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The Heritage Foundation

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CENTER FOR ENERGY, CLIMATE, AND ENVIRONMENT

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The economic engagement strategy with China that America has pursued for decades has failed. Embracing China with free trade and investment flows was designed to produce growth, which would in theory spawn greater political liberalization and foreign policy moderation. It did the opposite. As China has grown richer it has only grown more aggressive abroad, more repressive at home, and more determined to replace America as the world's pre-eminent power. Rather than liberalizing China, engagement has empowered America's principal adversary and exposed the U.S. economy and its citizens to predatory Chinese policies that have harmed their livelihoods, security, and prosperity. To ensure that America does not abdicate its natural advantage in the energy sector and voluntarily remain trapped in China's green energy handcuffs, it must advance and implement policies that protect the U.S. and reduce U.S. reliance on China's economy.

China is seeking to ensnare the United States in a dependence trap of renewable energy. America must avoid becoming ensnared in these "Chinese handcuffs" and chart a responsible path that ensures plentiful, reliable, reasonably priced power based on proven technologies for all Americans for decades to come, which is fully in America's capacity to achieve. Yet, the Biden-Harris Administration's own policies have aided China's efforts by undermining American energy security and independence. The Administration is using regulations and laws that encourage the purchase of Chinese-sourced renewables, electric vehicles (EVs), batteries, and critical minerals. At the same time, the Administration is discouraging the development and use of domestic supplies of oil and natural gas.

As is laid out in this *Special Report*, a massive overhaul of these policies should be a top priority for the next conservative U.S. Administration working in conjunction with Congress. U.S. national security policy should support the following capabilities to meet American needs: (1) exploring and extracting key resources in the United States, in partner countries, and in international waters; (2) transporting and processing or refining those resources in a way that is shielded from leverage by U.S. adversaries; (3) consuming energy, and using associated technologies, that are shielded from manipulation by U.S. adversaries; and (4) shielding, as much as possible, U.S. allies from energy-related leverage and manipulation.

The "Buy America" policies included in the Biden-Harris Inflation Reduction Act (IRA), for example, are a Trojan horse that allows Americans to use tax credits to lease EVs without requisite domestic-content requirements. Regulations from the U.S. Department of the Treasury have made this legal.

"Buy America" provisions have also not prevented American companies from collaborating with Chinese companies to launch domestic battery companies. Ford is doing this in Michigan with the Chinese battery company Contemporary Amperex Technology Co., Limited (CATL). "Buy America" provisions do not apply to products that are not made in the United States, and China makes components that are not sold in the United States.

In sum, the Administration's renewable energy and electrification policies make America dependent on China, thereby handcuffing the U.S. to the Chinese Communist Party (CCP).

The stated rationale for the Biden-Harris policies is that fossil fuels are causing climate change and that their consumption must be forced to end. But even if America stopped using *all* fossil fuels, temperatures would decline by a mere 0.2 degrees Celsius by 2100, according to government models run by The Heritage Foundation.[1] Meanwhile, China, India, Russia, Africa, and Latin America are increasing their consumption of fossil fuels, so American production has diminishing relevance to total global emissions.

In May 2024, the Biden Administration announced a wave of new tariffs on $18 billion worth of Chinese imports, later postponed.[2] While there are appropriate uses for tariffs—and the U.S. does need to pursue strategic decoupling from China to reduce its dependence on Chinese imports in sensitive sectors—the Biden-Harris Administration's new policies fail to hit the target. Several of these tariffs will not take effect for years and were designed to avoid raising prices before the 2024 election, while potentially postponing sensitive decisions and handing over problems to a future Administration.[3]

The focus on export-led growth gives China more power abroad at the cost of higher domestic poverty. Subsidies lower the prices of batteries, electric vehicles, critical minerals for batteries and electronic components, and renewables such as wind turbines and solar panels. This gives the CCP and

President Xi Jinping power over the Chinese people, over state-owned companies, and over foreign companies and economies, while making America dependent on Chinese supply chains. America must stop helping the CCP to expand this market power and increase its dominance over overseas companies and citizens.

Although America's domestic policy should be used to promote U.S. strength and use America's own resources, the Biden-Harris Administration is co-opting it and thereby strengthening China. By using regulations and laws requiring the purchase of these Chinese-sourced renewables, EVs, batteries, and critical minerals, rather than U.S. domestic supplies of oil and natural gas, the Biden Administration is increasing imports from China. These policies make America voluntarily dependent on China.

The Administration must do more to safeguard America's energy future in a period when energy needs are projected to grow exponentially. The recommendations in this *Special Report* present the way forward for a future of plentiful American energy that is free of Chinese coercion.

18 Recommendations for Escaping the Chinese Handcuffs

The following policies would enable America to begin to extricate itself from its growing dependence on China in the energy sector that has been encouraged by Biden-Harris policies.

Federal and State Reforms

Congress and state lawmakers should:

1. Encourage More Production of Oil and Natural Gas. Over the past decade, through innovative technology, America has become the largest oil and gas producer in the world, turning from a natural gas importer to a natural gas exporter.[4] America should focus on allowing companies to produce as much oil and gas as they want. This can be done by getting out of the way of companies that want to start or increase production, increasing pipeline capacity, and rapidly approving requests for export terminals.

Vibrant U.S. energy production leads to lower electricity prices, with both domestic and global advantages. On the domestic side, low electricity prices leave Americans with more money to spend, effectively increasing their paychecks by reducing the amount that households have to spend on electricity. In addition, companies prefer to locate their manufacturing plants in areas with low electricity prices, and this means more job openings for Americans. Last, the ability to export low-cost oil and natural gas will benefit U.S. allies and reduce coal and wood burning, lowering carbon-dioxide emissions.

U.S. energy policy needs to catch up to this new reality of being a powerful oil exporter so that America can build more natural gas power plants for baseload power to ensure reliable, resilient, and affordable electricity for consumers and manufacturers.

