

**HOLD UNTIL RELEASED**  
**BY THE COMMITTEE**

**Statement of  
Mr. Paul Cramer  
Performing the Duties of  
Assistant Secretary of Defense  
(Energy, Installations & Environment)**

**Before the Senate Committee on Appropriations  
Subcommittee on Military Construction and Veterans Affairs**

**Review of the FY2023 Budget Request for  
Military Construction and Family Housing**

**May 18, 2022**

## **INTRODUCTION**

Chairman Heinrich, Ranking Member Boozman, and distinguished members of the Subcommittee: Thank you for the opportunity to discuss the President's Fiscal Year (FY) 2023 budget request for the Department of Defense's (DoD) Military Construction and Family Housing programs.

Our installations remain one of our primary weapon systems. For nearly 80 years, we have been able to operate from our bases around the world with near-impunity, which has afforded us unprecedented power projection capabilities. However, the stark reality is that the homeland is no longer a sanctuary. In line with the 2022 *National Defense Strategy*, we must ensure a resilient Joint Force and defense ecosystem. Our installations must not only be postured to support the Joint Force, but also be resilient against the full range of man-made and natural threats. We continue to address these resilience challenges, while also addressing mission requirements and ensuring Service members have a safe and resilient place to live and work.

### **Reestablishment of EI&E**

As part of the larger reorganization within the Under Secretary of Defense for Acquisition & Sustainment, the Office of the Assistant Secretary of Defense for Energy, Installations & Environment (EI&E) was merged with Office of the Assistant Secretary of Defense for Logistics & Material Readiness (L&MR) into the Assistant Secretary of Defense for Sustainment in 2018. While there were benefits in bringing these two portfolios under a single organization, the breadth of the merged portfolio required the leadership team to focus on a narrower set of priorities at the expense of other, equally important priorities.

Recognizing that each portfolio warranted an Assistant Secretary-level oversight, Section 904 of the FY2021 NDAA restored EI&E as a distinct organization. The Department formally split EI&E and Sustainment on February 10, 2022. We appreciate Congress's support in ensuring that the Department has the senior visibility needed for us to effectively confront the energy, environment, military construction, housing, and real property challenges we face.

## **TAKING ACTION ON CLIMATE CHANGE**

Secretary Austin noted that the Department faces a "growing climate crisis that is impacting our missions, plans, and capabilities and must be met by ambitious, immediate action." As such, climate change will continue to amplify operational demands on the force. It will degrade installations and infrastructure, increase health risks to our service members, and require modifications to much of our existing and planned equipment. The Biden Administration, through Executive Order (EO) 14008 "Tackling the Climate Crisis at Home and Abroad" and Executive Order 14057 "Catalyzing Clean Energy Industries and Jobs through Federal Sustainability," places climate change at the center of the Department's national security planning and our installation and business operations. To do this the Department will take steps to adapt to the unavoidable impacts of climate change to our missions, while also working to

mitigate the future effects of climate change by taking steps to reduce emissions of greenhouse gas emissions (GHG).

### **Climate Change Adaptation**

The effects of climate change—drought, heat, forest fires, and extreme weather events—are already costing the Department billions of dollars. These costs will only increase as climate change accelerates. The *National Defense Strategy* describes how climate is transforming the entire context in which the Department operates and will increasingly stress the Joint Force. To address this, the Department is taking a number of actions to improve our adaptive capacity, centered around the DoD Climate Adaptation Plan (CAP), which was signed by the Secretary of Defense on September 1, 2021 and publicly released by the White House on October 7, 2021. Actions under the Plan will ensure the DoD can operate under changing climate conditions, preserving operational capability and enhancing the natural and man-made systems essential to the Department’s success. To do so the CAP takes an expansive approach to the concept of adaptation, seeking to integrate climate resilience thinking across all agency programs and real property management practices. A companion document providing highlights and examples of the Department’s climate adaptation efforts was released in November 2021.

Supporting this effort is the Defense Climate Assessment Tool (DCAT), which was developed to assist in understanding installation climate exposure. Outputs from this tool can be used to inform development of an “all hazards” threat assessment for installations and subsequently be incorporated into master plans and military construction projects. A summary of these exposures was presented in the April 2021 report, “DoD Installation Exposure to Climate Change at Home and Aboard.”

