

Office of Fossil Energy (FE)
Formerly Fossil Energy and Carbon Management (FECM)
(\$K)

FY 2024 Enacted	FY 2026 Request
865,000	595,000

Proposed Appropriation Language

For Department of Energy expenses necessary in carrying out fossil energy research and development activities, under the authority of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition of interest, including defeasible and equitable interests in any real property or any facility or for plant or facility acquisition or expansion, and for conducting inquiries, technological investigations and research concerning the extraction, processing, use, and disposal of mineral substances without objectionable social and environmental costs (30 U.S.C. 3, 1602, and 1603), \$595,000,000, to remain available until expended: *Provided*, That of such amount \$65,000,000 shall be available until September 30, 2027, for program direction.

Overview

The Office of Fossil Energy (FE) advances technologies related to affordable, reliable, and secure use of fossil fuels that are important to our Nation's security and economic prosperity while developing technological solutions for the prudent and sustainable development of our domestic coal, oil, gas, and critical minerals resources. FE conducts cutting-edge research, development and demonstration (RD&D) that focuses on promoting energy security, sustaining American leadership and innovation through early-stage RD&D, and developing breakthrough technologies that will ultimately lower American energy costs.

The Budget restores the name and function of the Office of Fossil Energy to its original purpose, which is funding for the research of technologies that could produce an abundance of domestic fossil energy and critical minerals. Activities funded through this account focus on 1) strengthening the reliability of our energy system and bolstering America's competitiveness and supply chain security through demonstrating advanced energy systems; 2) advancing mineral production and processing technologies; 3) accelerating oil, natural gas, and coal conversion into value-added products and supporting carbon capture, transport, and storage with a focus on enhanced oil and gas recovery; 4) natural gas infrastructure and blue hydrogen technologies; and 5) advanced oil and gas production technologies. These activities are pursued in partnership with the National Energy Technology Laboratory (NETL), the only DOE government-owned, government-operated National Laboratory dedicated to advancing the Nation's energy future by creating innovative solutions that strengthen the security, affordability and reliability of energy systems and natural resources, which also receives funding from this account.

In FY 2026, funding for Manufacturing and Energy Supply Chains (MESC) will support FE and EERE to sustain investments and analysis in manufacturing, energy products, and critical minerals and materials.

**Fossil Energy
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Coal and Carbon Utilization				
Advanced Energy Systems	91,000	75,000	-16,000	-18%
Transport and Storage	93,000	50,000	-43,000	-46%
Conversion and Value-Added Products	122,500	34,000	-88,500	-72%
Point-Source Capture	127,500	50,000	-77,500	-61%
Subtotal, Coal and Carbon Utilization	434,000	209,000	-225,000	-52%
Oil, Gas, and Critical Minerals				
Advanced Production Technologies	53,000	40,000	-13,000	-25%
Natural Gas Infrastructure and Hydrogen Technologies	78,000	40,000	-38,000	-49%
Mineral Production and Processing Technologies	70,000	100,000	+30,000	+43%
Subtotal, Oil, Gas, and Critical Minerals	201,000	180,000	-21,000	-10%
University Training, Research, and Recruitment	11,000	6,000	-5,000	-45%
Program Direction	70,000	65,000	-5,000	-7%
NETL Infrastructure	55,000	55,000	0	-%
NETL Research and Operations	89,000	80,000	-9,000	-10%
Interagency Working Group	5,000	0	-5,000	-100%
Total, Fossil Energy	865,000	595,000	-270,000	-31%

Coal and Carbon Utilization
Formerly Carbon Management Technologies
(\$K)

FY 2024 Enacted	FY 2026 Request
434,000	209,000

Overview

The Coal and Carbon Utilization programs support the Administration's priorities to sustain American energy leadership, focus innovation on early-stage research, development, and demonstration (RD&D), and develop breakthrough technologies to secure energy and lower American energy costs. With the FY 2026 Budget Request, FE funds technologies that support and produce an abundance of domestic fossil energy and critical minerals, with a particular focus on the following:

- RD&D on fuel flexibility for coal gasification and efficiency improvement for combustion turbine technologies firing coal-derived syngas, natural gas, hydrogen, ammonia or hydrogen/natural gas blends.
- RD&D toward production of low-cost, regionally sourced captured CO₂ for applications such as enhanced hydrocarbon recovery and mineral extraction.
- RD&D to expedite build-out of transport and storage infrastructure for purposes of enhanced oil and gas recovery, including regional geologic basin efforts and research on materials and field laboratory testing.
- Developing technologies that convert oil, natural gas, and coal by-products into valuable fuels, chemicals and products for energy security and economic impact
- Advance RD&D efforts in response to projected baseload growth largely driven by demand from electrification and data centers.

The Coal and Carbon Utilization programs will pursue the following major activities in FY 2026:

Advanced Energy Systems (\$75 million)

The FY 2026 Request for the Advanced Energy Systems program is \$75 million. The program comprises six activities: (1) Gasification Systems, (2) Advanced Turbines, (3) Advanced Energy Materials, (4) Sensors, Controls and Other Innovative Concepts, (5) Simulation-Based Engineering, and (6) Energy Asset Revitalization. In FY 2026, the primary focus is on power systems, efficiency improvement, and fuel flexibility. Improvements to these technologies are also applicable to other energy systems, such as nuclear and the chemical industry. Improvements to new and existing plants will also support their efforts to allow these assets to provide low-cost baseload power and resilient flexible grid services. These activities align with the Administration's priority of unleashing the great abundance of American energy required to power modern life and to achieve a durable state of American energy dominance.

Transport and Storage (\$50 million)

The Request provides \$50 million for the Transport and Storage program to fund basin-scale studies and field scale testing to address critical technical and operational challenges of enhanced oil and gas recovery transport and storage projects. Activities will help de-risk efforts by providing the scientific and technical information necessary to lower costs and optimize system performance and operations.

Conversion and Value-Added Products (\$34 million)

The Request provides \$30 million that includes efforts to exploring innovative, cutting-edge oil, natural gas, and coal by-product conversion activities that require advancement from the fundamental to the applied RD&D level. The Budget Request also provides limited funding to close out the direct air capture program and to support national lab RD&D on early-stage applied RD&D technologies that enhance American energy dominance and enable U.S. technological leadership and innovation.

Point-Source Capture (\$50 million)

FY 2026 activities will focus on optimizing cost, performance, and reliability of point-source capture technologies by utilizing test centers, small mobile testing units, and Artificial Intelligence/Machine Learning (AI/ML)-based material development. The request supports mid-stage RD&D on chemical looping, oxy-combustion, and reactive capture approaches, as well as CO₂ sourcing focused on enabling technologies for low-cost precursor availability for hydrocarbon recovery.