2. Reform the Federal Permitting Process. Congress should create a single, unified process for major permit applications, improving coordination between legislative and executive branches.[5] This reform should reduce the burdens and delays of the permitting process and create predictable timetables for applications. Time and awards limits should curb the litigation frenzy that awaits most major projects once they receive their permits. America could adopt best practices from other countries, including one-stop-shop agencies, uniform application process for infrastructure permitting, and significant limits on litigation and standing for challenges to permits.[6] Australia's one-stop-shop environmental agency and the Infrastructure Australia program are standouts in this regard, as is the Dutch process for regional infrastructure planning and permitting. This is particularly important because America needs to increase its capacity for data centers, artificial intelligence (AI), and expansion of the housing stock. Other countries want to purchase U.S. natural gas, and permits are needed for exploration, pipelines, and export terminals. If Americans purchase more EVs and states rely more on renewable energy sources, even more dispatchable power will be needed for backup, as can be seen from California's experience.[7] With civil nuclear facing the most prohibitive permitting obstacles of any power sector except transmission, most of the needed capacity expansions would have to come from coal and natural gas.[8]

3. Repeal All Green Subsidies and Credits. The Congressional Budget Office estimates that energy incentives in the Inflation Reduction Act will cost about $1 trillion over 10 years, similar to the estimate by Goldman Sachs.[9] In addition, previous legislation has put in place tax credits for renewable energy. Repeal of these subsidies will enable a more rational choice of forms of energy and choice of vehicles and appliances. Subsidies and credits are an inefficient use of funds, raise the deficit, and slow the U.S. economy.

Congress should repeal all credits and subsidies for renewable energy in the IRA. These include the production tax credit for electricity generated by renewables, the investment tax credit for energy property, the clean electricity production credit, the clean electricity investment credit, the clean vehicle credit, the clean hydrogen production credit, the advanced manufacturing production credit, and the residential clean energy credit.[10] Repeal of these credits would even the playing field and end the distorting incentives that are resulting in less necessary oil and gas investment and more investment in renewables.

4. Pass Fundamental Tax Reform. This reform must go beyond small changes, lowering tax rates and allowing full and immediate expensing of equipment, research and development (R&D) costs, and cost of structures to encourage businesses from services to manufacturing to return to America. By lowering tax rates and allowing companies to write off their investments immediately, instead of taking the deduction over the functional life of the asset, America will increase its labor productivity and competitiveness with CCP-subsidized Chinese companies. Lowering tax rates and increasing expensing will improve investment in all sectors, including high-capital-cost industries, such as advanced manufacturing, nuclear power, and domestic resource development and refining. By spurring such investment across the board, America will have complete energy independence and lead the world in energy intensive sectors, including data centers and AI computing.

5. Reform Commercial Nuclear Power Regulation. Advanced commercial nuclear technologies require a modernized regulatory pathway that is technology neutral and regulates the nuclear industry based on the risks and performance associated with specific reactors, rather than on generalized metrics.[11] The Nuclear Regulatory Commission's regulations must meet these requirements.

The recently passed Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy (ADVANCE) directs the Nuclear Regulatory Commission to develop a new pathway to license reactors at brownfield and former coal plant sites and to develop an accelerated licensing process for reactors being built on existing nuclear sites.[12] State and federal policymakers must demand that these useful processes are efficiently translated into actionable regulatory changes.

The basis of reform must be to realign responsibilities. Though the goal should be to privatize nuclear waste management while requiring firms to have insurance policies to guarantee safety, initial reforms must introduce competition, allow prices to reflect services rendered, and ensure that nuclear firms remain in control of funds set aside for nuclear waste management.

In addition, it would be beneficial in both the economic and military spheres for the United States to have a comparative advantage in nuclear power development in order to regain maritime industrial strength. That comparative advantage will include, in the future, small modular reactors (SMRs) as a critical element.[13] SMRs, used to propel ships being built today, should be adapted for other shipping purposes, and meet international pollution standards. SMRs will allow sustained high-speed maritime transit at no added cost, enabling fewer ships to carry more cargo than otherwise.

A secondary benefit of SMR-propelled commercial shipping is the potential to supply clean energy to waterfront communities. Last, SMRs would permit internal shipboard designs that allow more cargo space.

6. Allow Expanded Permits for Domestic Mining of Critical Minerals. In order to have more control over critical minerals, America should take action on two fronts. First, Congress and the Administration should streamline and reform permitting regulations to allow more domestic minerals to be mined. Second, the Administration should engage countries in Africa and Latin America, so as to form more joint ventures in the mining area and import more minerals from these countries.

America cannot cede development of critical minerals to China. China has increased its control over critical minerals, with mining projects in Africa, Latin America, and Australia, as well as in China.[14] In contrast, acquiring permits for mining for critical minerals in the United States is a lengthy, bureaucratic process. New American mines take an average of 16.5 years to move from discovery to development, even though construction generally takes five years, according to the International Energy Agency.[15]

The Biden-Harris Administration has restricted access to several projects in the United States, most recently by blocking the Ambler Road Copper Mine in Alaska in June 2024.[16] In 2023, the Environmental Protection Agency blocked the Pebble Mine in Alaska, placed a 20-year moratorium on the Twin Metals Mine in Minnesota, and lobbied the Army Corps of Engineers to block the copper and nickel New Range Mine in Minnesota.[17] In addition, the Administration unilaterally declared that 1 million acres of public lands in northern Arizona would become a national monument, blocking the extraction of radionuclides, such as uranium.[18]

Many state and federal environmental regulations prevent the expansion of domestic mineral, radionuclide, and hydrocarbon extraction and processing. By repealing these and other onerous regulations, America can ensure that the material is extracted and refined according to proper labor and environmental conditions. Overtly tightening environmental standards, however, will drive these processes into other countries that will forgo U.S. environmental and labor standards. Any future Administration should reduce this burden so that domestic mining, extraction, and refining can expand.