### **Climate Change Mitigation**

The entire nation faces broad exposure to the mounting risks caused by climate change which pose an existential threat if left unmitigated. Recognizing this, the Department is committed to reducing its GHG emissions through a variety of efforts. We are committed to ensuring net-zero GHG emissions across our entire civilian enterprise – our installations, non-tactical vehicles and procurement efforts, by or before 2045. While significantly more challenging, we are also working to reduce emissions throughout our operational forces and formations by deploying new technologies that concurrently add capability and reduce vulnerabilities in an era of contested logistics. These efforts are aligned with the 2021 *Interim National Security Strategic Guidance* as well as the 2022 *National Defense Strategy*.

Across DoD’s we are engaged in a number of specific initiatives. First, in concert with the General Services Administration DoD was the first Federal agency to initiate procurement actions aiming to obtain 24/7 Carbon Pollution Free Electricity, with the intention to transition all of DoD’s utility procurement to this model by 2035. Second, we are leveraging the prominent role that installation micro-grids will play in our installation energy resilience efforts, which will allow for significant deployments of on-site renewable power. Third, we are updating all Unified Facilities Criteria to dramatically improve the energy performance of newly-constructed buildings and designing them to easily operate within an installation micro-grid. And finally, the

Department has begun the planning and design efforts to deploy the charging infrastructure essential to transition our non-tactical vehicle fleet to one that does not rely on fossil fuels, with the aim of having this transition complete by 2035.

## **MILITARY CONSTRUCTION AND FAMILY HOUSING**

The President's FY2023 budget requests \$12.2 billion for the Military Construction (MilCon) and Family Housing appropriation. This represents a \$2.3 billion or 23% increase from the FY2022 budget request of \$9.8 billion, and addresses critical mission requirements as well as life, health, and safety concerns. These efforts directly support operations, training, maintenance, production, and projects to take care of our people and their families, such as medical treatment facilities, unaccompanied personnel housing, and schools.

### **Military Construction**

We are requesting \$10.2 billion in the budget for Military Construction across the Department, an increase of 18% from last year's request, primarily due to infrastructure requirements for the Pacific Deterrence Initiative, European Deterrence Initiative, beddown of the B-21 aircraft, investments in KC-46A depot maintenance facilities, recruit dormitories, facilities and land acquisition in support of Ground Based Strategic Deterrent program, continued Guam relocation efforts, and investments in the Shipyard Infrastructure Optimization Program. Slightly more than half of this request provides readiness improvements in facilities to support operations, training, maintenance and production, and supply. Another \$1.1 billion funds medical facilities, troop housing, and community support, and \$210 million funds DoD's continued support to the NATO Security Investment Program.

This request also includes \$2.4 billion for the Defense-Wide Components, including

- \$151 million for dependent educational facilities
- \$129 million for incremental funding of fuel infrastructure;
- \$518 million for incremental funding of recapitalization of National Security Agency facilities;
- \$296 million to address new capabilities/mission, force structure growth, and infrastructure for Special Operations Forces;
- \$18 million for Washington Headquarters Services facilities; and
- \$329 million for the Energy Resilience and Conservation Investment Program; and
- \$422 million for planning and design of future year projects.

In addition, the Defense-Wide request contains \$434 million for medical facility recapitalization including \$153 million for the sixth increment (of a \$695 million project) for the Walter Reed Medical Center Addition/Alteration at Naval Support Activity Bethesda, Maryland; \$300 million for the tenth increment (of a \$1.513 billion project) for the Medical Center Replacement at Rhine Ordnance Barracks, Germany; and \$58 million for an ambulatory care center replacement at Joint Base San Antonio, Texas. These projects are critical for our continued delivery of the quality health care that our service members and their families deserve.

The Department continues to make progress on its Military Construction Reform initiative. We codified the responsibilities of the major stakeholders involved in construction projects to enable the consistent delivery of projects across the DoD. Additionally, a forthcoming data management policy will ensure project sponsors and DoD construction agents are sharing information about critical details such as project requirements, acquisition timelines, and construction status to ensure that components make proactive decisions and manage scope and cost changes with minimal impact to project delivery.

