



## DEPARTMENT OF ENERGY

The Department of Energy (DOE) is responsible for supporting the Nation's prosperity by addressing its climate, energy, environmental, and nuclear security challenges through transformative science and technology solutions. The President's 2024 Budget for DOE: invests in basic research and scientific infrastructure authorized in the CHIPS and Science Act; creates jobs building clean energy infrastructure; targets greenhouse gas (GHG) emission reductions across sectors; advances energy justice; and modernizes and ensures the safety and security of the nuclear weapons stockpile.

The Budget requests \$52 billion in discretionary budget authority for 2024, a \$6.2 billion or 13.6-percent increase from the 2023 enacted level, which includes the \$2.1 billion rescission of Strategic Petroleum Reserve balances enacted in the Consolidated Appropriations Act, 2023.

### The President's 2024 Budget:

- **Advances Critical Climate Goals and Cuts Energy Prices for American Families.** The Budget includes \$11.9 billion in DOE climate and clean energy research, development, demonstration, and deployment, 20 percent over the 2023 enacted level—funding that is critical for achieving the goal of a 50- to 52-percent reduction from 2005 levels in economy-wide net GHG pollution in 2030 and net-zero emissions economy-wide by no later than 2050, while also cutting energy bills for American families.
- **Makes Historic Investments in Cutting-Edge Research at National Laboratories and Universities through the CHIPS and Science Act and Beyond and Invests in Climate Innovation.** To boost American innovation and reestablish American leadership in research and scientific discovery, the Budget provides a historic investment of \$8.8 billion for the Office of Science, \$680 million or 9 percent above the 2023 enacted level, advancing toward the CHIPS and Science Act full authorization level. These investments would: support cutting-edge research at the national laboratories and universities and building and operating world-class scientific user facilities; advance the Nation's understanding of climate change; identify and accelerate novel technologies for clean energy solutions, including a historic \$1 billion investment in the acceleration of efforts to achieve fusion, a promising clean energy power source; provide new computing insight through quantum information science and artificial intelligence that addresses scientific challenges; expanding innovation in the microelectronics ecosystem; leverage data, analytics, and computational infrastructure to strengthen and support U.S. biodefense and pandemic preparedness strategies and plans; and position the United States to meet the demand for isotopes. The Budget invests \$35 million in the Office of Energy Efficiency and Renewable Energy for a new laboratory at a Historically Black College and University, Tribal College and University, or Minority Serving Institution. The Budget also invests in programs to ensure DOE funded research

can be commercialized by private industry. In total, the Budget supports U.S. preeminence in developing innovative technologies that accelerate the transition to a clean energy economy, including \$9.4 billion, an increase of more than 16 percent over the 2023 enacted level, in DOE clean energy research, development, and demonstration, a portion of which is captured in the CHIPS and Science Act funding. This also includes over \$4 billion to support the Net-Zero Game Changers Initiative's five initial focus areas: low-GHG building heating and cooling; net-zero aviation; net-zero power grid and electrification; industrial products and fuels for a net-zero, circular economy; and fusion energy.

- **Creates Jobs Building Clean Energy Infrastructure and Cuts Energy Costs for American Families.** The Budget invests nearly \$2 billion to support clean energy workforce and infrastructure projects across the Nation, including: \$425 million to weatherize and retrofit homes of low-income Americans'; \$83 million to electrify tribal homes and transition tribal colleges and universities to renewable energy; and \$107 million for the Grid Deployment Office to support utilities and State and local governments in building a grid that is more secure, reliable, and resilient and that integrates increasing levels of renewable energy. These investments, which complement and bolster the historic funding in the Bipartisan Infrastructure Law and Inflation Reduction Act, would create good-paying jobs while driving progress toward the Administration's climate goals, including carbon pollution-free electricity by 2035.
- **Reduces Industrial Emissions.** Meeting the challenge of climate change will require dramatic technological advances across energy use sectors. The industrial sector in particular represents a major opportunity for significant GHG reductions while modernizing the U.S. industrial base for a more competitive future. Across the \$1.2 billion in DOE discretionary funding for industrial decarbonization activities described above, the Budget reflects the importance of strategically supporting U.S. industrial decarbonization through innovation, targeted investment, and technical assistance. The Budget encourages adoption of industrial decarbonization solutions including through the Office of Manufacturing and Energy Supply Chains (MESC) and expanded research and development efforts in the Industrial Efficiency and Decarbonization Office. The Budget includes \$160 million for the Office of Clean Energy Demonstrations to support at least two large-scale industrial decarbonization projects directly benefitting disadvantaged communities.
- **Strengthens Domestic and International Clean Energy Supply Chains.** To build on the resurgence of American manufacturing, the Budget complements funding provided in the Inflation Reduction Act by providing robust support for Loan Program Office administrative expenses to originate and oversee the ambitious growth in the financing of clean energy and advanced technology vehicle manufacturing projects envisioned in the Inflation Reduction Act. The Budget proposes a \$75 million investment to launch a Global Clean Energy Manufacturing effort within the MESC that would build resilient supply chains for climate and clean energy equipment through engagement with allies, enabling an effective global response to the climate crisis while creating economic opportunities for the United States to increase the global clean technology market. In addition, the Administration supports the use of the Defense Production Act at DOE to support rebuilding domestic uranium production and enrichment capacity to establish a secure supply for the Nation's current and future nuclear fleet and also to reduce reliance on foreign supplies of uranium, as well as other clean energy technologies to ensure robust supply chains for electrical transformers and other critical grid components. The Budget also includes \$75 million in MESC for DOE to carry out the President's recent determinations under the Defense Production Act.

