toward what is best described as a "New Denialism"—a narrative based on convincing the public that climate solutions don't work or are too expensive, that decarbonization is too difficult and unrealistic a goal, and that everyone should make peace with the fact that fossil fuels will be around forever, so the United States might as well produce more of them. Climate change will inflict some damage, but it's a small price to pay for progress, New Denialists argue.

New Denialism is more subtle and thus perhaps more dangerous than its predecessor. It thrives on the fact that the energy transition is complex and nuanced, and that the scientific consensus, though settled on the fundamentals, is uncertain about the magnitude, cost, and timeline of climate damages. The New Denialism exploits these features to undermine the public's confidence in the entire decarbonization project, while largely ignoring adaptation (or, in some cases, sophomorically suggesting it will be easy). If these ideas take root, they may prevent the formation of coalitions for meaningful climate action in the future, even if a climate-friendly party eventually takes the White House and Congress.

Building a fresh, durable consensus for climate action will require not just confronting the New Denialism but also setting forth a new approach that takes an objective, fact-based view of the promise and limitations of the global energy transition and of what the United States needs to do to adapt to climate impacts. But even more important is building a narrative that relates climate action to two other things that Americans are urgently demanding of their political leadership: an affordable way of life and better health for themselves and their loved ones. Many climate solutions can lower the cost of living and safeguard human health, and it is possible—in fact, imperative—to make life more affordable, longer, and healthier for the people of the United States while addressing climate change at the same time.

We call our approach Climate Clarity, and it's based on four foundational ideas that stem from our research and that of our peers. These ideas may be controversial in some quarters, but we are convinced they will lead to a more constructive, reality-aligned public debate about the future of climate policy and action at a key historical juncture in the United States:

1. Clean energy technologies today are effective and cost-competitive relative to fossil fuel alternatives. That is why the global energy transition, led by China and Europe, is now well under way, and why U.S. policy shifts are unlikely to derail it. A wave of disruptive, clean energy innovations is getting close to maturity and will further accelerate the transition.

2. Out of self-interest, the United States should be part of the energy transition rather than sitting on the sidelines and hitching its star to fossil fuels. This will allow Americans to benefit directly from clean energy markets that are growing much faster than fossil fuel markets, enable the global transition to move faster, and keep the goal alive of reaching net zero emissions. Negative emissions technology needs to advance urgently and is an area where the United States could lead.

3. Americans need to prepare for the impacts of climate change by taking a hard, dispassionate look at climate risk and adopting a risk-management philosophy. That means prioritizing the protection of vulnerable groups, ensuring that Americans have the information they need to make climate-informed decisions, and facilitating the mobility of people across and within different regions of the country.

4. Technological innovation alone won't be enough. Building lasting support for climate-friendly policies that support those technologies will require forming a new political coalition. And that, in turn, will require linking climate solutions to Americans' most important everyday concerns, namely affordability and health.

The Rise of the New Denialism

Traditional climate denialism was based on the idea that climate change is a hoax or has little to do with human activity. This was the weapon of choice for fossil fuel interests and politicians seeking to delay or block climate action. But over the past decade, outright denial of climate change has become harder to sustain in the face of extreme weather events and historic temperature records.

Surveys of public opinion demonstrate this gradual but undeniable shift. The percentage of Americans telling pollsters that they are "extremely" or "very" sure that global warming is happening grew by about twenty points over the past decade, from the low 30s in the early 2010s to the low 50s today, a majority. The percentage of Americans who believe that "global warming is human-caused" also increased, from the upper 40s a decade ago to 60 percent today, a solid majority.

Foes of climate action were forced to pivot. They replaced the old denialism with a new version, which has become the dominant narrative, particularly on the political right. Proponents of the New Denialism concede that man-made climate change may be real, but they argue the risks are overblown, merely a "modest negative trade-off" that is the price of progress, in the words of current Energy Secretary Chris Wright. In any case, the United States can adapt and geoengineer its way through climate change, runs the argument.

At the same time, climate solutions, such as renewable energy sources and electric vehicles, are portrayed as impractical, expensive, and sometimes just plain ugly. They are purportedly no match for fossil fuels, which are cheap and plentiful. Fossil fuels are assumed to be around forever, so the United States should get on with doubling down on their production and consumption and resist government efforts to limit this "freedom."