**Coal and Carbon Utilization
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Coal and Carbon Utilization				
Advanced Energy Systems				
Gasification Systems	30,000	24,000	-6,000	-20%
Advanced Turbines	30,000	25,000	-5,000	-17%
Reversible Solid Oxide Fuel Cells	5,000	0	-5,000	-100%
Advanced Energy Materials	9,000	10,000	+1,000	+11%
Sensors, Controls and Other Innovative Concepts	5,000	5,000	0	-%
Simulation-Based Engineering	6,000	6,000	0	-%
Energy Asset Revitalization	6,000	5,000	-1,000	-17%
Subtotal, Advanced Energy Systems	91,000	75,000	-16,000	-18%
Transport and Storage				
Transport and Storage Infrastructure	74,000	40,000	-34,000	-46%
Advanced Transport and Storage R&D	19,000	10,000	-9,000	-47%
Subtotal, Transport and Storage	93,000	50,000	-43,000	-46%
Conversion and Value-Added Products				
Carbon Dioxide Removal	70,000	4,000	-66,000	-94%
Carbon Utilization	52,500	30,000	-22,500	-43%
Subtotal, Conversion and Value-Added Products	122,500	34,000	-88,500	-72%
Point-Source Capture	127,500	50,000	-77,500	-61%
			-	
Total, Coal and Carbon Utilization	434,000	209,000	225,000	-52%

**Coal and Carbon Utilization
Advanced Energy Systems
(\$K)**

FY 2024 Enacted	FY 2026 Request
91,000	75,000

Overview

The Advanced Energy Systems (AES) program invests in six areas: (1) Gasification Systems, (2) Advanced Turbines, (3) Advanced Energy Materials, (4) Sensors, Controls, and Other Innovative Concepts, (5) Simulation-Based Engineering, and (6) Energy Asset Revitalization (EAR). In FY 2026, the EAR program will be incorporated into AES as a sub-program.

This program provides a platform for developing advanced energy systems capable of increasing electricity production to meet growing demand. The primary focus is on power systems, efficiency improvement and fuel flexibility. Improvements to new and existing plants may allow these assets to provide low-cost baseload power and resilient flexible grid services. These activities support the Administration's priority of increasing American energy production.

Gasification Systems (\$24 million)

Gasification technologies can play a key role in securing American energy dominance by converting feedstock into a variety of products. Gasification systems may provide affordable, reliable, and secure power, blue hydrogen, fuels, or chemicals to meet growing demand. These products can be generated from any carbonaceous fuel or mixtures thereof, including the vast domestic coal reserves, municipal solid waste, waste plastic, and biomass. Systems can be tailored to meet regional or local needs. For example, ammonia produced could be used to support regional fertilizer needs.

The FY 2026 Budget Request provides \$24 million for research, demonstration, and development (RD&D) to partner with industry, universities, and DOE National Laboratories to develop technologies to advance the deployment of gasification-based plants. The request will enable technology development to increase flexibility of feedstocks and improve processes (increase intensity and reduce costs):

- Innovative Technologies for Power, Fuels and Chemicals to advance and mature technologies capable of producing low-cost syngas from co-gasification of blended coal, biomass, and wastes, including municipal solid waste, legacy coal waste, and unrecyclable plastics that can be efficiently converted into power, fuels, and chemicals.
- Tar Mitigation, Management, and Conversion to investigate and manage tars produced during the gasification of blended feedstocks to increase syngas production rate through tar destruction and reduce the deleterious effect of tar on the process train that could hinder the ability to carry out long duration runs due to tar accumulation.
- Using emerging approaches such as microwave heating of the catalyst/reactants and pretreatment techniques for blended feedstocks (coal, biomass, mixed wastes, municipal solid waste, unrecyclable plastics, etc.) to increase process intensity and decrease the cost of syngas used as turbine fuel or as feedstock for chemicals and other valuable products

Advanced Turbines (\$25 million)

The FY 2026 Budget Request provides \$25 million in funding to develop innovative efficiency improvement technologies for gas turbine combustion systems that can also accommodate carbon-based syngas, natural gas, ammonia, and hydrogen-natural gas fuel blends while maintaining machine efficiency. RD&D investments will also support efficiency goals of 67 percent (lower heating value (LHV) natural gas) and 50 percent (LHV natural gas) for combined cycle and simple cycle machines, respectively. The program will also invest in RD&D to achieve a 70 percent efficient combined cycle machine (LHV natural gas).

Investments will be made in the application of advanced manufacturing and artificial intelligence and machine learning (AI/ML) to develop turbine components using innovative manufacturing techniques for application at higher firing

temperatures and thus higher efficiency. The activity will be executed in cost-shared collaboration with equipment manufacturers, the secondary market supporting turbine technology, U.S. universities, and the DOE National Labs.

The Advanced Turbines sub-program supports three key technologies to advance abundant, low-cost power production. These key technologies include:

- **Advanced Combustion Turbines** will support an investment in the development of fuel flexible systems for syngas, natural gas/hydrogen blends and hydrogen carriers like ammonia for retrofit applications and new gas turbines. The request will also support new designs for gas turbine components, advanced cooling techniques, aerodynamics, sealing, combustion systems and materials to achieve higher efficiency through higher combustion temperatures, lowering the cost of electricity from gas turbine systems.
- **Pressure Gain Combustion** has the potential to significantly increase gas turbine efficiency performance by 2-3 percent through realizing a pressure increase versus a pressure loss through the combustor of the turbine.
- **University Turbine Systems Research** supports turbine research at U.S. universities. This cost-shared activity, with industry endorsement, supports fundamental and applied RD&D projects that improve the efficiencies of turbines and related turbine technologies.

Advanced Energy Materials (\$10 million)

The Advanced Energy Materials sub-program focuses primarily on material discovery and development that will strengthen the nation's manufacturing capabilities for advanced energy materials that are critical to more efficient power generation, fuels, and chemicals processes that support a competitive U.S. industry base and help unleash American energy dominance. The sub-program has three main activities:

- **Advanced Materials Development:** This activity focuses on creating cost-effective structural and functional materials for a wide range of advanced energy technologies, including traditional power generation and emerging energy systems. The goal is to reduce the cost and time required to develop and commercialize new materials for applications in extreme operating environments. Development efforts emphasize advanced manufacturing methods for high-performance materials and computational materials modeling as enabling technologies. The National Energy Technology Lab (NETL) leads a National Laboratory consortium, Extreme Environment Materials (eXtremeMAT or XMAT), dedicated to accelerating materials innovation.
- **Advanced Materials Manufacturing Development:** Building upon the successes of the Advanced Ultra-Supercritical (AUSC) consortium, this activity focuses on strengthening domestic manufacturing capabilities for high-temperature alloys and technologies used in advanced energy applications, including natural gas combined cycles and high efficiency supercritical CO₂ plants. Ongoing development efforts include large-scale component manufacturing, forming and machining enhancements for high-temperature alloys developed under the AUSC program. This activity also supports the development of ceramic matrix composite material formulations for turbine applications (thermal barrier coatings or turbine blade materials) and advanced manufacturing methods to reduce fabrication costs and improve cyclic durability, ensuring the reliability and efficiency of American energy infrastructure.
- **High-Performance Computing for Materials (HPC4Mat):** This activity leverages the high-performance computing (HPC) resources of DOE's National Laboratories to assist American power generation industry in developing new or improved materials and resolve materials challenges for their applications.

