



HOUSE COMMITTEE ON
NATURAL RESOURCES
CHAIRMAN BRUCE WESTERMAN

To: House Committee on Natural Resources Republican Members
From: Subcommittee on Oversight and Investigations Staff,
Michelle Lane (Michelle.Lane@mail.house.gov) and Andrew Bambrick
(Andrew.Bambrick@mail.house.gov) x5-0500
Date: Monday, May 19, 2025
Subject: Oversight Hearing titled *“Unleashing a Golden Age: Examining the Use of Federal Lands to Power American Technological Innovation”*

The Subcommittee on Oversight and Investigations will hold an oversight hearing titled *“Unleashing a Golden Age: Examining the Use of Federal Lands to Power American Technological Innovation”* on **Wednesday, May 21, 2025, at 2:00 p.m. in 1324 Longworth House Office Building.**

Member offices are requested to notify Jace McNaught (Jace.McNaught@mail.house.gov) by 4:30 p.m. on May 20 if their Member intends to participate in the hearing.

I. KEY MESSAGES

- Throughout America’s history, technological innovations—from the first light bulb to the internet—have powered our nation forward. Access to reliable energy, in all its forms, is an essential component of innovation.
- Today, America finds itself at the precipice of a new technological revolution, with artificial intelligence (AI), cryptocurrency, and data centers spawning a massive innovation in technology.
- Prior technological revolutions that have both created efficiencies and transformed our standard of living required immense power input. Today’s innovative technologies are no different.
- As energy demand in the U.S. experiences its highest growth rate in over two decades, largely due to an ongoing technology revolution, our domestic supply of natural resources has the power to meet that demand.
- While the U.S. is a leader in these innovative technologies, cumbersome permitting processes, a lack of reliable energy infrastructure, and a push by environmental groups to ignore traditional energy resources threaten America’s leadership.
- Foreign entities, such as China, are working to surpass the United States by developing AI and data processing capabilities that will exceed those of the United States, barring policy changes that permit the unleashing of America’s natural resources.

II. WITNESSES

- **Ms. Paige Lambermont**, Research Fellow, Competitive Enterprise Institute, Washington, D.C.
- **Ms. Emily Arthun**, CEO, American Coal Council, Gillette, WY
- **Mr. Greg Osuri**, Founder and CEO, Akash Network and Overclock Labs, Austin, TX
- **Mr. Kyle Hart**, Mid-Atlantic Program Manager, National Parks Conservation Association, Washington, D.C. (*Minority witness*)

III. BACKGROUND

Energy Production and Demand in the New Age of Technology Innovation

Today's pace of technological advancement is staggering. Scientists estimate that approximately 2.4 million years passed between the first use of tools and the control of fire for cooking and heat by our ancestors.¹ Nearly 60,000 years passed between the invention of the bow and arrow and gunpowder.² The inventions of paper and the printing press are separated by 1,500 years.³ More recently, a mere 66 years passed between the first human flight and the successful U.S. moon landing.⁴ And though the internet's first web browser and website were only released in 1991, many children now use smartphones capable of immense computing before they reach the age of 12.⁵ Astonishingly, today's developments in emerging technologies like artificial intelligence and blockchain are measured not in years, but in months and weeks.

Although each technological leap made specific tasks or industries more efficient, each leap forward was accompanied by exponential increases in energy demand. For example, the invention of automobiles built via assembly lines undoubtedly made daily movement more efficient than horse-powered travel, but drove skyrocketing demand for fuel. Similarly, the modern cellphone weighs about 5.5 ounces compared to the 70-pound computer that powered the Apollo mission to the moon, while possessing approximately 2,800 times more processing power.⁶ Today there are now many more smartphones than people in the world and the energy demand to produce, use, charge, and dispose of these devices dwarfs that of the 1960s and 1970s.⁷ This trend of increased energy demand is only accelerating as the pace of advancement increases. In fact, the energy demands of AI programs, data centers, and cryptocurrencies are so large, that they can only be described as "insatiable."⁸

¹ See Max Roser, *Technology over the long run: zoom out to see how dramatically the world can change within a lifetime*, OUR WORLD IN DATA (Feb. 22, 2023), <https://ourworldindata.org/technology-long-run>.