New Denialism supporters hold that the expansion of renewable energy helps America's arch-rival China, which dominates those supply chains, whereas fossil fuel production helps the United States, which has become the world's largest producer of oil and gas. Geopolitical considerations thus dictate that the United States cast its fate with fossil fuels. Finally, new denialists downplay the importance of the United States in stabilizing the world's climate, arguing that its emissions are largely irrelevant. They argue that since the United States alone can't dent global emissions enough to meet Paris Agreement temperature targets, there's no point in trying, especially if doing so comes with costs.

The New Denialism is now official policy, and its ideas are spreading across large segments of American culture—"manosphere" podcasts, TV shows, and social media posts. According to an analysis by Yale Climate Connections, eight of the top ten podcasts and online shows, which reach tens of millions of Americans, disseminate inaccurate climate information. Unfortunately, the New Denialism appears to be working. Americans are now divided on whether climate policies help or hurt the economy, according to Pew.

In the face of the New Denialism, some analysts in the political center and Democratic establishment, in a misguided effort to stay relevant, have embraced elements of this new ideology. Recent commentaries have called, in the name of "pragmatism" or "realism," for a significant scaling back of ambition in reducing global emissions, effectively surrendering the fight to reach net zero emissions in the coming decades for the sake of economic growth today.

Other commentators have tied themselves in logical knots, arguing that the United States should rally "like-minded partners" (presumably Europe) and lead international efforts to punish "countries with large and fast-growing emissions" (presumably China and India). The United States should somehow serve as the global carbon policeman, while scrapping its own emissions targets and producing fossil fuels with abandon. In reality, it's more likely for the United States to be the target of carbon tariffs in this scenario than the leader of the group instigating them. There is also a serious dose of fiscal magical thinking here: the United States is supposed to arm heavily for geopolitical competition in the Arctic, incur massive costs to adapt to a 3-degree world, and invest copiously in nuclear power and batteries, all while balancing the budget and paying down the national debt. The math doesn't add up.

Climate Clarity proposes a different approach, one grounded in the facts and sensitive to the tradeoffs. First, we reject the New Denialist notion that clean-energy solutions aren't working. In fact, we argue they are working so well that the energy transition has gained enough momentum globally to keep going even without the United States as an active participant. That transition is now being largely led by China with Chinese technology, and the Global South will not be easily persuaded to give up on clean, cost-effective energy security just because the United States seeks to sell natural gas.

The energy transition has gained enough momentum globally to keep going even without the United States as an active participant.

Second, while the energy transition will go on regardless, the United States should join, first and foremost out of self-interest.Aspects of fossil fuel demand may soon plateau, and the future growth of the global energy system will be driven by renewables and electrification. Embracing a future vision of the United States as a "petrostate" whose primary exports are fossil fuels and fossil-fuel-powered machines seems like a poor wager. At the same time, excellent opportunities abound for the United States in certain areas of clean energy

technology, and the country should seize them. Doing so will require a major effort to build on U.S. comparative advantage in "subsurface" transition technologies, such as next-generation geothermal, direct lithium extraction, carbon removal, and, potentially, geologic hydrogen.

To be sure, China's dominance in many traditional clean-energy sectors like solar panels, lithium-ion batteries, and wind turbines is unlikely to ever be wrested away, and in many cases, it makes little sense to try to compete with China on high-volume, low-price components and equipment in international markets. But that is a reality the United States can learn to live with. The United States already manufactures much of its own wind equipment, is scaling domestic battery production, and is diversifying solar imports—though this last area remains more entangled with Chinese suppliers. Regardless, these clean energy products bring a plethora of benefits for Americans, including cleaner air, lower electricity bills, a more diversified and reliable energy mix, and yes, lower global carbon emissions.

Third, we admit that oil and gas and their derivatives will be part of the landscape for the foreseeable future, especially in petrochemicals and plastics production, where few substitutes exist, and in the hard-to-abate industrial sectors. But that admission is far from conceding to the status quo. Thanks to clean energy, the U.S. and global economies can prosper with vastly lower levels of fossil fuel production and consumption. For those emissions that can't be avoided, we call for a major push to advance carbon removal technologies, which will be key to meeting net zero targets and stabilizing the planet's climate. The United States could have an advantage here, given its world-leading research and development efforts, as well as its early commercial strides in this space.