Sensors, Controls, and Other Innovative Concepts (formerly Sensors, Controls, and Other Novel Concepts) (\$5 million)

This sub-program provides \$5 million to fund early-stage RD&D on technologies to provide real-time information and controls critical to the operation, reliability and efficiency of next generation power systems. Focus areas include the following:

- **Sensor development:** Early-stage RD&D on low-cost and reliable multi-sensing wired and wireless technologies to conduct process monitoring and measure component health by sensing critical process parameters that are currently unmeasurable due to high process temperatures or pressures.
- **Quantum Sensing:** Quantum sensors are highly precise sensors that can measure at lower detection limits not previously attainable. This has important ramifications and synergies with other FE priorities such as critical minerals extraction.

- **Cyber-physical systems:** Enables deployment of integrated energy systems that maintain generation stability, reliability, and security while minimizing energy costs.
- **Novel concepts:** This includes researching promising energy concepts such as direct power extraction and using AI for screening and design of functional sensing materials.

Simulation-Based Engineering (\$6 million)

The Simulation-Based Engineering sub-program includes computational software development, high performance computing, advanced process optimization, technoeconomic analysis and AI/ML. Simulations generate information beyond the reach of experiments alone and do so rapidly and inexpensively. They enable the optimization/troubleshooting of novel devices and complex process systems. This sub-program also comprises modeling to resolve challenges and optimize power plants as they integrate with a dynamic, evolving electricity grid. Key objectives include improving the reliability, flexibility, and economics of the next generation fleet, with applicability to the industrial and manufacturing sectors.

In FY26, the Budget Request for Simulation-Based Engineering provides \$6 million to continue funding for the Institute for the Design of Advanced Energy Systems (IDAES) and the Computational Fluid Dynamics for Advanced Reactor Design (CARD) program. IDAES activities will focus on developing process systems engineering tools for conceptual design and process intensification of innovative systems. The CARD element will support computational efforts to gain deep insight into plant operation to improve performance outcomes and reduce unexpected, forced outages.

Energy Asset Revitalization (\$5 million)

The Energy Asset Revitalization sub-program supports the revitalization, re-start, or continued operation of decommissioned and retiring energy assets across the U.S. by providing technical and financial assistance and developing publicly available tools and resources.

The FY 2026 Request will fund:

- Targeted assistance, provided through project funding and technical support, related to energy assets revitalization to ensure continued economic contributions.
- Support for revitalization activities and the development of innovative concepts through competitive solicitations and technical assistance, fostering efforts that lead to further support for pre-front-end engineering and design (FEED) studies.
- Development of publicly available tools and resources, including analyses supported by the Department of Energy headquarters, the National Labs, industry, and academia. Funded research and case studies will focus on ensuring the safety, reliability, and efficiency of energy assets, particularly in response to evolving operational demands and to maximize their continued economic contributions.

Advanced Energy Systems (AES) (\$K)

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Gasification Systems	30,000	24,000	-6,000	-20%
Advanced Turbines	30,000	25,000	-5,000	-17%
Reversible Solid Oxide Fuel Cells	5,000	0	-5,000	-100%
Advanced Energy Materials	9,000	10,000	+1,000	+11%
Sensors, Controls and Other	5,000	5,000	0	-%
Innovative Concepts				
Simulation-Based Engineering	6,000	6,000	0	-%
Energy Asset Revitalization	6,000	5,000	-1,000	-17%
Total, Advanced Energy Systems	91,000	75,000	-16,000	-18%

**Coal and Carbon Utilization
Transport and Storage
(\$K)**

FY 2024 Enacted	FY 2026 Request
93,000	50,000

Overview

In FY 2026, the Transport and Storage program will play an important role in advancing next-generation, cutting edge technologies intended to lower the cost of storage facility development, improve operational performance, and help de-risk existing and future projects including those that incorporate enhanced oil or gas recovery. The request provides \$50 million for initiatives that support technology validation of early-stage RD&D in operational transport and injection sites and basin-scale studies with cross-cutting benefits to subsurface energy activities aligned with energy market demands including enhanced recovery, and infrastructure routing near data centers. The transport and storage program prioritizes early-stage research in technology areas that both support energy security and for which there is a clear and unique Federal role. Concentration areas include leveraging artificial intelligence and machine learning technologies to enhance efficiency and quality of subsurface investigations, fast-tracking validation of novel technologies for energy activities in the subsurface and demonstrating approaches for advanced operational control and decision support.

Transport and Storage Infrastructure (\$40 million)

The FY 2026 Budget Request provides \$40 million in funding to support basins with multiple subsurface projects where knowledge gained will support activities such as enhanced oil and gas recovery, rapid development of storage sites to support data centers, and mining activities. A key outcome will be tools and approaches for resource managers to define and utilize subsurface pore and pressure space efficiently and safely.

Advanced Transport and Storage Research and Development (\$10 million)

The Transport and Storage Request includes \$10 million for Advanced Transport and Storage R&D that will advance technologies targeting enhanced plume imaging/tracking, high-temporal and high-spatial resolution monitoring, improved geomechanical stress/strain characterization and measurement, high fidelity sensing, and automation and intelligent systems inclusive of AI-enabling/supporting technologies. Targeted research by national laboratories and other research institutions includes efficient utilization of oil, gas, and CO₂ production infrastructure, intelligent monitoring systems, and developing approaches/methods for adaptive reservoir management.

**Transport and Storage
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Storage Infrastructure	74,000	40,000	-34,000	-46%
Advanced Storage R&D	19,000	10,000	-9,000	-47%
Total, Transport and Storage	93,000	50,000	-43,000	-46%

**Coal and Carbon Utilization
Conversion and Value-Added Products
(\$K)**

FY 2024 Enacted	FY 2026 Request
122,500	34,000

Overview

In FY 2026, the Conversion and Value-Added Products program will bolsters domestic energy security and resilience via oil, natural gas, and coal-derived fuels and chemicals, while also generating an opportunity for new export markets for oil, natural, gas and coal-derived products Activities will focus on enabling early-stage conversion technologies and overcoming fundamental barriers to real-world operations. Reduction for CDR activities represents the closing out of the DAC activities.