### **Facilities Sustainment, Restoration, and Modernization**

Facilities sustainment represents the Department's largest category of facilities spending. It provides for the regularly scheduled maintenance and repair or replacement of facility components. Ongoing and predictable investments are required throughout the service life of a facility to optimize its performance and support the safety, productivity, and quality of life of our personnel, while also reducing avoidable costs associated with premature deterioration. In addition to facilities sustainment funding, the Department relies upon its Restoration and Modernization (R&M) program funding to provide ongoing support to assigned missions by countering obsolescence and reversing degraded conditions of existing facilities.

The Department's FY2023 budget request includes \$12.6 billion of sustainment funding for the Military Services and the major Defense-wide organizations. This represents an increase from the \$12.3 billion in the FY2022 budget request and a slight increase in the overall sustainment rate from 82 percent to 85 percent. Within the budget request, each Military Component and Agency, excluding the Marine Corps, is funded to at least 85 percent of the modeled requirement. We are working with the Marine Corps to pilot a comprehensive model that would optimize FSRM and MilCon facility investments across their real property portfolio.

In addition to facilities sustainment funding, the Department relies upon its Restoration and Modernization (R&M) program funding to provide ongoing support to assigned missions by countering obsolescence and reversing degraded conditions of existing facilities. The FY2023 budget request includes \$5.4 billion in Operations and Maintenance appropriations for facilities R&M, a 35% increase compared to our \$4.0 billion FY2022 budget request.

Historically, the Department has managed the budgeting for sustainment of assets at the portfolio level with a sustainment model. This model, however, relies on an inventory approach to requirements development, which does not directly align asset investment requirements to expenditures. OASD(EI&E) has been maturing a tool that helps capture facility inspection data. The system not only considers the asset's condition, but also individual components that make up those assets to provide a much more granular assessment of the entire facility. It is guiding our transition to an asset management approach for budgeting for and managing the Department's infrastructure that addresses facility investment as a holistic program instead of independent sustainment, restoration and modernization programs. As the system is implemented over the next few years, the Department intends to set baseline parameters using factors such as mission criticality to set a minimum condition standard on its facilities.

## **Family and Unaccompanied Housing**

One of the Department's principal priorities is to support military personnel and their families and improve their quality of life by ensuring access to suitable, affordable housing. Service members are engaged in the front lines of protecting our national security and they deserve the best possible living and working conditions. Sustaining the quality of life of our people is crucial to recruitment, retention, readiness, and morale.

The Department owns, operates, and maintains nearly 36,000 family housing units, most of which are on enduring bases in overseas locations, and leases approximately 5,200 family housing units where government-owned or privatized housing is unavailable. The Department's housing inventory also includes more than 500,000 government-owned unaccompanied personnel housing (UH) bed spaces, and over 2,000 government-leased UH bed spaces.

Our FY2023 budget request includes \$2.0 billion to fund construction, operations, and maintenance of government-owned and leased family housing worldwide; provide housing referral services to assist military members in renting or buying private sector housing; and oversight of privatized family housing. The FY2023 request is \$533 million (37%) higher than the FY2022 request, and \$432 million (28%) higher than the FY2022 enacted amount to sustain our increased focus on ensuring the delivery and maintenance of quality housing for military families. The FY2023 request includes \$739.4 million for construction and improvements to meet the Department's goal to maintain at least 90 percent of the world-wide Family Housing inventory at Good and Fair condition levels, to include \$95.0 million for construction of 107 Army family housing units at Vicenza, Italy; \$248.6 million for three projects at Joint Region Marianas – Andersen Air Force Base, Guam; and \$230.1 million for the restructure of three Air Force Military Housing Privatization Initiative projects. The O&M budget request of \$1.21 billion represents a \$86.2 million (8%) increase compared to the FY2022 request and enacted amount. This funding request supports more than 35,000 government-owned family housing units, most of which are on enduring bases in overseas locations, and approximately 5,800 government-leased family housing units where government-owned or privatized housing is unavailable. The requested funding will ensure that U.S. military personnel and their families continue to have suitable housing choices.