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ *Id.*; see also Erin Digitale, *Age that kids acquire mobile phones not linked to well-being, says Stanford Medicine study*, STANFORD MEDICINE NEWS CENTER (Nov. 21, 2022), <https://med.stanford.edu/news/all-news/2022/11/children-mobile-phone-age.html#:~:text=The%20average%20age%20at%20which,was%20best%20for%20their%20child>.

⁶ Dwight Silverman, *Your smartphone is light years ahead of NASA computers that guided Apollo moon landings*, HOUSTON CHRONICLE (May 13, 2019), <https://www.houstonchronicle.com/local/space/mission-moon/article/Your-smartphone-is-light-years-ahead-of-NASA-13757565.php>.

⁷ See Felix Richter, *Charted: There are more mobile phones than people in the world*, WORLD ECONOMIC FORUM (Apr. 11, 2023), <https://www.weforum.org/stories/2023/04/charted-there-are-more-phones-than-people-in-the-world/>.

⁸ See Steven Woo, *Addressing AI's Insatiable Demand for Power*, FORBES (Oct. 3, 2024), <https://www.forbes.com/councils/forbestechcouncil/2024/10/03/addressing-ais-insatiable-demand-for-power/>.

Recognizing this reality, Republicans in Congress and President Trump have moved to unleash a golden age of American energy dominance by increasing energy exploration and production, especially on federal lands and waters, to power U.S. technological advancement and superiority.

Recent Executive Actions

Since taking office in January 2025, President Trump has recognized that the new age of technological innovation flourishing in the United States requires an immense and reliable power supply. On January 20, 2025, President Trump issued Executive Order (EO) 14156, “Declaring a National Emergency,” which declared a national energy emergency and directed agencies to establish a reliable, diverse, and affordable energy supply, including on federal lands.⁹ That same day, President Trump also issued EOs 14154,¹⁰ “Unleashing American Energy”, and 14153,¹¹ “Unleashing Alaska’s Extraordinary Resource Potential,” both of which served to unlock energy resources to solve our nation’s energy emergency. Additionally, to underscore the importance of American critical and other hardrock mineral production to energy independence and dominance, President Trump issued three more EOs: 14220, Addressing the Threat to National Security From Imports of Copper;¹² 14241, Immediate Measures To Increase American Mineral Production;¹³ and 14285, Unleashing America's Offshore Critical Minerals and Resources.¹⁴ Moreover, to most effectively ensure that our natural resources are being developed and produced, President Trump issued EO 14213, Establishing the National Energy Dominance Council.¹⁵ Finally, recognizing the importance of emerging technologies, President Trump issued EO 14179, “Removing Barriers to American Leadership in Artificial Intelligence”, which directed the Assistant to the President for Science and Technology, the Special Advisor for AI and Crypto, and the Assistant to the President for National Security Affairs to develop an action to help enhance America’s global leadership in AI innovation and dominance.¹⁶ Together, these orders reflect the reality that rapidly emerging technologies, like AI, decentralized cryptocurrencies, data processing centers, and microchips, will revolutionize the world while requiring a greater amount of baseload fuel sources to power the growing power demand for these innovations.¹⁷

⁹ See Exec. Order No. 14156, 90 Fed. Reg. 8433 (Jan. 20, 2025), <https://www.federalregister.gov/documents/2025/01/29/2025-02003/declaring-a-national-energy-emergency>.

¹⁰ See Exec. Order No. 14154, 90 Fed. Reg. 8353 (Jan. 20, 2025), <https://www.federalregister.gov/documents/2025/01/29/2025-01956/unleashing-american-energy>.

¹¹ See Exec. Order No. 14153, 90 Fed. Reg. 8347 (Jan. 20, 2025), <https://www.federalregister.gov/documents/2025/01/29/2025-01955/unleashing-alaskas-extraordinary-resource-potential>.

¹² See Exec. Order No. 14220, 90 Fed. Reg. 11001 (Feb. 25, 2025), <https://www.federalregister.gov/documents/2025/02/28/2025-03439/addressing-the-threat-to-national-security-from-imports-of-copper>.