7. Fundamentally Reform Regional Transmission Organizations (RTOs). RTOs were first set up by the Federal Energy Regulatory Commission in 1999.[19] They started to become prevalent after 2000. The first RTO was PJM Interconnection in 2001, followed that same year by the Midcontinent Independent System Operator (MISO).[20] RTOs were

TABLE 1

Residential Electricity Prices and Gasoline Prices by State (Page 1 of 2)

Control of Legislature: All Democrat | All Republican | Split Control

Rank	State	Residential Electricity Cost (cents/kwh)	Democrat Governor	Democrat Legislature	Part of RTO/ISO*	RPS** by 2035	Gas Price
1	Hawaii	42.45	✓	✓	✓	40%	$4.64
2	California	32.99	✓	✓	✓	60%	$4.75
3	Massachusetts	28.15	✓	✓	✓	35%	$3.25
4	Rhode Island	27.03	✓	✓	✓	100%	$3.13
5	Connecticut	26.00	✓	✓	✓	48%	$3.26
6	Alaska	25.40			✓	0%	$3.74
7	New York	24.51	✓	✓	✓	70%	$3.40
8	New Hampshire	22.44			✓	25%	$3.20
9	Maine	22.26	✓	✓	✓	80%	$3.29
10	Vermont	21.91		✓	✓	75%	$3.31
11	Michigan	19.88	✓	✓	✓	35%	$3.30
12	New Jersey	19.88	✓	✓	✓	50%	$3.14
13	Pennsylvania	17.68	✓		✓	18%	$3.40
14	Wisconsin	17.60	✓		✓	0%	$3.04
15	Maryland	17.41	✓	✓	✓	50%	$3.14
16	D.C.	17.11	✓	✓	✓	100%	$3.51
	U.S. average	**16.41**					
17	Minnesota	16.38	✓		✓	55%	$3.08
18	Delaware	16.29	✓	✓	✓	40%	$3.05
19	Illinois	16.15	✓	✓	✓	25%	$3.51
20	Ohio	15.92			✓	9%	$3.02
21	Georgia	15.53				0%	$3.03
22	Nevada	15.50		✓		50%	$4.00
23	West Virginia	15.48			✓	0%	$3.14
24	Virginia	15.31		✓	✓	30%	$3.10
25	Colorado	15.21	✓	✓		30%	$3.46
26	Arizona	15.14	✓			15%	$3.43
27	Oregon	15.12	✓	✓		90%	$3.76
28	Alabama	15.03				0%	$2.83
29	Indiana	14.89			✓	0%	$3.19
30	Iowa	14.82			✓	0%	$3.06
31	Missouri	14.64			✓	15%	$2.94
32	Texas	14.47			✓	0%	$2.82
33	New Mexico	14.44	✓	✓		40%	$3.16
34	Kansas	14.22	✓		✓	0%	$2.97
35	South Carolina	14.18				0%	$2.83
36	South Dakota	14.15				0%	$3.15
37	Florida	13.89				0%	$3.18
38	North Carolina	13.72	✓			0%	$2.98
39	North Dakota	13.65			✓	0%	$3.18
40	Montana	13.58				0%	$3.39

TABLE 1

Residential Electricity Prices and Gasoline Prices by State (Page 2 of 2)

Control of Legislature: ● All Democrat ● All Republican ● Split Control

Rank	State	Residential Electricity Cost (cents/kwh)	Democrat Governor	Democrat Legislature	Part of RTO/ISO*	RPS** by 2035	Gas Price
41	Mississippi	13.42			✔	0%	$2.77
42	Nebraska	12.92			✔	0%	$3.12
43	Wyoming	12.90				0%	$3.33
44	Kentucky	12.87	✔		✔	0%	$2.89
45	Tennessee	12.57				0%	$2.80
46	Oklahoma	12.37			✔	0%	$2.83
47	Arkansas	12.36			✔	0%	$2.89
48	Washington	12.34	✔	✔		100%	$4.16
49	Idaho	12.28				0%	$3.59
50	Utah	11.50				20%	$3.64
51	Louisiana	11.42			✔	0%	$2.86

* Regional Transmission Organizations/Independent System Operators.
** Renewable portfolio standard.

NOTES: Electricity prices show data for June 2024. Gasoline prices are average prices for one gallon of regular unleaded. Nebraska's legislature is unicameral.

SOURCES:
- U.S. Energy Information Administration, "Electric Power Monthly," https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=table_5_06_a (accessed September 16, 2024).
- Federal Energy Regulatory Commission, "RTOs and ISOs," https://www.ferc.gov/power-sales-and-markets/rtos-and-isos (accessed September 16, 2024).
- National Conference of State Legisatures, "State Renewable Portfolio Standards and Goals," updated August 13, 2021, https://www.ncsl.org/energy/state-renewable-portfolio-standards-and-goals (accessed September 16, 2024).
- AAA Gas Prices, "State Gas Price Averages," https://gasprices.aaa.com/state-gas-price-averages/ (accessed September 16, 2024).

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a well-intentioned effort to promote competition and reliability for the production of electricity. However, their structures have had unintended consequences.

Broadly speaking, providers of electricity to households and businesses have become separate entities from a large portion of generators of electricity and the wider energy distribution system. Because certain industries can now cut their own deals with generators rather than providers, they have increasingly pushed for RTOs and Independent System Operators (ISOs).

RTOs are increasingly building transmission, not where they are needed, but for largely renewable generation projects which receive extensive federal subsidies. Additionally, these renewables are intermittent, causing problems of stability within the power grid. They are often far from where power is needed, thereby increasing the cost of transmission.

Therefore, states should have detailed Integrated Resource Plans, which are road maps to meet forecasted energy demand on hottest and coldest days, using both supply-side and demand-side resources to ensure reliable service to customers in the most cost-effective way. Rather than depending on an RTO or ISO, which might not be within their control and which might be influenced by special interests not aligned with the state, states should require their utilities or providers to be able to supply this power.

As Table 1 shows, states that have their own systems have lower than average prices.

Spurring Domestic and Non-Chinese Production

America should:

8. Expand Production of Commercial Uranium Enrichment. For America to free itself from the Chinese handcuffs of renewable energy sources, it should pursue an expansion of the domestic civilian nuclear capacity. To do so, the federal government will have to ease restrictions on private companies from building and operating commercial nuclear facilities.

First, the regulatory process for expanding, building, and operating new domestic low-enriched uranium (LEU) capacity should be streamlined. Private companies have been safely building and operating commercial enrichment facilities worldwide for decades, and they should be allowed to expand U.S. capacity with as little interference from Washington as possible, including for the high-assay low-enriched uranium (HALEU) that is required for some advanced reactors.[21]

Second, the U.S. should expand domestic nuclear fuel capacity. There are challenges ahead. President Joe Biden recently signed into law the bipartisan Prohibiting Russian Uranium Imports Act.[22] The legislation has three key parts: (1) It bans the import of LEU from Russia or any Russian entity; (2) it prevents black market imports by banning LEU that "is determined to have been exchanged with, swapped for, or otherwise obtained" to circumvent the ban; and (3) it is in effect until 2040.[23]

A long-term ban is critical because investors will not expand capacity to make up for Russian supply if the ban can be terminated or waived, making low-cost Russian LEU available again to U.S. buyers. While growing demand for non-Russian uranium fuel had already prompted America's sole domestic commercial enricher to expand capacity, a long-term ban on Russian imports is necessary to provide the market certainty required to justify investment in a broader expansion in the sector.