The Department's FY2023 budget request demonstrates our continued commitment to modernize Unaccompanied Personnel Housing (UPH) to improve privacy and provide greater amenities. The FY2023 budget request includes nearly \$1.2 billion for 17 construction projects that will improve living conditions for permanent party personnel. This includes \$105 million for an Army barracks at Fort Stewart, Georgia; \$103 million for a barracks and dining facility at East Camp Grafenwoehr, Germany; \$101 million for phase II of a Navy barracks project at Kaneohe Bay, Hawaii; \$101 million for a Marine Corps Barracks Complex at Kadena, Japan; and \$131 million for two Air Force dormitory projects at Joint Base San Antonio, Texas;

With these investments, the Department remains committed to ensuring that our government-owned and leased family housing provides a high quality of life for U.S. military personnel and their families, and will continue our efforts to modernize and ensure safe, quality unaccompanied personnel housing with improved privacy and greater amenities for junior personnel.

## **Military Housing Privatization Initiative (MHPI)**

Under the overall direction the Chief Housing Officer, the Department has made significant progress to enhance the Military Housing Privatization Initiative (MHPI) and our oversight of the private sector MHPI companies that own and operate MHPI housing projects.

Central to this oversight, the Department has issued all policy guidance necessary to implement, prospectively, all 18 tenant rights at all MHPI housing projects. This includes a revised Tenant Bill of Rights, which was issued on August 1, 2021 and expands the version previously submitted to Congress in February 2020.

As Congress has recognized, retroactive application of the Tenant rights requirements at existing projects requires voluntary agreement by the respective MHPI companies; the Department cannot unilaterally change the terms of the complex, public-private partnerships that established the MHPI housing projects. As a result of our collaboration with the private-sector MHPI companies that own and operate the MHPI housing projects, all 18 rights are fully available at all but five of the nearly 200 installations with privatized housing. The Department continues to pursue select agreements not yet reached at the five remaining installations.

Our other key completed initiatives include strengthening oversight through improved training; reinforcing installation commander responsibilities; hiring more than 600 housing-related staff including resident advocates and increasing training; improving communication with residents and the annual tenant satisfaction survey; ensuring increased transparency and reporting of maintenance and repair work orders; revising project performance incentive fee metrics; establishing housing standards and inspection requirements; establishing policies and procedures for health hazard assessments and mitigation; and expanding MHPI project and program oversight at all levels.

Our next phase of MHPI reform actions will continue to prioritize key reforms that will improve the safety, quality, and habitability of privatized housing; enforce performance standards established for the MHPI companies; and monitor individual MHPI project performance to ensure the long-term financial viability of the MHPI projects and program. These efforts include examining ways to improve processes to enhance the housing experience for military families who have accessible housing needs and improving coordination with the Exceptional Family Member Program.

The Department of Defense understands that family is important and honors the sacrifice that military members and their families make to serve our Nation. We recognize that the environment where Service members and their families live impacts their quality of life, their ability to do their jobs, and the Department's ability to recruit and retain the force.

We are committed to working closely with you and the committee staff to ensure the long-term success of the MHPI program, and will remain diligent in our oversight to ensure MHPI projects deliver quality housing and a positive living experience for Service members and their families.

## **DEPARTMENT OF DEFENSE INSTALLATION ENERGY PROGRAMS**

The Department spent \$3.3 billion in FY2021 on electricity to power facilities at over 500 installations worldwide. This amount of energy consumption represents how great our dependency is on energy, underscoring the importance of our need to ensure our energy supplies and methods of supply are resilient, sustainable, and affordable.

### **Threats to Energy**

Energy is an essential enabler of military capability, and the Department depends on energy-resilient forces, weapon systems, and facilities to achieve its mission. At home and abroad, installations are reliant on commercial, municipal, and host nation power grids for day-to-day operations, including command and control systems, communications, lighting, heating, and cooling.