Carbon Dioxide Removal (CDR) (\$4 million)

The FY 2026 Budget Request of \$4 million provides limited funding to the NETL Direct Air Capture (DAC) Test Center which is designed to accommodate the rapidly evolving DAC technological landscape and has now commenced material-scale operations.

Carbon Utilization (\$30 million)

The Conversion to Value-Added products request includes \$30 million for Carbon Utilization activities. This sub-program will support RD&D for the critical technical challenges associated with the cost-effective and selective upgrading of oil, natural gas and coal by-products to facilitate U.S. leadership in energy innovation.

**Conversion and Value-Added Products
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Carbon Dioxide Removal	70,000	4,000	-66,000	-94%
Carbon Utilization	52,500	30,000	-22,500	-43%
Total, NETL Research and Operations	122,500	34,000	-88,500	-72%

**Coal and Carbon Utilization
Point-Source Capture
(\$K)**

FY 2024 Enacted	FY 2026 Request
127,500	50,000

Overview

Advancements in Point-Source Capture technologies will support U.S. efforts to produce low-cost, regionally sourced CO₂ for enhanced energy production through hydrocarbon recovery, incorporation into revenue generating products, as well as mineral extraction. The FY 2026 Budget Request provides \$50 million to fund research, development, and demonstration (RD&D) of point-source capture transformational technologies that can significantly improve efficiency, effectiveness, costs, and performance of coal and natural gas use in power, manufacturing and industrial facilities. These investments will foster U.S. energy dominance, continue energy security, and enable U.S. competitiveness in global markets.

In FY 2026, RD&D efforts will target optimized cost, performance, and reliability to provide economical sources, quantities, and purities required for enhanced hydrocarbon recovery, incorporation into products such as building materials, and use in processes such as mineral extraction. Key RD&D elements include lab scale approaches for cost effective CO₂ purification methods as well as conceptual designs of CO₂ central processing facilities to enable low-cost CO₂ availability for enhanced oil and gas recovery. RD&D associated with industrial applications will be focused on those sectors with the potential to supply the greatest quantities of CO₂ at the lowest cost, such as hydrogen production, petrochemicals, and cement manufacturing.

These transformational technologies will be designed to adapt to the operational demands of current and future power systems including the increasing need for coal and natural gas electric generation facilities to power data centers. RD&D activities will be focused on the integration of capture technologies with data centers serviced by behind the meter, reliable electric generation for improved fuel and operational flexibility while maintaining performance, reliability, and cost targets. Furthermore, activities will investigate approaches to optimize the capture process for coal and natural gas-based load-following/demand-responsive electricity generators.

The Point-Source Capture program will also support the development of transformational capture technologies that utilize high-performance computing, artificial intelligence, advanced manufacturing and engineering tools which result in enhanced co-benefits from installing point-source capture at coal- and natural gas-based electric generation facilities. These efforts will include artificial intelligence approaches to developing materials and processes that offer the potential for step-change improvements in cost and performance. FY 2026 funding will also support development of digital twin models powered by thermodynamic analysis and artificial intelligence to optimize thermal efficiencies and operating performance of existing coal and natural gas electric generation facilities. This element will leverage the expertise at national laboratories to drive innovation.

**Point-Source Capture
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Total, Point Source Capture	127,500	50,000	-77,500	-61%

**Oil, Gas, and Critical Minerals
(\$K)**

FY 2024 Enacted	FY 2026 Request
201,000	180,000

Overview

The Oil, Gas, and Critical Minerals program works to ensure American Energy and Mineral Dominance through the development of our Nation’s abundant domestic fossil energy and minerals potential. The program’s research, development, and demonstration (RD&D) could enable affordable, reliable and secure fossil energy resources and robust domestic supply chains for critical minerals and materials (CMM). The Office of Oil, Gas, and Critical Minerals consists of three programs: Advanced Production Technologies, Natural Gas Infrastructure and Hydrogen Technologies, and Mineral Production and Processing Technologies.

The Oil, Gas, and Critical Minerals program will pursue the following major activities in FY 2026:

Advanced Production Technologies (\$40 million)

The Advanced Production Technologies program focuses on developing technologies and solutions that accelerate oil and natural gas exploration and production. The program will conduct RD&D to increase oil and natural gas production, water management, and offshore efficiency, safety, and spill prevention. In addition, the program will conduct research using field laboratories to explore carbon dioxide enhanced oil and gas recovery (CO₂-EOR and EGR) in unconventional reservoirs.

Natural Gas Infrastructure and Hydrogen Technologies (\$40 million)

The Natural Gas Infrastructure and Hydrogen Technologies program will conduct research to develop technologies and solutions to improve the reliability, safety, and security of oil and natural gas pipelines. This research will include advanced materials, innovative sensors, and innovative more efficient compressors, drive engines, and infrastructure components. Additionally, the program will utilize existing natural gas infrastructure for high volume hydrogen and blended fuels transport, and demonstrate large-scale underground hydrogen storage capabilities.

Mineral Production and Processing Technologies (\$100 million)

The Mineral Production and Processing Technologies program will support American minerals dominance by advancing technologies to support development of the domestic supply chain networks required for the economically sustainable and geopolitically secure production and processing of critical minerals and materials (CMM). This mission will be accomplished by prioritizing research on the use of unconventional resources such as coal, coal production and combustion wastes, and other waste streams such as acid mine drainage, mine tailings, and produced water from oil and gas production for domestic CMM and rare earth elements; and through research to create products such as graphite from coal. The program will also focus on utilizing waste materials from currently mined and previously mined resources outside of traditional thermal and metallurgical markets. The program will also develop advanced mining technologies and solutions that can enable more "laparoscopic" approaches to mining, which will enable at least a tenfold reduction in the amount of waste material produced on the surface at a mine site.

Oil, Gas, and Critical Minerals
(\$K)

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Oil, Gas, and Critical Minerals				
Advanced Production Technologies				
Gas Hydrates	15,000	2,000	-13,000	-87%
Advanced Oil and Gas Production Research	28,000	30,000	+2,000	+7%
Water Management Technologies	10,000	8,000	-2,000	-20%
Subtotal, Advanced Production Technologies	53,000	40,000	-13,000	-25%
Natural Gas Infrastructure and Hydrogen Technologies				
Natural Gas - Infrastructure	55,000	30,000	-25,000	-46%
Natural Gas - Hydrogen Technologies	23,000	10,000	-13,000	-57%
Subtotal, Natural Gas Infrastructure and Hydrogen Technologies	78,000	40,000	-38,000	-49%
Mineral Production and Processing Technologies				
Critical Minerals Processing	17,000	28,000	+11,000	+65%
Carbon Ore Processing	14,000	17,000	+3,000	+21%
Resource Characterization Technologies	39,000	15,000	-24,000	-62%
Advanced Critical Material Recovery Technologies	0	40,000	+40,000	N/A
Subtotal, Mineral Production and Processing Technologies	70,000	100,000	+30,000	+43%
Total, Oil, Gas, and Critical Minerals	201,000	180,000	-21,000	-10%

**Oil, Gas, and Critical Minerals
Advanced Production Technologies
(\$K)**

FY 2024 Enacted	FY 2026 Request
53,000	40,000

Overview

Fossil fuels are critical to unleashing American energy and creating an affordable, secure, and reliable energy sector. Oil and natural gas provide fuel for vehicles, heat for homes, industrial goods, plastics, and other important products. The Advanced Production Technologies program conducts research and development of technologies and solutions to responsibly increase oil and natural gas production with a particular focus on unconventional reservoirs. Research areas include enhanced oil recovery, water management, offshore production efficiency and safety, and gas hydrates.