- **Supports Energy Communities.** The Budget provides \$905 million for DOE's Office of Fossil Energy and Carbon Management to advance technologies that can provide economic revitalization opportunities in energy communities. The Budget also includes dedicated funding for the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization to coordinate interagency efforts and stakeholder engagement across Federal agencies. This interagency effort would expand the delivery of Federal resources and advance job-creating investments in communities affected by the energy transition.
- **Advances Environmental Justice and Equity.** The Budget includes historic support for underserved communities, including \$70 million for Community Capacity Building initiatives in the Office of Environmental Management and the National Nuclear Security Administration (NNSA) to address areas of persistent poverty located around the Department's sites. The Budget also includes \$54 million for the Office of Economic Impact and Diversity to help implement the Department's Justice40 Initiative efforts and equity action plan, and \$13 million for the Office of Legacy Management (LM) to strengthen its environmental justice mission. The Budget supports programs, including Funding for Accelerated, Inclusive Research and Reaching a New Energy Sciences Workforce in the Office of Science, to train and support a diverse and inclusive scientific workforce for the future. In addition, the Budget includes \$50 million for the newly established Office of State and Community Energy Programs to launch a new Energy Burden Reduction Pilot to lower energy costs of at least 3,000 low-income homes while also reducing GHG emissions. These investments would build healthy, sustainable, and resilient communities.
- **Reduces Health and Environmental Hazards for At-Risk Communities.** The Budget includes \$8.3 billion for the Environmental Management program to support the cleanup of communities used during the Manhattan Project and Cold War for nuclear weapons production. The Budget also provides \$196 million for the LM to ensure cleanup remedies at these sites remain protective of human health and the environment. The Administration would ensure investments for the cleanup of legacy pollution and long-term stewardship support the Justice40 Initiative to benefit disadvantaged communities.
- **Strengthens the Cybersecurity and Resilience of the Energy Sector.** The Budget provides \$245 million to enhance the security of clean energy technologies and the energy supply chain. The Budget also includes increased assistance to States, local governments, Tribes, and Territories for emergency planning and preparation, including for events caused by the impacts of climate change.
- **Strengthens the Nation's Nuclear Security Enterprise.** The Budget makes historic investments in the Nation's nuclear security enterprise to implement the President's Nuclear Posture Review. The Budget supports a safe, secure, and effective nuclear stockpile. In addition, the Budget continues robust, executable funding for the recapitalization of NNSA's physical infrastructure, including essential scientific and production facilities to ensure the deterrent remains viable.
- **Restores American Leadership in Arms Control and Nonproliferation.** The Budget continues to enhance DOE's expertise, infrastructure, and capabilities needed to reduce nuclear risks and counter the global challenge of nuclear proliferation. As called for in the Administration's *National Security Strategy*, the Budget supports DOE's efforts to secure nuclear and radiological materials and prevent terrorists from acquiring them. The Budget also continues to strengthen the Nation's capability to respond to nuclear incidents at home and

abroad. In addition, the Budget funds the development of more demanding verification technologies as part of an integrated approach to the future of arms control.

- **Powers the Nuclear Navy.** DOE's Naval Nuclear Propulsion Program ensures safe and reliable operation of reactor plants in nuclear-powered submarines and aircraft carriers. The Budget prioritizes investments in research and development to maintain American dominance while continuing to support improvements to the Naval Nuclear Laboratory infrastructure. The Budget also funds the strong technical and engineering foundation that supports the President's trilateral security partnership—Australia, the United Kingdom, and the United States—which provides Australia with a conventionally armed, nuclear powered submarine capability.