Despite the claims of New Denialists and their followers, the United States still matters in the race to stabilize the climate, and not just because it represents the second-largest national slice of global emissions in the world. The United States still possesses a uniquely dynamic scientific, entrepreneurial, and financial ecosystem that can generate new technologies and new climate solutions. Net zero is still possible if the United States joins the race instead of sitting on the sidelines. Protecting the climate is an open-ended challenge, and the United States still has a chance later in the century to commercialize breakthrough technologies, including in novel nuclear power systems and industrial decarbonization techniques.

Fourth, we categorically reject the notion that climate change is a "modest negative trade-off." Any dispassionate assessment of the evidence leads to the conclusion that climate change is a major risk, and potentially a very major risk, even if the intricacies aren't fully understood yet. The uncertainty surrounding its impacts is cause for more, not less caution. Any prudent society must take such a threat seriously and invest in understanding it, while also taking every reasonable precaution to mitigate the risk. Climate Clarity calls for doing just that.

Finally, tackling climate change is not just a technological or engineering challenge. It's also a political one. Building a new and lasting coalition in support of climate action will require connecting climate solutions with other, more immediate and concrete challenges confronting Americans and constructing a powerful new narrative that makes those connections clear and relevant to the current political moment.

The Global Energy Transition Reaches Escape Velocity

Climate Clarity begins by rejecting the obsolete idea that clean energy technologies don't work or that they are impractical. In fact, the global clean energy transition has achieved unstoppable momentum, driven increasingly by cost advantages and self-interest. Replacing imported fossil fuels with homegrown electrons doesn't just cut emissions—it strengthens security, shields citizens from volatile fuel prices, and frees up hard currency. In an increasingly unstable world, that combination is a compelling proposition.

If history is any guide, the energy transition will advance in a jagged trajectory, not a smooth, linear one. But to mistake these zigs and zags for terminal deceleration is to misread the market and technological macrotrends. As of 2025, the majority of new power installations worldwide are clean, and global investment in clean technology is now more than double that in fossil fuels. After decades of stubborn growth, emissions from the power sector—the single largest source of global greenhouse gases—are nearing a plateau. From 2024 through 2027, the growth curve is expected to flatten out, an unthinkable milestone just a decade ago, made possible by renewables dominating new capacity additions. By 2030, wind and solar installations are expected to nearly triple from 2022 numbers, adding more capacity in five years than in all previous decades combined.

China stands at the center of this surge, responsible for nearly three-quarters of the new wind and solar capacity coming online in 2025. In May alone, it installed 93 gigawatts of solar—about 100 panels every second—nearly twice the U.S. total for all of 2024. Clean sources now supply 38 percent of China's electricity, up from 16 percent in 2005. Without any new policy changes, that figure could exceed 50 percent by 2030 and reach 70 percent by 2050. Europe is moving too; clean energy already accounts for 61 percent of its electricity generation, coal is all but gone, and Brussels is aiming for 45 percent renewables generation by 2030.

But the transformation reaches well beyond China and Europe. Brazil currently generates nearly 90 percent of its electricity from clean sources, anchored by legacy hydropower and surging wind and solar. Kenya matches that figure, with geothermal providing about half of its power amid rising wind and solar. Even Pakistan—long dependent on fossil fuel

imports—has imported so many Chinese solar panels since 2022 that solar is now the country's largest source of power. This influx of cheap Chinese solar is now making its way to Africa, where imports of Chinese panels increased by 60 percent from summer 2024 to summer 2025. Meanwhile, important economies around the world, including South Korea, India, Australia, and Brazil, are implementing their own green industrial policies, racing to supply the world with the clean energy products the energy transition demands.

The favored New Denialist talking point—that wind and solar are "unreliable" because the sun sets and the wind dies—is becoming obsolete. In 2017, the only grid battery in the world was a single 100-megawatt project in Australia. In 2024, the world deployed 69 gigawatts (690 times the Australian project) of grid-scale batteries in just one year. Battery storage installations are doubling, both in both the United States and globally. The technology itself is both becoming cheaper and evolving—flow batteries made from abundant minerals promise longer-duration storage (8–100 hours). In addition to battery storage, high-renewable grids across the UK, Ireland, and Australia are deploying massive quantities of grid stabilizing technologies that are demonstrating in real time that wind and solar can supply a majority of the grid's electrons without challenges.