An additional concern is the abuse of the waiver process that the Prohibiting Russian Uranium Imports Act establishes to allow some Russian imports through 2027 under certain conditions.[24] While a waiver process may be necessary in specific cases, waivers must not be granted unless there is no alternate source for the LEU. One such waiver has already been granted.[25] Little information is available on how the waiver request meets the law's requirements.[26] To ensure the law's integrity, Congress should demand a full justification from the Department of Energy about any decisions to grant waivers.

9. Wean U.S. Industry Off Chinese Products and Spur Reshoring or Nearshoring. Future Administrations must use the power of the executive to deal harshly with overt machinations by China to dominate key industries with national security implications. Increasing tariffs in response to unfair practices will signal to other nations and to international companies the country's continued willingness to resolutely hold China accountable for its behavior.

While there are appropriate uses for tariffs—and the U.S. does need to pursue strategic decoupling from China to reduce its dependence on Chinese imports in sensitive sectors—the Biden Administration's new policies fail to hit the target.

As a general economic principle, for those goods and imports the U.S. seeks to phase out from China, outright bans or graduated quotas are generally preferable to tariffs. On the import of Chinese EVs, for example, The Heritage Foundation has argued for full-blown import ban.[27]

In cases where there are not currently viable alternatives to Chinese imports, imposing quotas for Chinese imports and then gradually decreasing these quotas would incentivize a shift toward alternative suppliers or domestic manufacturers.

In cases where tariffs are preferable to bans and quotas, they must be imposed on end-user products and not intermediate goods or critical supply components. Equally important, they cannot be guided more by political calculations than economic conditions, and they cannot be undermined by counterproductive domestic policies in other areas.

For example, several of the tariffs unveiled by the Biden Administration will not take effect for several years and were designed to avoid affecting the 2024 election while kicking the can of responsibility down the road to a future Administration.

Pursued in smart and targeted ways, tariffs can be a part of the overall policy toolkit for rebalancing America's distorted economic relationship with China. But rarely are they preferable to bans and quotas, and they must always be complemented through sound domestic policies and free from political calculations if they are to serve the American people and advance American interests.

10. Expand Memoranda of Understanding and Trade Agreements with Countries in Africa and Latin America to Secure Fair Market Access to Their Resources. Beyond developing U.S. domestic resources, America can more rapidly decouple from China by diversifying its supply chains for these critical minerals to countries with supplies of critical minerals, such as **Angola,** the Democratic Republic of the Congo, Malawi, Mozambique, Namibia, and South Africa. America should not allow China to dominate countries in Africa and Latin America with false promises, no economic gain for these countries, and unfair, disadvantageous, and exploitative conditions because these countries sell their resources to China rather than to the United States.

11. Establish a Short Phase-On Plan that Identifies Which Foreign-Produced Energy Infrastructure Equipment Must Be Completely Excluded from the U.S., and What Must Be Manufactured Domestically, on National Security Grounds. The Administration must establish import prohibitions for the former, including Chinese-manufactured power transmission and storage equipment.

The specific types of equipment in this category would have to be a National Security Council initiative, where equipment was identified by the Departments of Commerce, the Treasury, Energy, and Defense, in consultation with industry representatives. When Congress passed a law requiring certain levels of domestic content in EVs to allow the vehicles to qualify for tax credits, the Treasury Department received many complaints that the standards were too onerous. The Treasury Department was pressured into allowing individuals to lease EVs without any domestic content requirement, on the grounds that these were commercial vehicles.

Phasing out technologies should be gradual, so that American firms do not go out of business due to this action.

12. Rebuild the American Maritime Industrial Sector to Ensure Access to Strategic Materials Beyond China's Control or Leverage, While Ensuring Ability to Supply Allies with American Energy. This policy is premised on the U.S. regaining a comparative advantage through a revolution in shipping. China plans to lead in the global maritime sector, and for strategic and military reasons to focus on shipbuilding. That objective was ensconced in a 1998 policy white paper, which informed CCP focus on a range of commercial maritime industries to take a leading position in global shipbuilding eight years later in 2006.[28] A copy of this CCP-led effort is not envisioned or needed, but a concerted effort to regain American competitiveness in shipbuilding can be achieved in a decade, regaining the capacity to build and sustain the nation's economy and a Navy that deters China. Rather than working within existing business models, a "blue ocean strategy" is needed—a revolutionary rethinking of logistics integrating a range of innovations and technologies in a novel intermodal approach—that could usher in a new era of shipping.[29] The nation is well positioned for leadership in such an approach.

Targeting China's Malicious Practices

The Administration should:

13. Leverage America's Position at the World Trade Organization (WTO) to Change Rules About Self-Determined Developing Nation Status. The WTO must be reformed to accurately reflect the economic development of its members, starting with China. Indeed, it was a failure of previous U.S. Administrations to agree to admit non-market economies and autocracies, such as China, into the WTO.

The WTO should return to its focus on negotiations between parties as a basis for dispute resolution, not unaccountable and biased appointees expanding their power through an internationalist version of judicial activism. Former U.S. Trade Representative Ambassador Robert Lighthizer is correct when he recommends that the Appellate Body (AB) of the WTO be "scrapped" and replaced with a fair dispute settlement system based on commercial arbitration.[30]

The Office of the United States Trade Representative (USTR) clearly articulated the WTO AB's failure to comply with WTO agreements when it published its "Report on the Appellate Body of the World Trade Organization" in 2020.[31] In essence, the AB has failed to apply WTO rules in a way that "adheres strictly to the texts of those agreements."[32]

The USTR highlighted numerous examples of how the AB altered member states' rights and obligations through "numerous erroneous interpretations of WTO agreements."[33] In other words, the AB judges engaged in judicial activism by expanding the AB powers beyond the scope of the treaties to which that the U.S. had agreed. The AB was intended to interpret existing treaties, not to create new laws and obligations binding on member states.