Adversaries recognize the strengths of U.S. power projection and sustainment, and possess long-range weapons, significant anti-access/area-denial (A2/AD) systems, and substantial cyber capabilities able to degrade the Department's ability to provide energy to forces and facilities. In response to these threats and in alignment with statute, the Department is working to "ensure readiness of the armed forces for their military missions by pursuing energy security and energy resilience" (10 U.S.C. § 2911) and "ensure the types, availability, and use of operational energy promote the readiness of the armed forces" (10 U.S.C. § 2926).

In addition, the Department's ability to provide energy to critical missions is affected by the climate. For instance, floods, storms, and other severe weather can degrade energy generation and distribution infrastructure on our installations, as well in the surrounding communities. In fact, severe weather can degrade supply chains beyond energy, with "last-mile" delivery systems for a range of mission critical commodities, goods, and services being particularly at risk. Therefore, climate resilience must be built into the supply chain as well, and the Department must ensure that key suppliers and industries can still operate though impacted by climate change, with special attention given to "last-mile" resilience.

### **Installation Energy Resilience**

The President and the Secretary of Defense have directed the Department to ensure installations and forces are resilient to all hazard risks – kinetic, cyber, and climate – and that the use of energy promotes the readiness of the armed forces for their military missions. In response, the Department is making significant energy investments in installation energy resiliency to increase the resilience of bases and facilities critical to generating, deploying, operating, and sustaining military capabilities. This includes a \$1.9 billion request for installation energy resilience and energy conservation initiatives, most of which are directed to existing buildings.

#### **Energy Resilience and Conservation Investment Program (ERCIP)**

The FY2023 budget request includes \$553.25 million for the Energy Resilience and Conservation Investment Program (ERCIP), which is one the Department's key mechanisms for



building both energy resilience and reducing greenhouse gas emissions. The ERCIP program has executed over 511 high-priority projects from FY2009-2021 including the implementation of micro-grids, renewable energy generation (i.e., solar PV, solar thermal, wind, etc.), building efficiency enhancements, and utility distribution improvements. ERCIP supports a full range of projects and technologies, but will be increasingly focused on building cyber-secure micro-grids that incorporate energy generation and power storage technologies. The FY2023 ERCIP budget request includes an increase in Planning and Design (P&D) to accommodate the design required for the more complex projects in the program. Additionally, the increase in P&D for FY2023 will build a pipeline of projects with more improved and timely project execution.

As ERCIP transitions to a standardized MilCon program and projects become larger and more complex, we are improving project planning & design, and enhancing execution oversight of these projects. We continue to make ERCIP the backbone of our energy resilience investments and prioritize energy project investments where they can best support the defense posture – based on the critical missions they support and the quality of Installation Energy Plans (IEPs). We recently updated ERCIP Guidance to the Services to reflect the statutory changes to the program stemming from the FY2022 NDAA. At the same time, we are working to prioritize projects that support energy resilience for critical mission requirements (10 U.S.C. § 2920). As Department focuses on reducing the carbon footprint at our military installations, ERCIP will continue to support a range of technologies and efforts, including renewable energy and energy storage, geothermal, accelerated deployment of air source heat pumps, and infrastructure projects directly supporting electrical vehicle (EV) charging stations.

The Department also has a number of energy conservation initiatives, most of which are directed to existing buildings. These include sustainment and recapitalization projects, which generally involve retrofits to install improved lighting, high-efficiency HVAC systems, double-pane windows, facility related control systems (FRCS), and new roofs. The Department is also giving increased attention to Micro Reactors and Next Generation Geo-Thermal as zero-carbon technologies capable of providing consistent baseload power.

#### *Installation Energy Resilience Policy and Governance*

To continue infusing the installation energy programs across the Department with an urgent sense of traceability, accountability and purpose, we are continuing to develop and promote a data- and metrics-driven approach to our energy planning and programming. This approach is reflected in our recent and continuing efforts to develop or update installation energy policy across the Department.