The transportation sector is undergoing a parallel transformation from fossil to clean. Over one-quarter of cars sold worldwide are electric or hybrid, and cost parity with gasoline models has already been reached in China, the world's largest car market. Almost every car and scooter sold by 2040 will likely be electric. In India, where two- and three-wheeled scooters dominate urban mobility, over 40 percent will be electric by 2030. Indonesia's innovative battery-swapping stations allow riders to exchange depleted batteries for charged ones in minutes, removing a major barrier to adoption. In Thailand, EVs are on track to make up 20 percent of new car sales in 2025. Even Brazil, long a bastion of biofuels, saw EV sales jump 90 percent in 2024 to 177,000 units. Global sales of gasoline-powered cars peaked in 2017, and oil demand for transport is heading toward a plateau this decade—driven less by subsidies than by Chinese automakers delivering cost-effective vehicles that consumers want to own.

Among the new frontier of clean energy innovations are ways for oil and gas incumbents to diversify away from fossil fuels. Next-generation geothermal, long dismissed as a niche option, is now poised to deliver clean, firm power almost anywhere in the world. Enabled by drilling advances honed during the U.S. fracking revolution, it offers 24/7 power with a tiny land footprint and no emissions. Carnegie analysis suggests that by the mid-2030s, it could outcompete both natural gas and nuclear in certain locations. The International Energy Agency estimates its resource potential as second only to solar, projecting 800 gigawatts of capacity by 2050—15 percent of global electricity supply and twice today's nuclear fleet. From Vietnam to Australia, Germany to Chile, dozens of new markets could be opened to geothermal energy for the first time.

Another potential disruptor is natural hydrogen—pockets of the clean molecule trapped underground or naturally stimulated. While green hydrogen from renewables and blue hydrogen from natural gas remains expensive ($4.5-12/kg and $1.8-4.7/kg respectively), geologic hydrogen could be produced for as little as $0.50–$1/kg. If proven at scale, this would be a game-changer for heavy industry and other hard-to-abate sectors. Startups in the United States, France, and Australia are already drilling exploratory wells in search of commercially viable reserves.

Even with this extraordinary momentum, parts of the global economy will be slow to decarbonize. The aviation, cement, and steel industries are only now beginning to see breakthrough technologies emerge, and scaling them across global supply chains will take decades. That means these sectors, alongside many fossil power plants, will keep producing large volumes of emissions for years to come.

The New Denialists seize on this to claim that the economy cannot function without hydrocarbons, but this is an outdated perspective: over the past twenty years,thanks to new technologies, it's now possible to electrify the majority of the global energy system. The more honest analysis implies that the global economy can indeed function with vastly lower amounts of fossil fuels, though some of the solutions needed to replace them will take time to deploy—time that the planet does not have. As a result, the world is certain to miss the more ambitious target from the 2015 Paris Agreement of limiting warming to 1.5°C by 2050.

Fortunately, carbon direct removal (CDR) is moving from theory to practice. The first generation of direct air capture (DAC) plants is now operating or under construction, with early-stage ocean-based removal projects at more nascent stages of development. Yes, this is happening far too slowly and on too small a scale. These novel technologies currently remove less than 2 million tons of carbon annually—a negligible amount compared to the 41.6 billion tons emitted each year—but they represent a crucial climate solution, and their commercialization is an essential global public good, as they are the only method of climate repair: carbon removal systems directly address the buildup of greenhouse gases, rather than masking the problem as solar geoengineering does. Carbon removal cannot smoothly turn back the clock, nor is it a replacement for emissions cuts. But it will be an essential part of efforts to stabilize emissions and avoid the worst impacts of climate change.

In some quarters solar geoengineering is attracting attention as a quick, cheap fix. Techniques like stratospheric aerosol injection—spraying sulfur into the stratosphere to reflect sunlight—would cost less to deploy than decarbonizing the global energy system or burying vast amounts of carbon underground. But they come with profound moral, geo-political, and climatological risks. While these dangers should not preclude geoengineering from being researched, they reaffirm that these approaches are far from the silver bullet that some have purported. They do nothing to address ocean acidification or other consequences of carbon pollution and could spark conflict over unintended climate effects. Nor do they address the core atmospheric challenge of greenhouse gas emissions.

