Office of the Assistant Secretary of the Army for Installations, Energy and Environment



INSTALLATIONS









STRATEGY 2025





Message from the Assistant Secretary of the Army for Installations, Energy and Environment

In our ever-changing world, the Army must evolve to meet emerging challenges. Challenges such as shrinking budgets, withdrawal of troops and up-and-coming demands and conflicts require every echelon within our Army to seek innovative, timely, and creative ways to operate.

The Office of the Assistant Secretary of the Army for Installations, Energy and Environment (OASA (IE&E)) contributes to Army readiness and enables global Army operations. We do this by providing strategic direction and oversight to all matters pertaining to infrastructure on Army installations and contingency bases, energy, and environmental programs to enhance resiliency.

During this time of constant change, it has never been more important to ensure our vision and strategy is well aligned with our plans and resources. Through a shared vision and strategic objectives, we will ensure the Army is ready, resilient and capable of accomplishing its mission of defending our Nation. To this end, I am proud to present the Office of the Assistant Secretary of the Army for Installations, Energy and Environment Strategy 2025. This provides the framework for executing the OASA (IE&E) mission and supports top-level strategic objectives through the lens of three key business drivers: installations, energy, and environment. I believe this strategy provides both the foundation and the vision to proactively support our Army. It is our guide for how we will continually improve our support to those we serve and is the focal point for communicating our efforts to key audiences, external stakeholders, Soldiers, Civilians, and their Families.

Guided by this strategy, OASA (IE&E) has a diverse workforce of dedicated professionals who take great pride in their service and continuously strive to improve the programs and support they provide to the Army. Collectively and individually, the IE&E team is determined to create greater and more positive results and to always seek better ways of managing our finite resources. This diversity and "can do" spirit makes OASA (IE&E) an adaptable and dynamic organization. Join me and the IE&E team in ensuring we do all we can to support the courageous men and women who fight our Nation's wars and preserve our freedom. Together we will make a difference.

Army Strong!

KATHERINE HAMMACK

Assistant Secretary of the Army

(Installations, Energy and Environment)

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Our Mission: The Assistant Secretary of the Army for Installations, Energy and Environment establishes policy, provides strategic direction and supervises all matters pertaining to infrastructure, Army installations and contingency bases, energy, and environmental programs to enable global Army Operations.

Our Vision: Enhance Army mission effectiveness and resilience in a prudent, efficient, and forward-thinking manner.

Our values provide guidelines for behavior within our organization and establish the framework for our culture. Our core values are the Army Values:

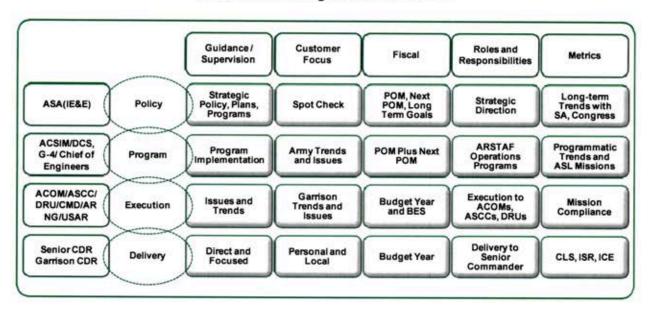
- Loyalty to bear true faith and allegiance to the Constitution, the Army, and Soldiers
- Duty to fulfill our obligations
- Respect to treat others with dignity and respect while expecting others to do the same
- Selfless Service to place the welfare of the Nation, the Army, and others before our own
- Honor to live up to all of the Army values
- Integrity to do what is right, legally and morally
- Personal Courage to face fear, danger, or adversity

Purpose: The Office of the Assistant Secretary of the Army for Installations, Energy and Environment Strategy 2025 sets forth the Army's vision for installations, energy, and environment. The strategy aligns to overarching National, Department of Defense, and Army strategies. It guides and shapes current and future actions and provides the strategic guidance and framework to bring the vision to fruition.