¹³ See Exec. Order No. 14241, 90 Fed. Reg. 13673 (Mar. 20, 2025), <https://www.federalregister.gov/documents/2025/03/25/2025-05212/immediate-measures-to-increase-american-mineral-production>.

¹⁴ See Exec. Order No. 14285, 90 Fed. Reg. 17735 (Apr. 24, 2025), <https://www.federalregister.gov/documents/2025/04/29/2025-07470/unleashing-americas-offshore-critical-minerals-and-resources>.

¹⁵ See Exec. Order No. 14213, 90 Fed. Reg. 9945 (Feb. 14, 2025), <https://www.federalregister.gov/documents/2025/02/20/2025-02928/establishing-the-national-energy-dominance-council>.

¹⁶ See Exec. Order No. 14179, 90 Fed. Reg. 8741 (Jan. 31, 2025), <https://www.federalregister.gov/documents/2025/01/31/2025-02172/removing-barriers-to-american-leadership-in-artificial-intelligence#page-0>.

¹⁷ Media Relations, *Berkeley Lab Report Evaluates Increase in Electricity Demand from Data Centers*, BERKELEY LAB (Jan. 15, 2025), <https://newscenter.lbl.gov/2025/01/15/berkeley-lab-report-evaluates-increase-in-electricity-demand-from-data-centers/>.

report found that data centers “consumed about 4.4% of total U.S. electricity in 2023, and, depending upon how much the rest of the economy grows, are expected to consume between 6.7 and 12% of total U.S. electricity by 2028.”²⁷

As more data centers operate to support AI servers, the need for reliable power will only increase. The Energy Policy Research Foundation calculated that the projected power needs for the 407 data centers that are either planned or under construction will require 19,270 megawatts to operate.²⁸ This energy demand will power not only the servers but also the storage systems, routers, and other components needed to ensure a seamless transfer of data and connectivity.²⁹

- *Semiconductors*: Semiconductors are “fundamental to nearly all modern industrial and national security activities, and they are essential building blocks of other emerging technologies, such as AI, autonomous systems, 5G communications, and quantum computing.”³⁰ The semiconductor industry, and the advanced chips they produce, power everything from the digital devices we rely on to cars and home appliances. Global supply chain shortages, due to a lack of critical hardrock minerals, continue to threaten this industry,³¹ which relies on a steady supply of copper, cobalt, and lithium.³² However, the actions of the Biden administration made sourcing needed materials here at home even more difficult due in large part to obstructionist environmental policies, increasing our reliance on foreign sources, particularly from China, who operates a state supported and market scale industry.³³

Facing the Challenges of Rising Energy Needs

As the race for technological supremacy heats up, the United States’ leadership is at risk of dwindling due to an inability to meet growing domestic power demands. These challenges include a lack of reliable energy infrastructure and an antiquated permitting regime, among others.

Lack of Reliable Energy Infrastructure

Actions pursued by the Biden Administration weakened the stability of the United States’ energy supply. For example, President Biden took deliberate actions to move the United States towards

²⁷ Media Relations, *Berkeley Lab Report Evaluates Increase in Electricity Demand from Data Centers*, BERKELEY LAB (Jan. 15, 2025), <https://newscenter.lbl.gov/2025/01/15/berkeley-lab-report-evaluates-increase-in-electricity-demand-from-data-centers/>.

²⁸ See Max Pyziur, *Chart of the Week #2024-45 U.S. Data Centers: A Provisional Summary in Two Tables* THE ENERGY POLICY RESEARCH FOUNDATION (Nov. 13, 2024), <https://eprinc.org/wp-content/uploads/2024/11/EPRINC-Chart2024-45-DataCenterDevelopmentSummary.pdf>.

²⁹ See *Powering Intelligence Analyzing Artificial Intelligence and Data Center Energy Consumption*, Electric Power Research Institute, (May 28, 2024) <https://www.epri.com/research/products/3002028905>.

³⁰ Emily G. Blevins et al., *Semiconductors and the CHIPS Act: The Global Context*, CONGRESSIONAL RESEARCH SERVICE (Sept. 28, 2023), <https://www.congress.gov/crs-product/R47558>.