Yes, the United States Still Matters

The global clean energy transition will keep advancing regardless of U.S. policy, but the pace and quality of that transition will be affected by the role the United States plays. As of now, the United States is still responsible for 11 percent of global GHG emissions—more than any other country except China. Some New Denialists argue that this percentage doesn't matter because on its own, it's not large enough to solve climate change. By the same logic, almost any segment of emissions would also be irrelevant, including those of, say, India (8 percent), cement production (8 percent), or the wealthiest 0.1 percent of people on Earth (8 percent). There's a moral element too. The United States has emitted more greenhouse gases than any other country in history, most of them after the dangers of climate change were well understood by policymakers and oil companies. Also, the assumption that U.S. emissions will continue to reliably fall into insignificance is not guaranteed.

For the United States, joining in and contributing to the energy transition can be justified through pure economic self-interest. Clean energy is the only way to get abundant energy online quickly and keep a lid on the growth of energy prices. Electricity prices are increasing around the country as power demand is rising again after years of stagnation. A key factor is the rush to build data centers to power the AI boom. The country's long-standing failure to build transmission lines and permit new sources to connect to the grid is also imposing heavy costs.

Developers are reaching for natural gas–powered plants first. The problem is that the United States is already adding about as much gas power as it can in the near term, while the price continues to rise. If a developer doesn't already have an order in for a combined cycle gas turbine, they'll likely have to wait until 2029 or 2030 to get one. The supply chains for gas turbines are snarled. Ironically, some developers now describe renewables and storage as a "bridge" to a future when more gas is available.

By contrast, adding renewables and storage is the lever the U.S. can pull to add more power, fast. Around 95 percent of the power projects waiting to be connected to the grid are wind and solar. But as the United States turns away from renewable electricity under the current government, this could lock in a future of expensive electricity, higher risks of blackouts, and frustrated tech firms who can't get their data centers connected in regions full of angry consumers. The states that have added renewables and batteries the fastest, like Texas, have sharply reduced the risk of dangerous blackouts even as power demand rises.

For the United States, joining in the energy transition can be justified through pure economic self-interest.

The New Denialists routinely assert that the growth of renewable power generation will increase power prices for everyday Americans. But if enacted correctly, an energy transition will cut costs and provide more abundant energy,

especially in regions with high solar resources. The question isn't whether renewables are cheap enough—it's whether the United States can build systems that capture their cost-saving potential. Peer-reviewed studies consistently show that cheaper wind and solar could reduce power prices by displacing costlier fossil fuel generation. Leading modelers are finding that new renewables are cheaper than new fossil fuel plants, even when adding the "firming costs" of building energy storage and keeping fossil fuel plants on standby for emergencies.

Empowering renewables to reduce cost for consumers can be achieved by overhauling market rules to reflect the real value of resources like storage while modernizing transmission. These are overdue updates to twentieth-century grid architecture. The prize of rewiring the economy to run mostly on clean electricity is worth the significant upfront capital investments that are required.

The United States must also consider economic self-interest when it comes to the energy products it sends to the world. The United States makes a lot of money exporting oil and gas, as New Denialists readily point out. The outlook is especially rosy for exports of LNG, which the U.S. Energy Information Administration expects to nearly double between 2024 and 2030, part of growing natural gas demand around the world. Climate Clarity does not dispute that exporting hydrocarbons brings economic benefits nor expect the country to shut down its wells that are still economic.

But the mistake is to think that other countries' perception of their own economic self-interest will always and forever drive them toward importing foreign fossil fuels, especially from the United States. In 2025, the Trump administration has used tariffs to try to pressure its allies into buying more U.S. fossil fuels, extracting only pledges of questionable credibility in return. Why would other countries want to depend on gas imports from a country that has proved eager to weaponize its trade relationships? The EU cannot deliver on its unrealistic "promise" to buy $250 billion of U.S. energy supplies annually as part of the U.S.-EU trade deal, nor has the Trump administration been able to persuade Japan and Korea to back U.S. LNG projects in Alaska. In the long term, the United States could end up squabbling with other petrostates over a stagnant hydrocarbon market as the world buys more clean technology from China and other countries.