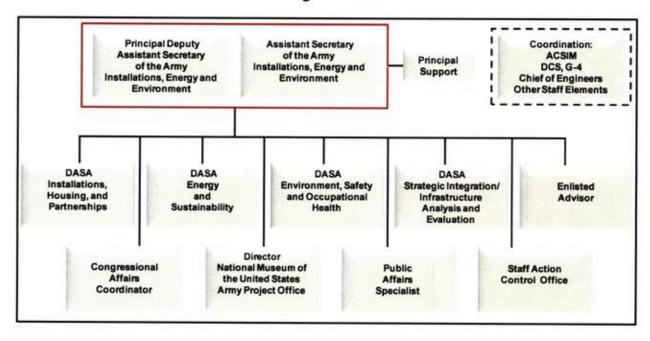
Scope: The strategy covers FY16-FY25 and will be updated as required to ensure relevance and currency with the Army's planning and resourcing efforts. It pertains to all installations on which Soldiers, Civilians and Families within the Army work and live. This is our means by which we inform and engage our stakeholders and partners around the globe.

Responsibilities and Governance: The Assistant Secretary of the Army for Installations, Energy and Environment (ASA(IE&E)) is the principal adviser to the Secretary of the Army on matters related to Army installations, their suitability for stationing, energy and water security and the Army's impact on the environment, safety and occupational health. The ASA(IE&E) is responsible for setting the strategic direction for and ensuring Army efforts related to installations, Army real estate, energy and water security and sustainability and the environment are executed consistent with law, regulation, and policy. This includes providing strategic direction for aspects of the planning, programming, budgeting and execution process within the IE&E domain, coordinating and integrating that direction with partner organizations, officials and stakeholders.

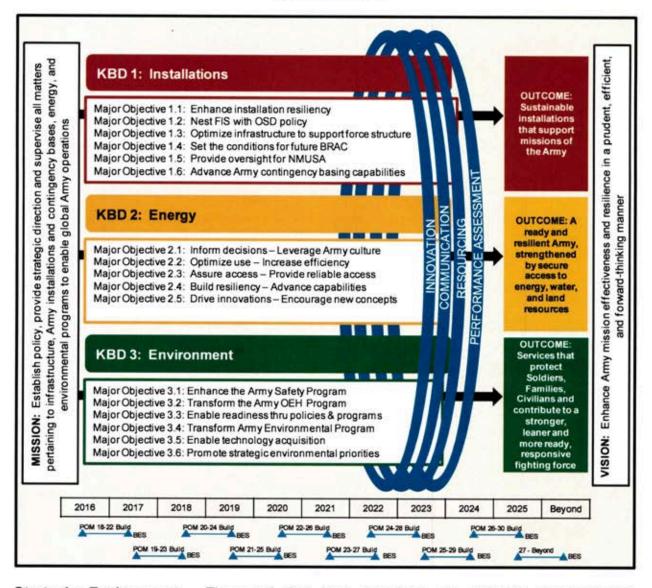
Installation Management Governance



Organization



Strategic Design



Strategic Environment: The word that best describes our strategic environment is "uncertainty." In the Preface of the U.S. Army Operating Concept, "Win in a Complex World," General David Perkins, Commanding General, Training and Doctrine Command asserts "the environment the Army will operate in is unknown. The enemy is unknown; the location is unknown; and the coalitions involved are unknown." The uncertainties of today's environment, the evolution of new military technologies, and the staying power of viable threats to Americans and their way of life will challenge the Army's ability to remain prepared for any contingency and to maintain its dominance over potential adversaries.

Compounding these circumstances is the budgetary uncertainty with which the Army must contend. While the Bipartisan Budget Act of 2013 provided the Army some relief from the Budget Control Act spending caps, the lack of fiscal predictability will continue in the future with a downtrend in resourcing and the potential resumption of sequestration-level spending caps. As the Army considers an operating environment that will present unique challenges, it must be prepared to prevent conflict, shape the security environment to facilitate national objectives and

ultimately defeat adversaries across the full range of military operations. To enable the Army to do this, IE&E must provide the Army with the capabilities it needs to win the nation's wars.

Key Terms of the Strategic Design:

Key Business Drivers (KBD) are OASA(IE&E)'s essential contributions to the Army. They encompass the processes, initiatives, information, and talent that enable our organization to accomplish its mission. These drivers are the guiding force in executing OASA(IE&E)'s strategy and are the key factors and influences that propel our organization's success.