³¹ *Id.*

³² See Ryan Koski, *Nvidia Founders’ Edition GPU Raw Materials Acquisition and Manufacture*, NVIDIA <https://www.designlife-cycle.com/nvidia-gpu>.

³³ Emily G. Blevins et al., *Semiconductors and the CHIPS Act: The Global Context*, CONGRESSIONAL RESEARCH SERVICE (Sept. 28, 2023), <https://www.congress.gov/crs-product/R47558>.

an exclusively renewable energy economy³⁴ by shuttering projects like the Keystone XL Pipeline³⁵ and launching a war on coal.³⁶ According to the North American Electric Reliability Corporation (NERC), over 8 gigawatts (GW) of coal power have been retired since 2023.³⁷ In addition, NERC reports an additional 83 GW of fossil-fired and nuclear generator retirements are anticipated by 2033, while 35 GW of new power will be necessary for data centers alone by 2030.³⁸

Currently, oil, natural gas, and coal together provide approximately 80% of American energy.³⁹ These energy sources provide for 40% of U.S. electric power, 32% of industrial power, and 14% of residential power.⁴⁰ Both wind and solar are weather dependent and, without reliable backup options like coal or fossil fuels, the risk of blackouts and grid failures rises exponentially.⁴¹ As Americans depend on more electricity to power their lives, the demand for power is at its highest point in two decades, while the generation capacity and associated infrastructure to meet that demand is not meeting the anticipated supply.⁴²

Permitting, NEPA, and Delayed Energy and Mineral Development

Prolonged analysis under the National Environmental Policy Act (NEPA) and constant litigation challenging the sufficiency of environmental documents have become significant barriers to all forms of energy development, causing uncertainty and deterring investment. The current permitting process is filled with repetitive assessments and lengthy processing times, making it difficult for developers to plan, finance, and build projects efficiently.⁴³

In addition, hardrock mineral development requires hundreds of millions of dollars in upfront capital due to the distinct technical challenges associated with hardrock mineral exploration and development. In the United States, exploration is followed by almost a decade of permitting under NEPA and other statutes before production begins.⁴⁴ It routinely takes over ten years and \$1 billion in start-up capital before a company produces any product in the U.S.⁴⁵ Prolonged

³⁴ See *Unleashing America's Energy and Mineral Potential*, oversight hearing before the Subcomm. on Energy and Mineral Resources (Feb. 8, 2023),

https://naturalresources.house.gov/uploadedfiles/fc_oversight_hrg_memo_unleashing_american_energy_and_minerals_02.08.23_final.pdf.

³⁵ See *Westerman, Graves, McMorris Rodgers Oppose Halting Keystone XL Pipeline Construction*, HOUSE COMM. ON NATURAL RESOURCES, (Jan. 19, 2021), <https://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=409444>

³⁶ See Rachel Frazin, *Biden crackdown on power plants expected to speed shift away from coal* THE HILL (Apr. 28, 2024), <https://thehill.com/policy/energy-environment/4625164-biden-power-plants-crackdown-coal-renewables/>

³⁷ See *2024 Long-Term Reliability Assessment*, NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION (Dec. 2024), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_Long%20Term%20Reliability%20Assessment_2024.pdf.

³⁸ *2025 Infrastructure Report Card*, INFRASTRUCTURE REPORT CARD, <https://infrastructurereportcard.org/wp-content/uploads/2025/03/Energy.pdf>.

³⁹ *The Economic Benefits of Oil & Gas*, U.S. DEPT. OF ENERGY (2020), <https://www.energy.gov/articles/economic-impact-oil-and-gas>.

⁴⁰ See *Natural gas explained Use of natural gas Basics*, ENERGY INFORMATION ADMINISTRATION (Oct. 31, 2024), <https://www.eia.gov/energyexplained/natural-gas/use-of-natural-gas.php>.

⁴¹ See *Id.*

⁴² *2024 Long-Term Reliability Assessment*, North American Electric Reliability Corporation (Dec. 2024), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_Long%20Term%20Reliability%20Assessment_2024.pdf.