It is also in the self-interest of the United States to deploy clean energy technologies and to diversify the energy products it sells to the world. In particular, U.S. firms have a comparative advantage in exploiting subsurface energy resources. The United States is well positioned to be the leading developer of next-generation geothermal energy and potentially, geologic hydrogen, both of which require drilling and fracking expertise and technology U.S. companies have already mastered. Over 530 oil and gas drill rigs are based in the United States (for reference, Saudi Arabia has roughly 70), and the United States has more technical potential for geothermal energy than any other country. In 2025, it also became the first country to map its geologic hydrogen deposits. Geothermal and geologic hydrogen offer genuine diversification opportunities for American hydrocarbon firms, especially oil servicing companies.

Finally, U.S. strength in subsurface technologies could be used to store excess carbon. As we noted earlier, the United States is the global leader in the deployment of carbon capture technologies and holds more patents for geological carbon dioxide removal than any other country, although most of the carbon captured today is used to drill for more oil. Scaling up carbon removal to protect the climate will require bold and ambitious measures to mobilize global scientific talent. We call for a global Manhattan Project or Operation Warp Speed for carbon removal technologies.

Confronting Climate Risk with Eyes Wide Open

Even as the energy transition races forward, driven by pure economic logic and energy security concerns, the impacts of climate change will keep coming. Up until mid-century, many of those impacts are locked in given the greenhouse gases already present in the atmosphere and the heat already absorbed by the oceans. After that, how bad things will get will depend on whether and how significantly the world bends the global emissions curve. But in the near term, the United States will need to confront the consequences of climate change that are inevitable.

New Denialists don't dispute that humans emitting greenhouse gases is causing damage. Instead, they downplay the risks, hoping the public will accept continued fossil-fuel burning as a reasonable course of action. Downplaying the risk requires some obfuscation. Take, for example, the tragedy of deaths from extreme heat. The Trump administration's landmark July 2025 report reviewing climate impacts concludes that heat-related mortality in the United States has declined. To reach that conclusion, the report's authors rely on three studies, all of them at least a decade old, which examine time periods that extend no further than 2006. At the same time, the authors omit recent research that finds that heat-related mortality increased by 117 percent in the United States between 1999 and 2023, with the declining trend reversing sharply after 2016. Selective, dishonest citations like this support the report's overall conclusion that "CO2-induced warming appears to be less damaging economically than commonly believed."

The New Denialism depends, like a stage magician, on keeping the public's attention trained on the macro picture so it won't notice the critical action happening at smaller scales. As long as the discussion focuses on averages over very long time periods, or averages across large geographies, it's easier to dilute alarming climate trends, which tend to be recent and regional. For example, the administration's scientists note that

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for the continental United States as a whole, "heatwaves are no more common today than they were a century ago." Yet, they admit that the number of heatwaves in the western United States has doubled since the 1980s and has reached levels never seen since records began in the nineteenth century. Overemphasizing the macro trends also keeps the focus off individual communities, cities, and whole regions that are already suffering from climate impacts, which would prove jarring to the New Denialist narrative.

When obfuscation doesn't suffice, they turn to deletion. The U.S. Global Change Research Program, established by Congress in 1990 to integrate federal research on climate change and other environmental phenomena, has been defunded, its staff fired, and its website shuttered. All five editions of the congressionally-mandated National Climate Assessment (NCA)—a massive, authoritative publication on how climate change is affecting the United States—have been removed as of this writing from the websites built to display them. The administration stopped work on the sixth edition of the NCA, due to come out in 2028, and has dismissed all authors working on it. Several National Oceanic and Atmosphere Administration observatories would be closed down under Trump's proposed 2026 budget, ending seven decades of continuous data collection on atmospheric carbon.

The New Denialists emphasize the uncertainty of it all, but they exaggerate how little we actually know. To be sure, uncertainty is a key feature of climate science. How climate change will affect human civilization in future years is enormously complex, and answers to that question are built on complicated models, vary widely by geography, are based on data that is necessarily incomplete, and come with large uncertainty bands.

But just because there is considerable uncertainty doesn't mean people can't make sensible, risk-informed decisions about the future. In fact, individuals and governments make consequential decisions about the future with imperfect information all the time. Personal investing, buying home insurance, deciding medical interventions, and investing in major infrastructure are examples. Decisions about managing and preparing for climate change should be no different. And in the presence of uncertainty, what is needed is more, not less, data and information.