Major Objectives focus on the efforts and actions we will actively be involved in to reach our vision and accomplish our mission. These objectives are long-term organizational goals that convert our mission statement into more specific plans and projects. They set the major benchmarks for success and are used by leadership to guide decision-making.

Outcomes are the results or culmination of the organizational, procedural, or external changes that move us forward to our desired end state.

Innovation is a critical enabler to our success. It is the process of translating an idea into a product or service that creates value. To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. Innovation involves deliberate application

"...the way we differentiate ourselves is not by size and technology, but rather by the rate of innovation." Success "will go to he or she that innovates more rapidly, more thoughtfully and more effectively."

> General Martin Dempsey Chairman of the Joint Chiefs of Staff

of information, imagination and initiative in deriving greater values from resources. It includes processes by which new ideas are generated and converted into useful products. While innovation is critical to our success, the rate of innovation is the catalyst that will exponentially increase our success in supporting the Army's mission. During his address at the National Defense University, Chairman of the Joint Chiefs of Staff General Martin Dempsey said, "...the way we

differentiate ourselves is not by size and technology, but rather by the rate of innovation." Success "will go to he or she that innovates more rapidly, more thoughtfully and more effectively."

Communication increases visibility of our challenges and successes; reaffirms our priorities; and generates support from policy makers, stakeholders, and partners. We must deploy our strategic messages vertically and horizontally so that all at each echelon understand what it is we are trying to do.

Resourcing – Our mission has not changed fundamentally, but the resources to accomplish our mission have been reduced significantly. To achieve the same mission with reduced means, we must dramatically improve the ways we operate, identify alternate service delivery paths, eliminate redundancies, achieve high return on investments, and target our resources to meet high priorities. We will leverage the Services and Infrastructure Core Enterprise (SICE) Board to review services and service delivery standards. The resourcing of IE&E priorities will be informed by Army guidance and decisions conveyed in documents such as the Army Planning Priorities Guidance and the Installations Program Evaluation Group (II PEG) guidance and priorities list. The Planning, Programming, Budgeting, and Execution process is the venue for documenting and resourcing Army requirements, resulting in the Program Objective Memorandum (POM). Effective use of the POM process is critical to resourcing success and

puts the Army on solid ground when defending its budget before Office of Secretary of Defense and the U.S. Congress.

Performance Management is a critical component of our strategic process as we adapt, operate, address our challenges and communicate our successes. It tells us how well we are doing toward reaching our vision, mission, and objectives and what adjustments, if any, we must make. OASA(IE&E) in collaboration with its Army partners will conduct holistic and recurring reviews that assess our plans, initiatives, and processes with the goal of improving our overall effectiveness and efficiency. The intent is to use existing metrics as practicable; establish new metrics only where significant gaps are identified; maximize the use the Army's Strategic Management System; and leverage existing forums such as the SICE Board to communicate and review performance. Through this process, we demonstrate transparency and accountability to our stakeholders and build stronger programs that meet the organizational mission.

Key Business Driver 1: Installations -



Installations are platforms of readiness that serve as the foundation and centerpiece of the Army's strategic priorities. These platforms support the Army's ability to remain a highly trained, effective, expeditionary, and campaign-quality force today and in the future. By providing worldwide policy, programming and oversight of the Secretary of the Army's Title 10 US Code responsibilities in the areas of real estate, military construction, engineering, housing, and base realignments and closures, OASA(IE&E) ensures success of the Army's readiness platforms. To accomplish this, OASA(IE&E) leverages numerous initiatives to optimize current capabilities and resources. At the center of these efforts are Base Realignment and Closure (BRAC) stationing analysis, the Army Facility Investment Strategy, Residential Communities Initiatives, and Privatized Army Lodging.

As the Army works to align end strength with current and future resources, we must take advantage of the opportunity to improve readiness while making the best use of our existing and planned facilities. While DoD has not yet been given the authority to execute another round of BRAC inside the United States, it is expected to be authorized in the near term as it is the best and proven way to address excess and shortfalls in facility requirements in a cost-effective and fair manner.