These failures have not been rectified, even after years of U.S. objections. In fact, the AB's failures have magnified the shortcomings of the WTO as a whole, because the AB effectively supplanted the WTO's negotiating function when America's trade competitors realized that they were better off focusing on litigation rather than on negotiations.

14. Prohibit Taxpayer Dollars from Being Used for Chinese-Manufactured Renewable Energy Products Tainted by Forced Labor. Forced labor remains a central component of the CCP's ongoing genocide against the Uyghurs in Xinjiang.[34] Labor from Uyghurs is endemic in global supply chains of renewable energy products. Chinese companies operating in Xinjiang account for 35 percent of global polysilicon production, a key input for solar panel production.[35] In addition, inputs for China's battery production come from Xinjiang.

China must also be held accountable for its other persistent human right violations, including the exploitation of forced labor and its calculated investments in South Asia and Mexico aimed at circumventing the Uyghur Forced Labor Prevention Act (UFLPA).[36] These secondary manufacturing or assembly and repackaging schemes, highlight the CCP's ongoing efforts to avoid meaningful compliance with international trade standards. Rather than adhering to its commitments under the WTO or fulfilling obligations in bilateral or multilateral trade agreements, China continues to obscure its practices, seeking ways to bypass scrutiny and dodge the consequences of its unfair trade behavior and present and future tariffs.

The United States should adopt a zero-tolerance policy for forced labor in the supply chains of renewable energy products—for the government's own agencies, as well as for U.S.-supported international institutions, such as the World Bank and the Asian Development Bank. No taxpayer dollars should be handed over to entities helping to fund the genocide of Uyghurs, and U.S. citizens should not be asked to pay for Chinese slave labor products that are illegal in the United States.

15. Ban the Import of Chinese EVs. China produces 66 percent of EVs, compared to 22 percent and 10 percent produced in Europe and the United States, respectively.[37] The CCP has subsidized its domestic EV market by $28 billion between 2009 and 2020 and plans to spend another $72 billion between 2023 and 2026.[38] These subsidies include sales tax exemptions, R&D grants, and infrastructure subsidies. Many Chinese companies were incentivized to enter the battery industry because of these subsidies.

Chinese EVs have the potential to send data back to China and spy on Americans.[39] EVs could go anywhere, including military bases, power plants, and cellphone towers. EVs would be far more effective than spy balloons at collecting important data, and at far lower cost—because Americans would be purchasing these vehicles. For similar security reasons, the U.S. Federal Communications Commission banned Huawei and ZTE technology in 2022.[40]

Chinese EVs would hand the CCP an unprecedented trove of Americans' personal data.[41] When people buy cars, they provide addresses as well as driver's license, credit card, and insurance information. If people get loans, the company can access credit history, including mortgages, other loans, and additional credit cards. America should not hand this personal sensitive data to the CCP.

The CCP controls all major Chinese companies, and America should not join the global rush to give the CCP power over a vital economic sector. Indeed, America should ban the sale of Chinese EVs—both those made in China and those made in other countries, such as Mexico. China should not be able to abuse the United States–Mexico–Canada Agreement (USMCA) to circumvent U.S. tariffs through production in Mexico. The U.S. government can weaponize USMCA Article 32.2—which deals with essential security.

Rolling Back Mandates

Congress and state lawmakers should:

16. Roll Back Mandates for Renewable Energy at the Federal and State Levels. The Biden-Harris Administration has put in place policies to reduce mineral extraction, domestic oil and gas production, and encourage wind and solar power production through Environmental Protection Agency (EPA) and Department of Energy regulations, monument designations, and climate czars in multiple agencies.[42] These should all be reversed.

On President Biden's first day in office, through executive order, he limited offshore drilling, enlarged boundaries of national monuments, and prohibited construction of the Keystone XL pipeline.[43] These decisions can be rolled back through executive order, which can then form the basis for legislation to provide private industry with more confidence in large projects going forward. The Biden-Harris Administration has appointed climate officials in each agency who focus on reducing the use of fossil fuels and slowing natural gas infrastructure.[44] A new Administration should eliminate these positions.

At the Securities and Exchange Commission (SEC), new climate regulations required companies to disclose climate effects of their operations; these rules were put on hold by the New Orleans-based 5th U.S. Circuit Court of Appeals in March.[45] The Department of Justice should not fight the legal challenge to these rules.

The climate czar at the Office of the Comptroller of the Currency wants to force banks to disclose loans to companies that have climate effects. This disclosure requirement is likely illegal, like the SEC rule, and should be eliminated. The Biden-Harris Administration stopped new exports of liquid natural gas (LNG) from a terminal in Louisiana before the stop was halted in July 2024 by U.S. District Judge James Cain, Jr. The Biden-Harris Administration's focus on sustainability not only directly harms exporters who want to use this terminal but also increases carbon-dioxide emissions, because LNG is a substitute for coal. The ability to find these foreign markets would motivate greater natural gas production, thereby simultaneously adding production for domestic use as well, which would help to promote U.S. energy independence at the same time.

The White House is appealing Judge Cain's decision.[46] The Department of Justice should drop the appeal.

17. End Mandates for Electric Cars and Trucks. The Biden-Harris Administration has put into place new regulations on automobile emissions from the EPA and the U.S. Department of Transportation that would require 70 percent of new car sales to be battery-powered electric or plug-in hybrid by 2032, compared to 7 percent sold in 2023—for no environmental benefit.[47]

Electric vehicles suit some people, but they are not for everyone. They cost more, take one or two hours to charge, and lose battery range in hot and cold climates.[48] Most important, they increase America's dependence on China, which makes 80 percent of the world's batteries and controls 60 percent of the critical minerals used to make the batteries.[49]

With the Biden-Harris EV rule, Americans will not only have to buy more Chinese batteries and components but will also have to pay higher electricity bills and transportation costs. This will, in turn, exacerbate inflation, drive manufacturing offshore, and increase unemployment—lowering gross domestic product growth and disproportionately hurting the poor, farmers, and small business. The EV mandate distorts choice of vehicles, increases the prices of all cars, and destroys jobs in the auto industry, parts industry, and at repair shops.