⁴³ *Geothermal Rising*, Letter to Secretary Debra Haaland, March 18, 2021, <https://geothermal.org/resources/geothermal-rising-letter-addressing-geothermal-permitting-public-lands>.

⁴⁴ Briefing from the National Mining Association. March 2019.

⁴⁵ *Id.*

delays under NEPA create significant uncertainty, deterring investment in developing minerals needed for renewable energy and countless other high-tech applications.

The current United States permitting process often stifles the ability of innovative technologies to move forward and maintain a competitive global advantage. The NEPA process and other environmental statutes can often lead to unnecessary project delays.⁴⁶

A 2024 study by S&P Global found that U.S. critical mineral projects take an average of 29 years from discovery to production—the second-longest in the world.⁴⁷ U.S.-based mining projects also lose over one-third of their value due to delays during the permitting process.⁴⁸

Harnessing America's Vast Natural Resources

Despite the challenges the United States currently faces with infrastructure and permitting, steps are being taken in the right direction. One of the goals of EO 14156 is to ensure that our abundant energy resources can be used. With 1.66 trillion barrels of technically recoverable oil, 4.03 quadrillion cubic feet of technically recoverable natural gas, 470 billion short tons of technically recoverable coal,⁴⁹ and the possibilities of geothermal energy to supply our electrical grid,⁵⁰ the energy needed to unleash the ongoing technological revolution is well within our reach.

The U.S. Energy Information Administration (EIA) predicts a 50 percent increase in global energy consumption by 2050. Petroleum and other liquid fuels will remain the largest energy source, and natural gas consumption is expected to increase as well.⁵¹ Maximizing energy production in America will limit the need to import from other nations, reduce global emissions and energy costs, create jobs domestically, and allow us to help our allies abroad. In spite of our abundant natural resources and the federal government owning 61 percent of America's onshore and offshore mineral estate, only 25 percent of domestic oil and 11 percent of domestic natural gas come from federal lands and waters.⁵²

In addition to natural gas, coal is also a critical natural resource to harness. The United States has the capacity to help meet demand in both the thermal coal and metallurgical coal markets; 84.8 million short tons of coal were exported from the U.S. in 2022, 45 percent of which were thermal coal and 55 percent of which were metallurgical coal.⁵³ Whereas oil and gas reserves are found

⁴⁶ See *DCC Comments on the Development of an Artificial Intelligence (AI) Action Plan*, DATA CENTER COALITION (Mar. 15, 2025) on file with Committee.

⁴⁷ Bonakdarpour et al., *Mine development times: The US in perspective*, S&P Global (June 2024)

https://cdn.ihsmarkit.com/www/pdf/0724/SPGlobal_NMA_DevelopmentTimesUSinPerspective_June_2024.pdf.

⁴⁸ *Id.*

⁴⁹ See *2024 North American Energy Inventory*, INST. FOR ENERGY RSCH. (May 2024),

<https://www.instituteforenergyresearch.org/wp-content/uploads/2024/05/2024-North-American-Energy-Inventory.pdf>.

⁵⁰ See *Letting Off Steam: Unleashing Geothermal Energy Development on Federal Land*, Oversight hearing before Subcomm. on Energy and Mineral Resources, (May 12, 2025) https://naturalresources.house.gov/uploadedfiles/hearing_memo_-_sub_on_emr_ov_field_hrg_on_geothermal_05.12.25.pdf.

⁵¹ Courtney Sourmehi, *EIA projects nearly 50% increase in world energy use by 2050, led by growth in renewables*, U.S. ENERGY INFORMATION ADMINISTRATION (Oct. 7, 2021), <https://www.eia.gov/todayinenergy/detail.php?id=49876>

⁵² *2024 North American Energy Inventory*, INST. FOR ENERGY RSCH. (May 2024), <https://www.instituteforenergyresearch.org/wp-content/uploads/2024/05/2024-North-American-Energy-Inventory.pdf>.