Based on the available information, uncertainty in the modeling should make everyone *more* cautious about the future, not less. Consider, for example, estimates of climate damages. Depending on the methodology used, credible models estimate future economic losses as low as 1–5 percent of global GDP at 3°C of warming, but also as high as 55 percent given the same level of warming. That's a full order of magnitude more.

With climate change, the downside risk should be especially concerning because the evidence suggests the damages have been underestimated rather than overestimated. Even the best models do not yet capture the full scope of factors that could damage people and ecosystems. For example, most models assume that losses in one country depend on the weather only in that country; they don't consider that weather changes elsewhere may

generate negative spillovers via trade and other channels. In addition, models operate on the basis of averages, but averages hide enormous variation in damage from one place to another. Cascading disasters, where the collapse of one system, such as electrical power generation, leads to the collapse of other systems, such as water distribution, are hard to model and are rarely priced in. Dangerous tipping points, like the Amazon rainforest turning from a lush carbon sink to a dry savannah and accelerating global warming, could make the more disturbing scenarios more likely but are difficult to model.

Our Climate Clarity framework calls for confronting climate change with eyes wide open, without sensationalizing the danger or recklessly dismissing the risk. First, there needs to be concerted, organized resistance against efforts to hide climate data and to otherwise impede the study of how climate change is affecting and may affect the United States. Leading European scientific institutions have banded together to preserve U.S. government data underpinning climate models. Also, a team of volunteer scientists is seeking to preserve access to vital information resources taken offline by the Trump administration. Second, obfuscations and misrepresentations of data and of the scientific record should never go unanswered by the scientific community or the media. Third, a relentless focus is needed on documenting how climate impacts are already affecting people and communities. Climate change must be given a human face. Spotlighting these stories will help combat efforts to dilute the effects of climate change by hiding the truth behind averages.

Fourth, Climate Clarity calls for prioritizing the protection of climate-vulnerable communities, as they will be hit first and hardest. That includes low-income households and populations that have limited or declining access to the things that will be essential for survival and adaptation in a climate-affected United States, such as: property and health insurance, liquid savings, retirement accounts that can be drawn down in a pinch, the ability to work remotely, private transportation, air conditioning, and networks of mutual aid. Access to or exclusion from these things is fast becoming the new, great social divide in this country, separating those who can adapt and flourish in a climate-unstable world from those who will struggle to survive and make a living.

Protecting climate-vulnerable communities is a major responsibility of the federal government. Pushing the risk down to states, local governments, and households less able to bear that risk, especially doing so without adequate preparation and resources, is a recipe for disaster, as Carnegie's research suggests. But it is also the responsibility of nonprofit organizations, houses of worship, businesses, and civil society as a whole.

Pushing climate risk down to states, local governments, and households without adequate preparation and resources is a recipe for disaster.

Finally, Climate Clarity calls for investing in human mobility. Moving away from climate-risky areas and to more climate-resilient regions of the country will be

a key mechanism through which Americans adapt to climate change. Already, Americans have stopped their decades-long migration from Snow Belt to Sun Belt, which suggests that warming regions are no longer as attractive as they once were, likely because of climate change as one factor. Indeed, one in eight Americans says they have considered moving to avoid the impacts of global warming. The problem is that American society has become less mobile over the years and is now more static than it's been for much of the twentieth century. The reasons are complex and include high housing costs and an aging population. Reducing those "frictions" and building more mobile communities is one of the most important investments in climate adaptation the United States can make.

Making Climate Solutions Relevant to People

New Denialism has taken root in part because climate change is not a priority for most Americans, even as more and more of the country reports experiencing it or losing sleep over it. Less than 40 percent of U.S. registered voters tell pollsters that, as a voting priority, climate change "is very important to me." Tellingly, registered voters for the 2024 presidential election ranked global warming as the nineteenth-most important issue on which they would base their vote (out of twenty-eight). That was far behind the economy (second), inflation (fourth), and healthcare (fifth). Even moderate and conservative Democrats ranked global warming as fourteenth.

If climate action is to have a future in the United States, it needs to speak to Americans' most urgent concerns. Two crises, in particular, are front of mind. One is the crisis of affordability. Housing costs weigh heavily. Today, 97 percent of people in the United States live in counties where median house prices and median rents have risen faster than incomes for the last two decades.