BRAC is the congressionally authorized process DoD has used to reorganize its base structure to more efficiently and effectively support our forces, increase operational readiness and facilitate new ways of doing business. The Army has successfully executed five previous rounds of BRAC: 1988, 1991, 1993, 1995, and 2005. The 1988, 1991, 1993, and 1995 BRAC rounds are producing \$943 million in net annual recurring savings since the recommendations were implemented. BRAC 2005 is producing \$1 billion in net annual recurring savings since its implementation in September 2011. The Army requires additional BRAC authorization to take unnecessary facilities out of the funding stream. This will allow the Army to apply these resources toward readiness and other priorities.

In addition to reducing and realigning functions more efficiently, the Army continues to dispose of excess property so it can be put to more productive re-use in our communities. The Army has excessed over 296,000 acres of property from the previous five BRAC rounds. The Army is utilizing the tens of millions of dollars in proceeds from negotiated leases and sales of excess BRAC 2005 property to defray the Army's costs for environmental clean-up and caretaker expenses. Every dollar earned from sales and leases of excess BRAC property is a dollar that does not have to be programmed and is therefore available to meet other important Army priorities like military construction, facility sustainment, and base operations support.

In 2013, the Secretary of Defense directed a European Infrastructure Consolidation review to coordinate cross-service and cross-agency opportunities to reduce expenses by eliminating excess capacity in Europe while ensuring remaining base structure supports operational

requirements and strategic needs. To this end, our Infrastructure Analysis and Evaluation team organizes, leads, and reports on initiatives to analyze, evaluate, and recommend retention, closure, consolidation, or divestiture of the Army's infrastructure to optimize its war-fighting capability and effectiveness. It is charged with developing policy; providing strategic direction; making recommendations to sustain and improve the expertise and capabilities to conduct large scale infrastructure evaluation and analysis; and to lead communication efforts to promote understanding and build stakeholder support.

Another way the Army is optimizing its facilities usage is through the Army Facility Investment Strategy (FIS). FIS is the Army's enterprise approach across the Active and Reserve components to establish guidelines to sustain needed facilities; dispose of excess facilities; improve the quality of those that are retained; and to only build-out critical facility shortfalls. This strategy encompasses numerous resource streams for success to include Sustainment, Restoration and Modernization, Facilities Reduction, Military Construction (MILCON), and Unspecified Minor Military Construction, Army programs.

To uphold the Army's commitment to making our installations safe, attractive, and modern communities for our Soldiers and their Families to live, the Army instituted the Residential Communities Initiative (RCI) – one of the Army's first major public-private partnerships. With its establishment, the Army became the first service to meet the Office of the Secretary of Defense mandate to complete privatization by 2010. Through RCI, the Army has been able to create world-class residential communities and leverage scarce funds, private sector expertise, creativity, and innovation. To date, RCI is comprised of 44 installations, 34 projects and over 86,000 homes equating to 98% of the Army's family housing inventory in the United States.

The continuation to this successful public-private partnership is the Privatized Army Lodging (PAL) program. PAL is a partnership between the Army and private industry to improve the condition of on-post lodging facilities and to provide for their long-term sustainment. This partnership enhances the Army's ability to improve the quality of transient lodging facilities throughout the continental United States, Alaska, Hawaii and Puerto Rico. Through PAL, the Army has been able to overcome \$1B+ in revitalization backlog; provide for long-term sustainment of facilities; and offer quality lodging at a discounted cost.

In summary, the Army's successful execution of BRAC, EIC, FIS, RCI, and PAL are essential to our long term commitment to providing safe, attractive, and modern communities for our Soldiers and Families to work, live and train. These programs, in conjunction with many other initiatives, leverage and translate into facility and infrastructure investments and strategic partnerships, good stewardship of resources, and streamlined processes that enable our installations to be the Army's platforms of readiness.