⁵³ See *U.S. coal exports remained relatively unchanged between 2021 and 2022* ENERGY INFORMATION ADMINISTRATION (Mar. 28, 2023),

on federal, state, and private lands, coal is almost exclusively located on lands owned by the federal government.⁵⁴ Accordingly, “federal policies can more easily impact coal production and consumption,” depending on the federal government's policies toward coal, both to America’s detriment and advantage.⁵⁵ According to the EIA, coal accounts for 9.8% of U.S. energy consumption.⁵⁶ Of this, 91.7% accounts for electric power, and 8.2% was for industrial use.⁵⁷

Recognizing this reality, Republicans in Congress have advocated for policies to reform the NEPA permitting process,⁵⁸ lower energy costs by increasing American energy production, conduct offshore lease sales in the Gulf of America’s Outer Continental Shelf,⁵⁹ provide for oil and gas leases on federal lands in Alaska,⁶⁰ promote energy exports, build critical infrastructure, and increase domestic critical minerals mining.⁶¹ In fact, legislation to codify many of these policies was previously passed by the House of Representatives, including the Lower Energy Costs Act,⁶² the Superior National Forest Restoration Act,⁶³ Alaska’s Right to Produce Act of 2023,⁶⁴ and the Mining Regulatory Clarity Act of 2024.⁶⁵ This work to unleash American energy, bolster mineral supply chains, and support critical mineral development continues in the 119th Congress, serving to lower energy costs through streamlining permitting processes and providing pathways for increased production of reliable energy resources.⁶⁶

<https://www.eia.gov/todayinenergy/detail.php?id=55980#:~:text=In%202022%2C%2084.8%20million%20short,metallurgical%20coal%20accounted%20for%2055%25.>

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ See *Coal Explained: Use of Coal*, ENERGY INFORMATION ADMINISTRATION (Sept. 14, 2023), <https://www.eia.gov/energyexplained/coal/use-of-coal.php>

⁵⁷ *Id.*

⁵⁸ See *Westerman Statement on Permitting Reform*, HOUSE COMM. ON NATURAL RESOURCES (Dec. 18, 2024), <https://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=416786>; *Modernizing NEPA Through Permitting Reform*, HOUSE COMM. ON NATURAL RESOURCES (Sept. 11, 2024), <https://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=416501>.

⁵⁹ See BRIDGE Production Act of 2023, H.R. 5616, 118th Cong. (2023).

⁶⁰ See Alaska’s Right to Produce Act of 2023, H.R. 6285, 118th Cong. (2023).

⁶¹ See Lower Energy Costs Act, H.R. 1, 118th Cong. (2023).

⁶² *Id.*; see also *H.R. 1, the Lower Energy Costs Act*, H. COMM. ON NATURAL RESOURCES, <https://naturalresources.house.gov/legislative-priorities/tapp-american-resources-act.htm>.

⁶³ See Superior National Forest Restoration Act, H.R. 3195, 118th Cong. (2023); see also *House Defends Domestic Energy Production, Multiple Use, and Rural Communities During Lands Week*, H. COMM. ON NATURAL RESOURCES (Apr. 30, 2024), <https://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=415960>.

⁶⁴ See Alaska’s Right to Produce Act of 2023, H.R. 6285, 118th Cong. (2023); see also *H.R. 6285, the Alaska Right to Produce Act*, H. COMM. ON NATURAL RESOURCES, <https://naturalresources.house.gov/legislative-priorities/h-r-6285-the-alaska-right-to-produce-act.htm>.

⁶⁵ See Mining Regulatory Clarity Act of 2024, H.R. 2925, 118th Cong. (2023); see also *H.R. 2925, the Mining Regulatory Clarity Act of 2023*, H. COMM. ON NATURAL RESOURCES, <https://naturalresources.house.gov/legislative-priorities/h-r-2925-the-mining-regulatory-clarity-act-of-2023.htm>.