18. End Zero-Emissions-Vehicle (ZEV) Mandates Through Legislation. Auto companies that do not sell EVs in sufficient quantities in California and other states that have voluntarily joined the California Air Resources Board regulations must purchase ZEV credits from companies that sell sufficient numbers of cars.[50] This mandate increases the price of gasoline-powered vehicles, making them less affordable, and subsidizes EVs. This rule encourages more vehicles with Chinese components to be sold and fewer vehicles with American components. It raises prices of cars, disproportionately hurting poor people, farmers, and small businesses.

In the 1970s Congress did not allow states to place separate requirements for cars covered by the federal rules.[51] This was meant to stop one state from imposing its will on other states.[52] Congress gave California an exception to this rule due to problems with smog in Los Angeles.[53] But the Biden-Harris Administration's EPA has given California a special waiver from pre-emption under the Clean Air Act not for smog, but for climate-change reasons.[54] This goes beyond congressional intent. Congress should repeal the California waiver, and automakers should not have to purchase credits for artificially high targets for EV sales.

Conclusion

There is growing recognition that the economic engagement strategy with China that the U.S. has pursued for decades has failed. Embracing China with free trade and investment flows was designed to produce growth, which would in theory spawn greater political liberalization and foreign policy moderation. It did the opposite.

As China has grown richer, it has only grown more aggressive abroad, more repressive at home, and more determined to replace the U.S. as the world's pre-eminent power. Rather than liberalizing China, engagement has empowered America's principal adversary and exposed its economy and its citizens to predatory Chinese policies that have harmed their security and prosperity.

There is now widespread recognition that the U.S.–China relationship must be rebalanced, and that Beijing's predatory practices must be addressed. To ensure that America does not abdicate its natural advantage in the energy sector and voluntarily get caught in China's green energy handcuffs, it must advance and implement policy solutions that protect the U.S. homeland, safeguard the U.S. economy, and mitigate U.S. reliance on China's economy.

Endnotes

1. Kevin D. Dayaratna, Katie Tubb, and David Kreutzer, "The Unsustainable Costs of President Biden's Climate Agenda," Heritage Foundation *Backgrounder* No. 3713, June 16, 2022, https://www.heritage.org/sites/default/files/2022-06/BG3713_0.pdf.
2. The White House, "Fact Sheet: President Biden Takes Action to Protect American Workers and Businesses from China's Unfair Trade Practices," May 14, 2024, https://www.whitehouse.gov/briefing-room/statements-releases/2024/05/14/fact-sheet-president-biden-takes-action-to-protect-american-workers-and-businesses-from-chinas-unfair-trade-practices/ (accessed August 8, 2024).
3. Brett Fortnam, "USTR Amends Timing, Rates in Final Modifications of China Tariffs," Inside U.S. Trade, September 13, 2024, https://insidetrade.com/daily-news/ustr-amends-timing-rates-final-modifications-china-tariffs (accessed September 13, 2024).
4. U.S. Energy Information Administration, "Natural Gas Explained," https://www.eia.gov/energyexplained/natural-gas/imports-and-exports.php (accessed August 23, 2024).
5. Mario Loyola, "Global Infrastructure Permitting: Survey of Best Practices," Loyola Associates, The Permitting Institute, and the Competitive Enterprise Institute, June 2023, https://cei.org/wp-content/uploads/2023/07/Global-Infrastructure-Permitting.pdf (accessed September 4, 2024).
6. Ibid.
7. Madeline Geocaris, "A Decade of Transformation: What We Have Learned Since RE Futures Showed What Was Possible," National Renewable Energy Laboratory, June 6, 2022, https://www.nrel.gov/news/features/2022/re-futures.html (accessed September 4, 2024).
8. John Jacobs, Lesley Jantarasami, and Xan Fishman, "Licensing and Permitting Reforms to Accelerate Nuclear Energy Deployment," Bipartisan Policy Center, January 2024, https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2024/01/BPC_Nuclear-Permit-License-Reform-Issue-Brief.pdf (accessed September 13, 2024), and Blake Deeley, "U.S. Permitting Delays Hold Back Economy, Cost Jobs," American Clean Power Association, April 2024, https://cleanpower.org/wp-content/uploads/gateway/2024/04/ACP-Pass-Permitting-Reform_Fact-Sheet.pdf (accessed September 15, 2024).
9. Goldman Sachs, "The US Is Poised for an Energy Revolution," April 17, 2023, https://www.goldmansachs.com/insights/articles/the-us-is-poised-for-an-energy-revolution (accessed September 4, 2024), and Arik Levinson et al., "The Inflation Reduction Act's Benefits and Costs," U.S. Department of the Treasury, March 1, 2024, https://home.treasury.gov/news/featured-stories/the-inflation-reduction-acts-benefits-and-costs (accessed September 4, 2024).
10. H.R. 5376, Inflation Reduction Act of 2022, 117th Congress (2021–2022), https://www.congress.gov/bill/117th-congress/house-bill/5376 (accessed September 3, 2024).
11. S. 512, An Act to Modernize the Regulation of Nuclear Energy, 115th Congress (2017–2018), January 14, 2019, https://www.congress.gov/bill/115th-congress/senate-bill/512/text (accessed September 4, 2024).
12. S. 870, A Bill to Authorize Appropriations for the United States Fire Administration and Firefighter Assistance Grant Programs, to Advance the Benefits of Nuclear Energy, and for Other Purposes, 118th Congress (2023–2024), https://www.congress.gov/bill/118th-congress/senate-bill/870/text (accessed September 4, 2024).
13. Joanne Liou, "What Are Small Modular Reactors (SMRs)?" International Atomic Energy Agency, September 13, 2023, https://www.iaea.org/newscenter/news/what-are-small-modular-reactors-smrs (accessed September 4, 2024).
14. S&P Global, "China's Global Reach Grows Behind Critical Minerals," August 17, 2023, pp. 3 and 4, https://www.spglobal.com/content/dam/spglobal/corporate/en/images/general/special-editorial/083123-china-s-global-reach-grows-behind-critical-minerals.pdf (accessed September 13, 2024).
15. International Energy Agency, "The Role of Critical Minerals in Clean Energy Transitions," March 2022, p. 131, https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf (accessed September 4, 2024).
16. News release, "Biden–Harris Administration Takes Steps to Protect Tribal Subsistence, Vital Ecosystems in Alaska," U.S. Department of the Interior, June 28, 2024, https://www.doi.gov/pressreleases/biden-harris-administration-takes-steps-protect-tribal-subsistence-vital-ecosystems (accessed September 4, 2024), and U.S. Department of the Interior, Bureau of Land Management, "Notice of Availability of the Ambler Road Final Supplemental Environmental Impact Statement, Alaska," *Federal Register,* Vol. 89, No. 82 (April 24, 2024), https://www.govinfo.gov/content/pkg/FR-2024-04-26/pdf/2024-08965.pdf (accessed September 4, 2024).
17. Environmental Protection Agency, "Final Determination to Prohibit the Specification of and Restrict the Use for Specification of Certain Waters Within Defined Areas as Disposal Sites; Pebble Deposit Area, Southwest Alaska," *Federal Register*, Vol. 88, No. 23 (February 3, 2023), pp. 7441–7443, https://www.govinfo.gov/content/pkg/FR-2023-02-03/pdf/2023-02287.pdf (accessed September 4, 2024); *Twin Metals Minnesota LLC. v. United States of America*, Case No. 22-cv-2506 D.C. Circ. (2023), Memorandum Opinion, p. 1, https://www.elr.info/sites/default/files/files-pdf/53.20145.pdf (accessed September 4, 2024); and Tera Fong, "Overview of EPA's Clean Water Act Section 401(a)(2) Evaluation and Recommendations on Fond du Lac Band's Objection to the Proposed Clean Water Act Section 404 Permit for the NorthMet Mine Project," U.S. Environmental Protection Agency, May 3, 2022, pp. 3–6 and 15, https://www.epa.gov/system/files/documents/2022-05/Presentation%20on%20EPA%E2%80%99s%20Evaluation%20and%20Recommendations1.pdf (accessed September 4, 2024).