- Installations Key Business Driver 1 Outcome: Sustainable installations that support missions of the transformed Army with land, facilities, and infrastructure providing excellent quality support for Soldiers and their Families. Installations will be more efficient, sustainable, and adaptive to the changing environment and needs of the Army.
- Major Objective 1.1: Enhance installation resiliency by planning and programming for infrastructure sustainment, utility upgrades, and by leveraging current authorities provided in the National Defense Authorization Act 2013, Section 331, Public-Public Partnerships.
- 1.1.1. Ensure Soldier and Family housing requirements are sufficiently funded to maintain RCI projects' sustainability through continued engagement with OSD and Army staff.
- 1.1.2. Work to identify and implement public private partnerships by leveraging PAL, RCI, and utilities privatization opportunities.
- 1.1.3. Reduce facility square footage within available Demolition Operations and Maintenance (O&M) budget; exceed 50% waste diversion goal.
- 1.1.4. Optimize real estate and real property management through the Realty Governance Board, and validate business cases for energy projects, RCI, BRAC, property disposal decisions, other non-BRAC authorities and Enhanced Use Leases.
- Major Objective 1.2: Ensure the Army's Facility Investment Strategy is nested in policy.
- 1.2.1. Validate Military Construction, Army and Sustainment, Restoration, and Management requirements over the recurring POM process.
- 1.2.2. Inform Congress regarding the Army's program and their expectations within DoD's facility investment.
- 1.2.3. Link O&M funded restoration and modernization into the Military Construction (MILCON) process to prioritize resources within MDEPs.
- 1.2.4. Process Congressional notifications to ensure success of the MILCON priority projects.
- 1.2.5. Provide sound advice to the Secretary of the Army and the Chief of Staff of the Army on installations' suitability for stationing, in accordance with GO-2012-1, to include cost effective facility, environmental, real estate, and socioeconomic factors for their consideration.
- Major Objective 1.3: Optimize infrastructure to support force structure requirements.
- 1.3.1. Analyze, evaluate and develop recommendations and initiatives for disposition of the Army's infrastructure.
- 1.3.2. Provide strategic direction and policies.
- 1.3.3. Plan, advise, and direct communication efforts to promote understanding and build stakeholder support.

Major Objective 1.4: Set conditions for a future BRAC round.

- 1.4.1. Validate real property inventory records are complete and up to date.
- 1.4.2. Ensure all data bases that provide critical infrastructure data are up to date and validated.
- 1.4.3. Ensure real property inventories and utilization rates are appropriately considered for real property investment, disposal decisions and stationing actions.
- 1.4.4. Complete comprehensive European infrastructure consolidation. Coordinate and track implementation of European Infrastructure Consolidation (EIC) recommendations and develop new Army-wide recommendations that increase military value, decrease operating costs, and enhance readiness to execute the Army's global mission. Use the after action review process to develop conceptual framework and requirements for the Army Basing Study (TABS) organization; plan early to transition EIC team role to future mission in support of future large-scale infrastructure analysis and evaluation.
- 1.4.5. Set policy and BRAC property negotiation guidance to optimize Army caretaker and environmental requirements and expenses, while maximizing Army consideration (revenues) from sales and leases of excess BRAC property; transfer and/or convey BRAC property to recipients expeditiously to help communities adjust successfully to life after BRAC.
- 1.4.6. Lay groundwork to facilitate another BRAC. Organize, lead, and report initiatives to analyze, evaluate, and recommend retention, closure, consolidation, or divestiture of the Army's infrastructure to optimize its war-fighting capability and effectiveness.

Major Objective 1.5: Provide oversight and decision authority for all aspects of the National Museum of the United States Army project.

- 1.5.1. Implement steps to conduct museum groundbreaking.
- 1.5.2. Optimize Army Historical Foundation partnership.

Major Objective 1.6: Enhance the Army's ability to provide scalable capabilities in support of Regional Alignment of Forces by advancing contingency basing strategies, policies and investments.

- 1.6.1. Ensure mission continuity by improving operational effectiveness and efficiency at contingency bases.
- 1.6.2. Integrate contingency base design principles that incorporate local materials, reduce energy and water requirements, reduce waste streams, and minimize environmental impacts.
- 1.6.3. Develop training and manning policies and strategies for contingency bases.