Last year, we updated our policies for energy resilience planning and metrics at installations to reflect the 10 U.S.C. § 2920 energy resilience requirements added by the FY2021 NDAA. These updated policies set forth energy availability standards for critical missions; directs the Military Departments to promote the use of multiple and diverse sources of energy in their planning, with prioritization of energy resources originating on the installation; encourages the use of micro grids; and favors the use of full-time, installed energy sources rather than emergency generation in their energy resilience solutions.

We are also working to harmonize the definitions and planning and assessment processes for critical missions across the Department, and improve our Installation Energy Plans (IEPs) to ensure alignment with the Installation Resilience Plans (IRPs) required by 10 U.S.C. § 2864. More than 158 IEPs were complete by the end of last year, and with an additional 200 expected to be completed this year. Currently, these plans establish the basis for planning energy performance projects, and provide a roadmap for integrating appropriated and public-private partnership authorities to close energy resilience gaps. Going forward, the IEPs will also document critical load requirements, lessons learned from black start exercises, and the ability of installations to withstand a 14-day energy disruption. We plan to eventually integrate the IEPs into the IRPs to reflect an “all hazards” approach that addresses a range of climate hazards and energy resilience gaps at priority installations and critical missions.

### *Black Start Exercises*

Black start exercises are an important component of the Department’s approach to risk assessment and for identifying gaps in our installations’ electrical infrastructure, such as previously-unknown interdependencies between various systems, so that we can best prioritize our resilience resources and planning. In the coming year, the Department will issue uniform black start exercise guidance and monitor a schedule of planned exercises through fiscal year 2027, for no less than five exercises per Service per year, in accordance with new Title 10 requirements stemming from the FY2021 National Defense Authorization Act.

Over the past year, we continued to transition execution of black start exercise to the Services. Across the Department in 2021, the Services conducted exercises at Marine Corps Air Station Miramar, Eielson Air Force Base, Wright Patterson Air Force Base, and Ohio Air National Guard bases Springfield-Beckley and Blue Ash. This brings the total number of black start exercises performed to date across the Department to 10. The Services have also begun planning for larger, regional black start exercises that cover several bases at once to more effectively test outage effects on Operation Plans, and the effectiveness of Continuity of Operations (COOP) plans.

### *Performance Contracting Authorities*

The Department continues to utilize performance contracting (i.e., ESPCs/UESCs) as a significant part of its efforts to enhance energy resilience through energy efficiency. Energy efficiency bolsters installation energy resilience by helping reduce the energy demand from distributed energy production resources during commercial grid disruptions. Energy efficiency is also a practical approach for the DoD to reduce its carbon footprint in response to the imperatives of EO 14008 and EO 14057, the Energy Act of 2020, the Federal Sustainability Framework, and DoD’s Climate Action Plan. DoD will continue to use these contracts where they enhance DoD mission readiness, mission assurance, and ultimately DoD’s warfighting capability, guided by the outcomes of the Installation Energy Planning process.

## **ENVIRONMENTAL CLEANUP AT BASE REALIGNMENT AND CLOSURE (BRAC) LOCATIONS**

To date, the Department, in cooperation with State agencies and the Environmental Protection Agency, has completed cleanup activities at 94 percent of Base Realignment and Closure (BRAC) sites and has conveyed many of these sites to other entities for further development. To continue this progress, we are requesting \$260 million for BRAC Environmental, a \$4 million decrease from the FY2022 request. DoD is still executing the generous additions provided by Congress in recent years.

While the Department continues to make progress completing cleanup, the remaining sites are complex and require more time or a remedy based on more advanced technology, or they are sites impacted by chemicals of emerging concern. Our focus remains on continuous improvement in the environmental restoration program by developing technologies to reduce costs and accelerate cleanup and establishing policies and guidance that maximize cleanup program efficiency and effectiveness. DoD also partners with regulatory and community stakeholders throughout the cleanup process to maximize transparency, public participation, and collaboration. Partnering is vital to ensuring DoD makes cost effective and efficient decisions. These initiatives help ensure that DoD makes the best use of available resources to steadily move sites through the cleanup process while protecting human health, safety, and the environment.

## **CONCLUSION**

Thank you for the opportunity to discuss DoD's programs supporting energy, installations, and environment. We appreciate Congress' continued support for our enterprise and look forward to working with you.