Electricity prices have also increased steadily since the pandemic, to the point that a fifth of Americans are "energy burdened"—they spend at least a quarter of their disposable income on energy. The AI boom is raising power prices further by sucking up large amounts of electricity from the grid. Rising temperatures will increase demand for air conditioning and thus for increasingly expensive energy.

The other is a crisis of public health. The United States is infamous for spending more than any other industrialized country on healthcare—over $14,570 per person, or $4.9 trillion a year. And yet, life expectancy continues to lag significantly behind other wealthy countries that spend less on health care. After years of improving air quality across the country, today nearly half of all Americans—156.1 million people—live in places that get failing grades

for unhealthy levels of ozone or particle pollution. The health risks of residential indoor air pollution, resulting in part from burning fossil fuels inside the home, are clear. Forty million Americans cook at home with natural gas; 12.7 percent of current childhood asthma cases in the United States are linked to gas stove use.

What the crises of affordability and health have in common is that climate change is a contributor to both, and climate solutions can help address both.

Then there are the alarming health risks in areas where communities live side-by-side with fossil fuel and petrochemical production plants. These are places like "Cancer Alley," the 85-mile stretch of the Mississippi River between New Orleans and Baton Rouge, where the risks of cancer from air pollution are seven times the national average, and non-cancer health risks may be underestimated. And on top of all that, warming temperatures bring new health challenges, including northward migration of disease-carrying insects, wildfire smoke, and the mental and physical health effects of extreme heat.

What the crises of affordability and health have in common is that climate change is a contributor to both, and climate solutions can help address both. On the affordability front, as we discussed above, more plentiful and cheaper renewable energy can reduce energy prices for American consumers if implemented correctly. Today, nearly half of the electric vehicle models sold in the United States cost less to own than their gasoline alternatives, even when considering their higher initial price tags. Switching to efficient vehicles, buildings, and appliances reduces energy consumption and therefore energy bills.

On the health front, burning fewer fossil fuels can immediately improve outdoor and indoor air quality, as well as the incidence of health problems that accompany air pollution. Already, higher penetration of electric cars has been found to reduce levels of nitrogen dioxide in the air and asthma-related emergency room visits. Switching from gas to induction stoves cuts indoor air pollution (nitrogen dioxide) by half. More efficient, cheaper, and more widely used air conditioning in homes, schools, hospitals, and nursing homes would reduce not just energy bills, but also protect vulnerable populations from the deadly effects of heat. Air-conditioned schools enable students to learn better; hotter days in schools without air conditioning have been linked to poorer learning outcomes.

In sum, a narrative that integrates climate solutions on one hand, and health and affordability on the other, can resonate across the country, much more than calls for climate action alone. Climate Clarity demands a new narrative and a new approach that explicitly integrates climate action into the problems that most directly and severely affect Americans in their daily lives. This is the power of climate solutions—they can tackle not one, but three major challenges simultaneously.

A New Way Forward

The time has come for deep reflection and soul-searching about the global energy transition and the United States' role in it. Our vision of Climate Clarity rejects defeatism dressed up as pragmatism. It recognizes that the energy transition has attained nearly unstoppable momentum at the global level, powered by self-interest and self-reliance, and that the United States stands to gain more by participating in that transition than by letting its vast opportunities pass Americans by. The world is still nearly two decades off from surpassing 2°C of warming, and it is too early to give up on limiting global warming to that level, especially given the technological and political momentum that could propel the energy transition faster still, and especially if the United States rejoins the effort.

In the United States, as in other countries, that won't happen on its own. Technological innovation alone will not save us. What is required is a new approach, one rooted in making the benefits of climate action relevant to Americans' most pressing needs and preoccupations, and one grounded in an unflinching understanding of climate risk and of how to protect the country and its people from inevitable climate perils. Above all, we owe ourselves and future generations a new path forward, one that embraces difficult truths but does not yield to them, and one that perseveres with clarity about what is in the true self-interest of the United States.

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The Sustainability, Climate, and Geopolitics Program explores how climate change and the responses to it are changing international politics, global governance, and world security. Our work covers topics from the geopolitical implications of decarbonization and environmental breakdown to the challenge of building out clean energy supply chains, alternative protein options, and other challenges of a warming planet.

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