18. President Joseph R. Biden, Jr., "Establishment of the Baaj Nwaavjo I'tah Kukveni Ancestral Footprints of the Grand Canyon National Monument," *Federal Register,* Vol. 88, No. 156 (August 15, 2023), pp. 55331–55344, https://www.govinfo.gov/content/pkg/FR-2023-08-15/pdf/2023-17628.pdf (accessed September 4, 2024).
19. Federal Energy Regulatory Commission, Order No. 2000, December 20, 1999, https://www.ferc.gov/sites/default/files/2020-06/RM99-2-00K_1.pdf (accessed September 13, 2024).
20. Federal Energy Regulatory Commission, "PJM," https://www.ferc.gov/industries-data/electric/electric-power-markets/pjm (accessed September 13, 2024).
21. World Nuclear Association, "Uranium Enrichment," October 11, 2022, https://world-nuclear.org/information-library/nuclear-fuel-cycle/conversion-enrichment-and-fabrication/uranium-enrichment (accessed September 13, 2024).
22. H.R. 1042, Prohibiting Russian Uranium Imports Act, 118th Congress (2023-2024), https://www.congress.gov/bill/118th-congress/house-bill/1042 (accessed September 4, 2024).
23. Ibid.
24. Jack Spencer and C. J. Milmoe, "Ban on Russian Uranium Is a Good Start, But More Must Be Done," Heritage Foundation *Commentary*, June 13, 2024, https://www.heritage.org/nuclear-energy/commentary/ban-russian-uranium-good-start-more-must-be-done.
25. William Freebairn, "DOE Allows Nuclear Company Centrus to Import Russian Uranium in 2024–25," S&P Global, July 19, 2024, https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/electric-power/071924-doe-allows-nuclear-company-centrus-to-import-russian-uranium-in-2024-25 (accessed September 13, 2024).
26. Centrus Energy Corp, "Form 8-K Current Report," U.S. Securities and Exchange Commission, July 18, 2024, https://investors.centrusenergy.com/static-files/9799b52f-4f99-4853-b41d-a833e394b314 (accessed September 15, 2024).
27. Diana Furchtgott-Roth, "America Should Ban Chinese EVs," Heritage Foundation *Commentary*, February 16, 2024, https://www.heritage.org/trade/commentary/america-should-ban-chinese-evs.
28. Information Office of the State Council of the People's Republic of China, "The Development of China's Marine Programs," 1998, https://policy.asiapacificenergy.org/sites/default/files/White%20Paper-%20The%20Development%20of%20China%E2%80%99s%20Marine%20Programs%20%28EN%29.pdf (accessed September 4, 2024).
29. Brent D. Sadler and Peter St. Onge, "Regaining U.S. Maritime Power Requires a Revolution in Shipping," Heritage Foundation *Special Report* No. 272, May 15, 2023, https://www.heritage.org/sites/default/files/2023-05/SR272.pdf.
30. Robert Lighthizer, *No Trade Is Free: Changing Course, Taking on China, and Helping America's Workers* (New York: Broadside Books, 2023).
31. Robert E. Lighthizer, "Report on the Appellate Body of the World Trade Organization," Office of the United States Trade Representative, February 2020, https://ustr.gov/sites/default/files/Report_on_the_Appellate_Body_of_the_World_Trade_Organization.pdf (accessed September 4, 2024).
32. Ibid., p. 121.
33. Ibid., p. 120.
34. The Select Committee on the Chinese Communist Party, "The Chinese Communist Party's Ongoing Uyghur Genocide: Policy Recommendations," May, 24, 2023, https://docs.house.gov/meetings/ZS/ZS00/20230524/116035/HRPT-118-1.pdf (accessed September 4, 2024).
35. Alan Crawford and Laura T. Murphy, "Over-Exposed: Uyghur Region Exposure Assessment for Solar Industry Sourcing," Sheffield Hallam University Helena Kennedy Centre for International Justice, November 2023, https://www.shu.ac.uk/helena-kennedy-centre-international-justice/research-and-projects/all-projects/over-exposed (accessed September 4, 2024).
36. H.R. 6256, To Ensure That Goods Made with Forced Labor in the Xinjiang Uyghur Autonomous Region of the People's Republic of China Do Not Enter the United States Market, and for Other Purposes, 117th Congress (2021–2022), https://www.congress.gov/bill/117th-congress/house-bill/6256 (accessed September 4, 2024).
37. Ilma Fadhil and Chang Shen, "Electric Vehicles Market Monitor for Light-Duty Vehicles: China, Europe, United States, and India, 2023," The International Council on Clean Transportation, May 2024, https://theicct.org/wp-content/uploads/2024/05/ID-147-%E2%80%93-Major-Markets-2023_final.pdf (accessed September 5, 2024).
38. Chinese Ministry of Finance, "Announcement on Continuing and Optimizing the Vehicle Purchase Tax reduction and Exemption Policy for New Energy Vehicles," Joint Statement, http://szs.mof.gov.cn/zhengcefabu/202306/t20230620_3891500.htm (accessed September 10, 2024).
39. The White House, "Statement from President Biden on Addressing National Security Risks to the U.S. Auto Industry," February 29, 2024, https://www.whitehouse.gov/briefing-room/statements-releases/2024/02/29/statement-from-president-biden-on-addressing-national-security-risks-to-the-u-s-auto-industry/ (accessed September 18, 2024).
40. Federal Communications Commission, "Report and Order, Order, and Further Notice of Proposed Rulemaking," November 25, 2022, https://docs.fcc.gov/public/attachments/FCC-22-84A1.pdf (accessed September 20, 2024).
41. Diana Furchtgott-Roth, "America Should Ban Chinese EVs," Heritage Foundation *Commentary*, February 16, 2024, https://www.heritage.org/trade/commentary/america-should-ban-chinese-evs.