⁶⁶ See, e.g., *Now Ore Never: The Importance of Domestic Mining for U.S. National Security*, Oversight Hearing before the Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources, 119th Cong. (Feb. 6, 2025) (hearing memorandum), <https://naturalresources.house.gov/uploadedfiles/hrg-119-ii06-20250206-sd002.pdf>; *Contrasting Momentum in the Space Mining Economy to the Terrestrial Mining Regulatory Morass*, Oversight Hearing before the Subcomm. on Oversight and Investigations of the H. Comm. on Natural Resources, 119th Cong. (Feb. 25, 2025) (hearing memorandum), https://naturalresources.house.gov/uploadedfiles/hearing_memo_-_sub_on_oi_ov_hrg_on_space_mining_02.25.25.pdf; *Unleashing the Golden Age of American Energy Dominance*, Oversight Hearing before the Subcomm. on Oversight and Investigations of the H. Comm. on Natural Resources, 119th Cong. (Apr. 2, 2025) (hearing memorandum), https://naturalresources.house.gov/uploadedfiles/hearing_memo_-_sub_on_oi_ov_hrg_on_energy_dominance_04.02.25.pdf; *Exploring the Potential of Deep-Sea Mining to Expand American Mineral Production*, Oversight Hearing before the Subcomm. on Oversight and Investigations of the H. Comm. on Natural Resources, 119th Cong. (Apr. 29, 2025) (hearing memorandum), https://naturalresources.house.gov/uploadedfiles/hearing_memo_-_sub_on_oi_ov_hrg_on_seabed_mining_04.29.25.pdf.

EO 14156 builds upon this work by directing all agencies to expedite permitting procedures, such as those needed under the Endangered Species Act and the Clean Air Act.⁶⁷ It also requires that the Secretary of Defense collaborate with the Secretaries of the Interior and Energy to “acquire and transport the energy, electricity, or fuels needed to protect the homeland and to conduct operations abroad, and, within 60 days, shall submit this assessment to the Assistant to the President for National Security Affairs.”⁶⁸

Fortifying American Energy and Technology Independence

Harnessing America’s natural resources and supporting the development of innovative technology is critical not only to our economy but to our national security. For example, AI technologies have a wide range of national security applications, including “intelligence, surveillance, and reconnaissance; logistics; cyber operations; command and control; semi-autonomous and autonomous vehicles; and weapons systems.”⁶⁹ The United States Military has invested in AI systems and technologies since at least 2017, while other nations, like China and Russia, have released national plans to lead with AI military development.⁷⁰

In addition to using innovations like AI for national defense, these systems can also be utilized as economic weapons. While the United States currently maintains a competitive edge in AI compared to China, that dominance is not guaranteed as China-based companies focus on emerging markets and deploy open models.⁷¹ Although the United States has taken steps to limit China’s development of AI technology, primarily through limiting exports of semiconductors, China continues to advance its own domestic AI industry.⁷²

In the race to maintain American technological dominance, the United States must also contend with its reliance on foreign nations like China for the minerals necessary to produce the semiconductor industry. China has a stronghold in the processing and supply chains of the hardrock minerals needed for high-tech applications. Because of this overreliance, China has taken steps to limit their exports of hardrock minerals and other technologies needed for innovation.⁷³ Republicans on the House Committee on Natural Resources have aggressively pursued policies and legislation, like the Lower Energy Costs Act,⁷⁴ the Superior National Forest

⁶⁷ See Exec. Order No. 14156, 90 Fed. Reg. 8433 (Jan. 20, 2025), <https://www.federalregister.gov/documents/2025/01/29/2025-02003/declaring-a-national-energy-emergency>.

⁶⁸ See *Id.*

⁶⁹ Laurie Harris, *Artificial Intelligence: Overview, Recent Advances, and Considerations for the 118th Congress*, CONGRESSIONAL RESEARCH SERVICE (Aug. 4, 2023), <https://www.congress.gov/crs-product/R47644>.

⁷⁰ *Id.*

⁷¹ Cole McFaul and Peter Engelke, *Navigating the US-PRC tech competition in the Global South*, ATLANTIC COUNCIL (Apr. 16, 2025), <https://www.atlanticcouncil.org/in-depth-research-reports/report/navigating-the-us-prc-tech-competition-in-the-global-south/>.

⁷² See Hanna Dohmen, *Assessing China’s AI development and forecasting its future tech priorities*, THE ATLANTIC COUNCIL (Sept. 18, 2024), <https://www.atlanticcouncil.org/content-series/strategic-insights-memos/assessing-chinas-ai-development-and-forecasting-its-future-tech-priorities/>.