In the FY 2026 Budget Request:

The Gas Hydrates sub-program in FY 2026 will support modeling and analysis activities from data collected from field projects, including the Alaska Methane Hydrates project, the longest gas hydrates production test to-date.

The Advanced Oil and Gas Production Research sub-program will conduct research, development, and demonstration (RD&D) to increase the productivity of unconventional oil and gas wells while continuing research efforts to ensure offshore safety and spill prevention. The sub-program will conduct research in lab and field environments (Field Laboratories/Test Sites) to enhance/increase production of unconventional oil and gas resources (e.g., CO₂-EOR, optimized hydraulic fracturing design), and will include artificial intelligence and machine learning (AI/ML) efforts in support of these objectives.

The Water Management Technologies sub-program will conduct RD&D to improve produced water management, aimed at reducing demands on freshwater resources and indirectly addressing induced seismicity issues from disposal in injection wells. This RD&D will include produced water treatment and reuse as well as characterization for critical mineral and rare earth elements.

Descriptions of the Advanced Production Technologies sub-programs are presented below:

Gas Hydrates (\$2 million)

The Gas Hydrates sub-program will evaluate the potential of hydrates as a future energy source. This funding supports laboratory based modeling and analysis of data and results accumulated from field projects, including from the completed production test on the Alaska North Slope.

Advanced Oil and Gas Production Research (\$30 million)

The Advanced Oil and Gas Production Research sub-program will focus on advanced oil and gas production research, including unconventional oil and gas development, offshore safety, and spill prevention. The sub-program continues to build on previous research conducted by, and data collected from, the Department of Energy's original 17 field laboratory projects, which resulted in a substantial body of knowledge about the geochemistry, geomechanics, and geophysics of oil and gas reservoirs.

The Field Test Sites activity will focus on 1) research to enhance/increase production of existing unconventional oil and gas resources (e.g. CO₂-EOR, optimized hydraulic fracturing design); and 2) support research to understand the potential to develop new and emerging oil and gas plays/zones (e.g. residual oil zones). This will include AI/ML efforts in support of Field Test Sites objectives.

The sub-program's offshore safety and spill prevention research will focus on identifying and mitigating risks from ocean currents and seafloor hazards, such as landslides; reducing risks associated with infrastructure used to deliver chemicals to the well and to bring produced fluids to the platform; and assessing, predicting, and mitigating the risks associated with an aging offshore infrastructure. DOE is working with the Department of the Interior, under a Memorandum of Collaboration, to pursue collaborative offshore research to increase offshore safety.

Water Management Technologies (\$8 million)

The Water Management Technologies sub-program will focus on the characterization, treatment and management of water produced during oil and gas operations to increase both recycling of reservoir water for oil field activities (e.g. hydraulic fracture), and beneficial reuse of treated produced water for uses outside of the oil fields. Research will also characterize produced water for critical minerals and rare earth elements and evaluate the potential for extraction. Improved produced water management will reduce demands on freshwater resources and indirectly address induced seismicity issues.

**Advanced Production Technologies
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Gas Hydrates	15,000	2,000	-13,000	-87%
Advanced Oil and Gas Production Research	28,000	30,000	+2,000	+7%
Water Management Technologies	10,000	8,000	-2,000	-20%
Total, Advanced Production Technologies	53,000	40,000	-13,000	-25%

Oil, Gas, and Critical Minerals
Natural Gas Infrastructure and Hydrogen Technologies
(\$K)

FY 2024 Enacted	FY 2026 Request
78,000	40,000

Overview

Fossil fuel infrastructure is critical to providing affordable, reliable, and secure energy for American consumers and industry. The Natural Gas Infrastructure and Hydrogen Technologies (NGI-HT) program focuses on comprehensive solutions to improve reliability, safety, and security; and to minimize product loss across the entire oil and natural gas supply chain. The NGI-HT program is focused on improving the operational resiliency and efficiency of oil and natural gas infrastructure through advanced technology development and field validation. The program will also leverage natural gas infrastructure in the development of hydrogen production, transport, and storage to strengthen the U.S. energy landscape.

A description of each Natural Gas Infrastructure and Hydrogen Technologies sub-program is presented below:

Natural Gas – Infrastructure (\$30 million)

The Natural Gas – Infrastructure sub-program develops cost-effective and scalable technologies that improve the efficiency, integrity, and reliability associated with the production, processing, transportation, storage, and export of domestic oil and natural gas resources.

The sub-program supports RD&D focused on advanced materials; innovative sensors; and more efficient natural gas compressors, drive engines, and other infrastructure components, along with analytical technologies (including artificial intelligence (AI) applications) that enable rapid detection and mitigation of methane leakage along the oil and natural gas value chain. The sub-program also addresses utilization of natural gas that would be otherwise stranded or flared through the development of field-deployable, modular technologies to capture and convert natural gas into high-value, readily transportable products. Each of these research thrusts will improve the reliability of natural gas production, transmission, distribution, storage, and export facilities.

The Natural Gas – Infrastructure sub-program will pursue the following major activities in FY 2026:

- Developing technologies in advanced pipeline materials, pipeline sensors and systems, pipeline data management and computational tools, and in-pipe inspection and repair technologies.
- Developing advanced modular natural gas conversion technologies, capable of being deployed near wellheads, natural gas processing facilities, and transportation infrastructure.
- Development and deployment of efficient solutions that can be utilized by U.S. oil and natural gas operators and service companies to economically reduce natural gas leakage from engine combustion slip, natural gas gathering and pressure boosting stations, storage tanks, pipeline blowdowns, subsurface natural gas storage, and other point sources.
- Support the development and deployment of innovative technologies, tools, and processes to optimize liquefied natural gas (LNG) transport.

Natural Gas - Hydrogen Technologies (\$10 million)

The Natural Gas - Hydrogen Technologies (NG-HT) sub-program develops safe, reliable, and domestically derived hydrogen. The sub-program will conduct research on utilizing natural gas infrastructure for high volume hydrogen and blended fuels transport, and demonstrate large-scale underground hydrogen storage capabilities.