42. Jael Holzman and Hannah Northey, "Biden Wants Minerals, But Mine Permitting Lags," E&E News, August 9, 2022, https://www.eenews.net/articles/biden-wants-minerals-but-mine-permitting-lags/ (accessed September 13, 2024); Heather Richards, "3 Ways Biden Reshaped Oil Drilling on Public Lands," E&E News, July 30, 2024, https://www.eenews.net/articles/3-ways-biden-reshaped-oil-drilling-on-public-lands/ (accessed September 13, 2024); H.R. 5376, Inflation Reduction Act of 2022, 117th Congress (2021–2022), https://www.congress.gov/bill/117th-congress/house-bill/5376 (accessed September 3, 2024); The White House, "Fact Sheet: President Biden Expands San Gabriel Mountains National Monument and Berryessa Snow Mountain National Monument," May 2, 2024, https://www.whitehouse.gov/briefing-room/statements-releases/2024/05/02/fact-sheet-president-biden-expands-san-gabriel-mountains-national-monument-and-berryessa-snow-mountain-national-monument/ (accessed September 3, 2024); and The White House, "President Biden's Historic Climate Agenda," https://www.whitehouse.gov/climate/ (accessed August 7, 2024).

43. President Joseph R. Biden, Jr., "Executive Order 13990: Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," *Federal Register*, Vol. 86, No. 14 (January 20, 2021), https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01765.pdf (accessed September 3, 2024), and President Joseph R. Biden, Jr., "Executive Order 14008: Tackling the Climate Crisis at Home and Abroad," *Federal Register,* Vol. 86, No. 19 (January 27, 2021), https://www.govinfo.gov/content/pkg/FR-2021-02-01/pdf/2021-02177.pdf (accessed by September 3, 2024).

44. The White House, "President Biden's Historic Climate Agenda."

45. U.S. Securities and Exchange Commission, "The Enhancement and Standardization of Climate-Related Disclosures for Investors; Delay of Effective Date," *Federal Register*, Vol. 89, No. 72 (April 12, 2024), https://www.govinfo.gov/content/pkg/FR-2024-04-12/pdf/2024-07648.pdf (accessed by September 4, 2024), and Andrew Ramonas, "SEC Climate Disclosure Regulations Paused by Fifth Circuit (2)," Bloomberg Law, March 15, 2024, https://news.bloomberglaw.com/esg/sec-climate-disclosure-regulations-paused-by-fifth-circuit-court (accessed August 23, 2024).

46. Ben Lefebvre, "Biden Administration Appeals LNG Export Pause Injunction," Politico Pro, August 5, 2024, https://subscriber.politicopro.com/article/2024/08/biden-administration-appeals-lng-export-pause-injunction-00172633 (accessed September 20, 2024).

47. U.S. Environmental Protection Agency, "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles," *Federal Register*, Vol. 89, No. 76 (April 18, 2024), https://www.govinfo.gov/content/pkg/FR-2024-04-18/pdf/2024-06214.pdf (accessed September 3, 2024), and U.S. Department of Transportation, "Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027 and Beyond and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030 and Beyond," *Federal Register*, Vol. 89, No. 121 (June 24, 2024), https://www.govinfo.gov/content/pkg/FR-2024-06-24/pdf/2024-12864.pdf (accessed September 15, 2024).

48. U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, "All-Electric Vehicles," Alternative Fuels Data Center, https://afdc.energy.gov/vehicles/electric-basics-ev (accessed September 5, 2024); U.S. Department of Transportation, "Charger Types and Speeds," https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds (accessed September 5, 2024); U.S. Department of Energy, "Electric Vehicle Battery Drains," https://www.energy.gov/energysaver/electric-vehicle-battery-drains (accessed September 5, 2024); and Andrew Garberson and Blake Hough, "Study: Summer & Hot Weather on Electric Car Range," Recurrent, https://www.recurrentauto.com/research/what-a-c-does-to-your-range (accessed September 5, 2024).

49. International Energy Agency, "Batteries and Secure Energy Transitions," 2024, p. 12, https://iea.blob.core.windows.net/assets/cb39c1bf-d2b3-446d-8c35-aae6b1f3a4a0/BatteriesandSecureEnergyTransitions.pdf (accessed September 5, 2024).

50. California Air Resources Board, "The Zero Emission Vehicle (ZEV) Regulation," https://ww2.arb.ca.gov/sites/default/files/2019-06/zev_regulation_factsheet_082418_0.pdf (accessed September 3, 2024).

51. Steven G. Bradbury, "Biden's California Waiver: An Assault on Federalism," Heritage Foundation *Commentary*, January 27, 2023, https://www.heritage.org/energy-economics/commentary/bidens-california-waiver-assault-federalism.

52. Ibid.

53. Ibid.

54. Ibid.

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