⁷³ See *China will limit exports of antimony, a mineral used in products from batteries to weapons*, AP, (Aug. 15, 2024), <https://apnews.com/article/china-antimony-export-controls-critical-material-2fcfe08912d20996e9aa87d1fb97dd6a>.

⁷⁴ See Lower Energy Costs Act, H.R. 1, 118th Cong. (2023); see also *H.R. 1, the Lower Energy Costs Act*, H. COMM. ON NATURAL RESOURCES, <https://naturalresources.house.gov/legislative-priorities/tapp-american-resources-act.htm>.

Restoration Act,⁷⁵ Alaska’s Right to Produce Act of 2023,⁷⁶ the Mining Regulatory Clarity Act of 2024, and the BUILDER Act of 2023,⁷⁷ which will allow for more domestic mining of critical resources necessary for technological advancement, including industries like the semiconductor, data center, and AI space, which promote additional pathways forward for unleashing American energy dominance.⁷⁸

Conclusion

The United States is well-positioned to remain a leader in innovation. America’s abundance of natural resources can provide the baseload supply necessary to meet the growing power demand required for these innovations, which will benefit both our economy and national security. However, cumbersome permitting processes that limit our ability to unleash the full potential of our resource wealth pose a key threat, providing an opportunity for nations like China to challenge our global leadership.

In a time of high energy demand, it is imperative that Congress continue to support technological innovation by ensuring that our natural resources are responsibly developed and that American innovators are provided with the necessary ingredients for a sustainable energy supply to power a technology revolution.

⁷⁵ See Superior National Forest Restoration Act, H.R. 3195, 118th Cong. (2023); see also *House Defends Domestic Energy Production, Multiple Use, and Rural Communities During Lands Week*, H. COMM. ON NATURAL RESOURCES (Apr. 30, 2024), <https://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=415960>.

⁷⁶ See Alaska’s Right to Produce Act of 2023, H.R. 6285, 118th Cong. (2023); see also *H.R. 6285, the Alaska Right to Produce Act*, H. COMM. ON NATURAL RESOURCES, <https://naturalresources.house.gov/legislative-priorities/h-r-6285-the-alaska-right-to-produce-act.htm>.

⁷⁷ See BUILDER Act of 2023, H.R. 1577, 118th Cong. (2023); see also *The BUILDER Act*, H. COMM. ON NATURAL RESOURCES, https://naturalresources.house.gov/uploadedfiles/builder_2021_1-pager.pdf; *Republicans Advance Solutions to Ongoing Permitting Challenges*, H. COMM. ON NATURAL RESOURCES (Feb. 28, 2023), <https://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=412837>.

⁷⁸ See, e.g., *Now Ore Never: The Importance of Domestic Mining for U.S. National Security*, Oversight Hearing before the Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources, 119th Cong. (Feb. 6, 2025) (hearing memorandum), <https://naturalresources.house.gov/uploadedfiles/hrg-119-ii06-20250206-sd002.pdf>; *Contrasting Momentum in the Space Mining Economy to the Terrestrial Mining Regulatory Morass*, Oversight Hearing before the Subcomm. on Oversight and Investigations of the H. Comm. on Natural Resources, 119th Cong. (Feb. 25, 2025) (hearing memorandum), https://naturalresources.house.gov/uploadedfiles/hearing_memo_-_sub_on_oi_ov_hrg_on_space_mining_02.25.25.pdf; *Unleashing the Golden Age of American Energy Dominance*, Oversight Hearing before the Subcomm. on Oversight and Investigations of the H. Comm. on Natural Resources, 119th Cong. (Apr. 2, 2025) (hearing memorandum), https://naturalresources.house.gov/uploadedfiles/hearing_memo_-_sub_on_oi_ov_hrg_on_energy_dominance_04.02.25.pdf; *Exploring the Potential of Deep-Sea Mining to Expand American Mineral Production*, Oversight Hearing before the Subcomm. on Oversight and Investigations of the H. Comm. on Natural Resources, 119th Cong. (Apr. 29, 2025) (hearing memorandum), https://naturalresources.house.gov/uploadedfiles/hearing_memo_-_sub_on_oi_ov_hrg_on_seabed_mining_04.29.25.pdf.