The NG-HT sub-program leverages domestic resources towards the development of natural gas technologies to produce, transport, store, and utilize low-cost hydrogen and valorized solid carbon products. The FY 2026 Budget Request for the Natural Gas – Hydrogen Technologies program will focus on near-term research and development that emphasizes advancing technologies for:

- Low-cost, blue and gray hydrogen, fuels, and carbon production pathways derived from geologic and fossil energy resources;
- Resilient natural gas and hydrogen infrastructure development;

- Secure and cost-effective underground hydrogen storage; and
- Safe hydrogen utilization.

Programmatic activities will be conducted in support of and coordination within the Office of Fossil Energy and other offices in the U.S. Department of Energy in support of Administration goals.

Natural Gas Infrastructure and Hydrogen Technologies
(\$K)

FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
		\$	%

Natural Gas - Infrastructure	55,000	30,000	-25,000	-45%
Natural Gas - Hydrogen Technologies	23,000	10,000	-13,000	-57%
Total, Natural Gas Infrastructure and Hydrogen Technologies	78,000	40,000	-38,000	-49%

Oil, Gas, and Critical Minerals
Mineral Production and Processing Technologies
(\$K)

FY 2024 Enacted	FY 2026 Request
70,000	100,000

Overview

American industries have become reliant on foreign countries for many of the most critical minerals and materials (CMM) needed for advanced energy and defense technologies due to decades of underinvestment in domestic mineral production. This over-reliance on foreign sources of minerals is an urgent national priority for investment, as malign foreign actors are exploiting their now-dominant market position over certain critical materials to diminish the competitiveness of American industry. The risks born by the American public due to over-reliance on foreign sources of minerals are acute.

The Mineral Production and Processing Technologies program (MPPT) directly addresses the impediments to domestic mineral production by investing in technologies and approaches associated with mineral extraction, processing, reduction to metal, perceptions of impacts of mining, and refining. The program focuses on approaches to accelerate mineral developments that are likely to secure local drive for minerals projects and it catalyzes collaboration and characterization of diverse mineral production options in regions across the U.S.

The program will support resilient domestic mineral supply chains by prioritizing the use of immediately available domestic resources such as those associated with permitted mineral mines, impoundments, or secondary and unconventional resources. These include abundant domestic resources, like coal, coal waste and by-products from industry feedstocks for domestic critical materials.

The Office of Fossil Energy's Mineral Production and Processing Technologies program is coordinated with complementary investments in other DOE offices through the DOE-wide Critical Materials Collaborative (CMC) to ensure future American mineral dominance across critical mineral and material (CMM) supply chains.

In FY 2026, the program will focus on the following:

- Further advance facilities to produce large quantities of high purity, commercial grade rare earth elements (REE) and other CMM through front-end engineering and design (FEED) studies and large-scale pilots, which is the next stage of development to broadly enable extraction of REE and other CMM from unconventional feedstocks (such as coal refuse and acid mine drainage) towards a commercial industry. The program will take advantage of existing pilot facilities, where applicable.
- Support the maturation of transformational separation and extraction technologies, potentially through laboratory and/or bench-scale innovative process concept development, as well as modeling and validation of models for optimization and efficiency improvements that would improve process economics.
- Develop technologies for creating new products such as synthetic graphite that are useful for the domestic economy or have better lifetime performance characteristics than current materials, as well as provide economic value in the co-production of other CMM.
- Work with the U.S. Geological Survey (USGS) to improve exploration and characterization technologies to reduce time, cost, and environmental impact, thereby enabling more rapid new upstream CMM projects from secondary and unconventional feedstocks to proceed.
- Initiate research, and development programs centered on developing next-generation mining and extraction technologies, using surgical precision to target and recover critical minerals from the subsurface. Such technologies would include advanced drilling technologies, novel geophysics, digital subsurface applications (autonomous operations, robotics, real-time extraction), in-situ mineral extraction, tailings management, marine mineral production, and novel processing.
- Begin development of a capability for mineral traceability throughout the supply chain, enabling transparency and validation of claims made by sources, processors, and manufacturers.

Critical Minerals Processing (\$28 million)

The Critical Minerals Processing sub-program focuses on next-generation processing technologies with the potential to transform the recovery, purification, and reduction to metal of critical minerals sourced from abundant domestic feedstocks. These feedstocks include: domestic ores, mine tailings, impounded energy waste, industrial process streams, and other metal and mineral production streams.

The Critical Minerals Processing sub-program activities will continue to advance technologies toward large scale pilots while investing in novel advances throughout the supply chain of critical materials. This sub-program will focus on technologies to improve the economics of future projects through the evaluation of co-production of other valuable products to minimize waste generation. This focus will also accelerate industry adoption of transformative processes to recover minerals as part of domestic mineral and energy operations. The primary RD&D focus areas will include mineral beneficiation, extractive metallurgy (hydrometallurgical, and pyrometallurgical process technologies), and waste management technologies. All efforts will be associated with domestic feedstocks that have the potential for significant market impacts to diminish domestic reliance on foreign imports.

Carbon Ore Processing (\$17 million)

The Carbon Ore Processing sub-program develops technologies to produce high-value carbon-based materials from coal. Materials like graphite, carbon fibers, and pitch are necessary precursors for many of the most important technologies in modern life. By focusing on transformational technologies to enable domestic manufacturing of strategic carbon materials and superior building products, the Carbon Ore Processing sub-program can enable secure critical material supplies from an abundant domestic coal resource base at competitive market prices.

RD&D will focus on the following areas: High-value carbon products, especially those needed for the industrial economy, such as graphite electrodes, battery anodes, and supercapacitor materials from carbon ore, as well as graphene, quantum dots, activated carbon, and conductive inks; universal infrastructure components (e.g., components for mass transit, sewers and tunnels, roads and bridges); and continuous industrial processes improvements to reduce capital and operating costs for future carbon products.

Resource Characterization Technologies (\$15 million)

The Resource Characterization Technologies sub-program focuses on accelerating the identification and estimation of tonnage, grade, and recoverability of U.S. domestic critical mineral resources. The urgency of domestic mineral production requires a renewed focus on materials that can be accessed and processed quickly, so continued focus on unconventional mineral resources, such as mine tailings, waste impoundments, and process wastes are a high priority.

The Resource Characterization sub-program leverages the success of former FE RD&D, including the technologies and the capability to assess and characterize unconventional and secondary feedstocks. Building on this success, this sub-program will target high-value likely commercial opportunities to accelerate project development.

This approach will be accomplished through technology development and validation, including machine learning and artificial intelligence, and will leverage the regional-phase of CORE-CM production with less intensive processing steps required to produce REE from conventional ores.

The primary focus areas are:

- Resource Characterization Methods Development – Technology development for prospecting and validation for environmentally-sustainable exploration and production from various sources. This includes regional opportunities and assessments, the economic recovery of CMM through identification (including physical and chemical properties), mineral assays, prediction and assessment of resources and volumes of CMM/REE from various feedstocks. This work is coordinated with the Department of Interior (USGS) and the Environmental Protection Agency.
- Sensors and data connection and analysis – This includes development of new technologies for assessment of recoverable resources (drones, real time sensing and analytics, and micro drilling technologies) and of technologies and methods for rapidly analyzing data. This work is coordinated with the USGS.
- International Engagements, Standards, Supply Chain Development, and Characterization Technology Development – Ensure American mineral dominance by prioritizing leadership among international allies to address sustainable practices throughout the world, across the supply chain, from exploration through manufacturing, including certification approaches and methods for traceability throughout supply chains.

Advanced Critical Material Recovery Technologies (\$40 million)

The Advanced Critical Material Recovery Technologies sub-program will identify innovative technologies that can substantially reduce costs, waste, and resource use from new mining. A primary focus area for research and development will be novel mining technology – RD&D of technologies that can enable more "laparoscopic" approaches to mining, targeted to enabling at least a tenfold reduction in the amount of waste material produced on the surface at a mine site.

**Mineral Production and Processing Technologies
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Critical Minerals Processing	17,000	28,000	+11,000	+65%
Carbon Ore Processing	14,000	17,000	+3,000	+21%
Resource Characterization Technologies	39,000	15,000	-24,000	-62%
Advanced Critical Material Recovery Technologies	0	40,000	+40,000	+100%
Total, Mineral Production and Processing Technologies	70,000	100,000	+30,000	+43%

**NETL Infrastructure
(\$K)**

FY 2024 Enacted	FY 2026 Request
55,000	55,000

Overview

The National Energy Technology Laboratory (NETL) Infrastructure program supports the fixed costs of NETL's laboratory footprint in three geographic locations: Morgantown, WV; Pittsburgh, PA; and Albany, OR. Table 1 provides information on the size of each site.

The NETL Infrastructure program comprises the following subprograms:

- (1) **High-Performance Computer (Super Computer) (\$6 million)** provides funding for the lease of Joule 3, NETL's Supercomputer. The FY 2026 Budget Request includes \$6 million for the continuation of a 4-year lease.
- (2) **Laboratory & Site-wide Facilities (\$39 million)** include repairs to existing laboratory facilities, general-purpose buildings, and sitewide infrastructure and the continued management of deferred maintenance balances. Priorities for funding are established to ensure compliance with life safety standards, critical laboratory research facilities and infrastructure, and compliance with High Performance Sustainable Building (HPSB) goals.
- (3) **Safeguards and Security (\$8 million)** provides funds to ensure protection of workers (physical and cyber), the public, the environment, facilities, and operations in performing the Office of Fossil Energy (FE) mission.
- (4) **Environmental Restoration (\$2 million)** supports NETL's obligations to the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) across all NETL sites and one off-site location in Wyoming.

The FY 2026 Budget Request for NETL Infrastructure is \$55 million. The most significant component is Laboratory & Site-wide Facilities with a total of \$39 million, as follows: (1) \$17 million for Minor Construction Projects (MCP), prioritizing investments in infrastructure reliability and managing deferred maintenance balances; and (2) \$21 million for fixed operational costs such as building and grounds maintenance, utilities, fleet management, and information technology (IT) licenses and agreements. In addition, \$6 million is requested for NETL's high performance computer (HPC) lease. HPC is an essential element in more than 50% of NETL's research projects. The balance of the request is for safeguards and security (\$8 million), environmental compliance and remediation (\$2 million).

Funding supports implementing zero trust architectures, improving incident detection and response capabilities, addressing supply chain risks, and increasing automation across IT infrastructure operation/maintenance (O&M), portfolio management, cybersecurity risk management.

Table 1¹

Comparison of Physical Footprint, Workforce, and Value of Assets by Campus and in Total, National Energy Technology Laboratory as of May 5, 2025.

	Morgantown	Pittsburgh	Albany	Total NETL
Buildings	40	30	56	126
Sq. Ft. of Building Space (1,000s)	437	433	250	1,120
Acres	136.0	57.4	47.4	240.8
Assets Replacement Value	\$426.5 million	\$391.3 million	\$289.7 million	\$1,107.5 million

**NETL Infrastructure
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Super Computer	6,000	6,000	0	0%
Laboratory & Site-wide Facilities	39,000	39,000	0	0%
Safeguards and Securities	8,000	8,000	0	0%
Environmental Restoration	2,000	2,000	0	0%
Total, NETL Infrastructure	55,000	55,000	0	0%

¹ Table 1 compares physical footprint, workforce, and value of assets as of May 5, 2025.

NETL Research and Operations
(\$K)

FY 2024 Enacted	FY 2026 Request
89,000	80,000

Overview

The National Energy Technology Laboratory (NETL) is an integral part of the U.S. Department of Energy (DOE) national laboratory system. There are 17 National Laboratories in the DOE laboratory system; NETL is the only government-owned, government-operated laboratory (GOGO). NETL supports the DOE mission by addressing energy and related challenges through transformative science and technology solutions. NETL is recognized for its capabilities in applied material science, computation science, chemical and systems engineering, subsurface science, decision science, and government contract and project management.

The NETL Research and Operations program comprises three sub-programs:

- (1) **Research, Development, Demonstration, and Deployment (\$51 million)** supports Federal researcher salaries and benefits, travel, personal protective equipment, and other employee costs for the NETL staff of scientists and engineers who conduct research activities for FE RD&D programs. This sub-program also funds the salaries, benefits, travel, and other employee costs for the NETL staff of engineers and technical professionals who conduct project management for FE RD&D programs. This sub-program also funds partnership, technology transitions, and other collaborative research activities with industry, other National Laboratories, and state and local governments as well as strategic energy analysis and research data management.
- (2) **Site Operations (\$19 million)** includes funding for: (a) building operations and maintenance such as non-capital repairs and routine upkeep; (b) grounds maintenance including parking lot repair, lighting, groundskeeping, snow removal, etc.; and (c) information technology operations.
- (3) **Program Oversight (\$10 million)** includes funding for Federal employees and contractors performing research-enabling functions such as planning and managing financial assistance activities and providing oversight of research grants and awards.

The NETL Research and Operations request is \$80 million. The request includes \$69.5 million to fully fund federal salaries and benefits at the requested full-time equivalent (FTE) level. An additional \$6.1 million is for contractor support in the areas of information technology operations, technology transitions and business outreach, research data management, and strategic energy analysis. The balance of the request funds travel, training, material, supplies, and other employee costs for the federal staff and NETL's Laboratory-Directed Research and Development contribution.

NETL Research and Operations
(\$K)

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
RDD&D	57,000	51,000	-6,000	-11%
Site Operations	21,000	19,000	-2,000	-10%
Program Oversight	11,000	10,000	-1,000	-9%
Total, NETL Research and Operations	89,000	80,000	-9,000	-10%

**Interagency Working Group
(\$K)**

FY 2024 Enacted	FY 2026 Request
5,000	0

Overview

No funding is being requested for this account in FY 2026.

**Program Direction
(\$K)**

FY 2024 Enacted	FY 2026 Request
70,000	65,000

Overview

Program Direction (PD) provides funding for salaries and benefits for federal staff and associated costs to support the overall direction and execution of the Office of Fossil Energy (FE), including oversight and administration, monitoring activities for the FE's research, development, and demonstration (RD&D) portfolio. Funding also supports the National Energy Technology Laboratory (NETL) technical staff who perform acquisition, finance and legal functions, and federal staff for management of the laboratory. PD also funds the contractor support for budget, communications, workforce management, mission Information Technology (IT) and cybersecurity, and workforce Environment, Safety, Security and Health (ESS&H) activities. Federal NETL scientific researchers and project managers are not funded by Program Direction. They are funded by the NETL Research and Operations control point.

The FY 2026 Program Direction Request of \$65 million will provide support for the projected FY 2026 average federal salaries and benefits for the requested full-time equivalent (FTE) level, travel, support services and other related expenses. This funding reflects a reduction in the workforce to support the Department's reorganization efforts and the Administration's goals and priorities.

**Program Direction
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
Washington Headquarters				
Salaries and Benefits	27,662	25,810	-1,852	-7%
Travel	420	420	0	0%
Support Services	3,070	2,770	-300	-10%
Other Related Expenses	8,948	8,200	-748	-8%
Total, Washington Headquarters	40,100	37,200	-2,900	-7%
National Energy Technology Laboratory				
Salaries and Benefits	19,300	18,200	-1,100	-6%
Travel	400	350	-50	-13%
Support Services	7,100	6,150	-950	-13%
Other Related Expenses	3,100	3,100	0	0%
Total, National Energy Technology Laboratory	29,900	27,800	-2,100	-7%
Total – Program Direction				
Salaries and Benefits	46,962	44,010	-2,952	-6%
Travel	820	770	-50	-6%
Support Services	10,170	8,920	-1,250	-12%
Other Related Expenses	12,048	11,300	-748	-6%
Total, Program Direction	70,000	65,000	-5,000	-7%

**University Training, Research, and Recruitment
(\$K)**

FY 2024 Enacted	FY 2026 Request
11,000	6,000

Overview

Through the University Training, Research, and Recruitment (UTRR) program, the FY 2026 Request includes funding for foundational research and development (RD&D) at U.S. academic Institutions of Higher Education and trade and vocational schools. The program focuses on introducing students to research topics pursued in support of the Office of Fossil Energy (FE) mission and preparing them for jobs in related fields such as extraction, processing, use of fossil energy; critical minerals and rare earth elements; artificial intelligence and machine learning; petroleum engineering; and supporting skills.

The Special Recruitment Program prepares students through hands-on educational programs. The program includes FE's flagship Mickey Leland Energy Fellowship (MLEF) and other DOE intern and fellowship programs, that offer undergraduate and graduate students majoring in STEM disciplines opportunities. Students learn about the DOE and FE missions through participation in hands-on research projects and gain insight into the challenges and opportunities in providing clean, affordable energy for future generations.

Consistent with EO 14283, the University Fossil Research (UFR) program and the Historically Black Colleges and Universities (HBCUs), Education, and Training programs will enable principal investigators to competitively apply for funding in a restricted eligibility Notice of Funding Opportunity (NOFO) and facilitate training students in key RD&D areas.

Highlights of the FY 2026 Request

In FY 2026, FE will support educational fellowship opportunities at DOE for students through the UTRR program. In addition, FE will recruit and select undergraduate and graduate students in STEM majors to participate in MLEF and other DOE educational programs. Recruitment will focus on attracting students from across the U.S. to participate in DOE programs.

**University Training, Research, and Recruitment
(\$K)**

	FY 2024 Enacted	FY 2026 Request	FY 2026 Request vs FY 2024 Enacted	
			\$	%
University Fossil Research	4,000	2,000	-2,000	-50%
HBCUs, Education, and Training	6,000	3,000	-3,000	-50%
Special Recruitment Programs	1,000	1,000	0	0%
Total, University Training, Research, and Recruitment	11,000	6,000	-5,000	-45%

Facilities Maintenance and Repair
(\$K)

The Department of Energy’s (DOE) Facilities Maintenance and Repair activities are tied to its programmatic missions, goals, and objectives. Facilities Maintenance and Repair activities funded by this budget are displayed below.

Costs for Direct-Funded Maintenance and Repair (including Deferred Maintenance Reduction)

	FY 2024 Actual Cost	FY 2024 Planned Cost	FY 2026 Planned Cost
National Energy Technology Laboratory	18,222	19,000	17,000
Total, Direct-Funded Maintenance and Repair	18,222	19,000	17,000

Total Costs for Maintenance and Repair

	FY 2024 Actual Cost	FY 2024 Planned Cost
National Energy Technology Laboratory	18,222	19,000
Total, Direct-Funded Maintenance and Repair	18,222	19,000

Excess Facilities
(\$K)

Excess Facilities are facilities no longer required to support the Department’s needs, present or future missions or functions, or the discharge of its responsibilities. This table reports the funding to deactivate and dispose of excess infrastructure, including stabilization and risk reduction activities at high-risk excess facilities, resulting in surveillance and maintenance cost avoidance and reduced risk to workers, the public, the environment, and programs. This includes maintenance of excess facilities (including high-risk excess facilities) necessary to minimize the risk posed by those facilities prior to disposition.

Costs for Direct-Funded Excess Facilities

	FY 2024 Actual Cost	FY 2024 Planned Cost	FY 2026 Planned Cost
National Energy Technology Laboratory (All)	132	40	30
NA	0	0	0
Total, Direct-Funded Excess Facilities	54	40	30

Capital Summary
(\$K)

	Total	Prior Years	FY 2024 Enacted	FY 2026 Request	FY 2026 vs FY 2024
Capital Operating Expenses Summary (including Major Items of Equipment (MIE))					
Capital Equipment >\$500,000 (including MIE)	n/a	0	0	0	0
Minor Construction Project (>\$5 million)	25,000	25,000	0	0	0
Total, Capital Operating Expenses	25,000	25,000	0	0	0
Capital Equipment > \$500,000 (including MIE)					
Total Non-MIE Capital Equipment	n/a	0	0	0	0
Total, Capital Equipment (including MIE)	n/a	0	0	0	0