Key Business Driver 2: Energy -



Energy, water, and land are an operational necessity and foundational enabler for all military capabilities. Army operations span a diverse range of environments and tasks, from base infrastructure under lesser threat, to expeditionary operations and sustained campaigns in hostile areas. Supplying water and energy to these diverse missions is an increasing challenge. Constraints and threats to the supply of energy, water and other resources are growing in scope and complexity both abroad and at home.

OASA(IE&E) provides the strategic leadership, policy guidance, program oversight and outreach for energy, water and sustainability throughout the Army enterprise. The vision for the Army's energy security and sustainability efforts is a ready and resilient Army, strengthened by secure access to energy, water, and land resources and executed to preserve future choice in a rapidly changing world. This will contribute to ensuring the Army is a strong, flexible, and mobile force that is housed, trained, and maintained on resilient installations able to project power, unimpeded by disruptions to domestic utilities or land use constraints. When deployed, these forces will accomplish their missions while making optimal use of available resources with the lowest possible logistics footprint and without generating tension with local communities.

The Army's Net Zero initiative is built on the Army's long-standing energy efficiency and sustainability practices. It is a strategy for managing existing energy, water, and solid waste programs with the goal of exceeding federally mandated minimum targets, where fiscally responsible, to provide greater energy and water security and increase operating flexibility. Net Zero concepts are applicable to both CONUS and OCONUS installations

Operational Energy (OE) is the energy and associated systems, information and processes required to train, move and sustain forces and systems for military operations. Army operational energy is a critical enabler for the range of military operational capabilities from the individual Soldier through the strategic level. Operational energy performance drives operational effectiveness through mobility, agility, flexibility, resilience and sustainability. It is an essential resource for supporting operational capabilities and performance. The Army OE policy is to use energy to our greatest benefit through resilient capabilities and energy-informed operations.

In October 2014, the Office of Energy Initiatives (OEI) was established to leverage multiple acquisition approaches and partners to execute renewable energy projects. These partners include the U.S. Army Corps of Engineers, the Defense Logistics Agency, General Services Administration, and others. Renewable energy produced on Army installations increases installation resilience, enhances mission effectiveness and provides a means to temper rising energy costs. The OEI is helping the Army meet its commitment to the President of deploying one gigawatt of renewable energy by 2025 as well as achieving the mandates identified in Congress' 2007 National Defense Authorization Act for the Army to consume 25% of its electricity from renewable sources by 2025.

- Energy Key Business Driver 2 Outcome: Provide a ready and resilient Army, strengthened by secure access to energy, water, and land resources in order to preserve future choice in a rapidly changing world.
- **Major Objective 2.1:** Inform decisions. Leverage Army culture to use resources wisely, improve operating effectiveness, and preserve future choice.
- 2.1.1. Incorporate resource sustainability in plans and processes. Ensure resource considerations, including sustainability, security, integrated design, and life-cycle cost are incorporated into plans, business processes, materiel management, and acquisition strategies at all levels.
- 2.1.2. Educate and train personnel across the enterprise. Integrate organizational resiliency and sustainability principles in training and leader development to support an adaptive and innovative force.
- 2.1.3. Lead by example. Leverage the Army culture to shape resource-informed behavior by our Soldiers, Civilians, and Family members.
- Major Objective 2.2: Optimize Use. Increase efficiency, recovery and decrease demand so as to maximize resource effectiveness for systems, installations, contingency bases, and operations.
- 2.2.1. Decrease resource demand. Minimize demand for energy, water, and land in the design, manufacture, and operation of systems, aircraft, vehicles, and equipment, along with the installations and operating locations that support them.
- 2.2.2. Increase resource efficiency. Increase the productivity of Army energy, water, and land use.
- 2.2.3. Support resource recovery. Implement systems and processes that improve energy, water, and land utilization, including life-cycle material management.
- Major Objective 2.3: Assure access. Provide reliable access to energy, water and land resources, and protect delivery mechanisms to mission-essential functions and applications, both domestically and to contingency bases during operational deployments.
- 2.3.1. Diversify and expand resource supply. Secure access to multiple energy and water sources, including renewable and alternative options, to improve resource availability.
- 2.3.2. Maximize flexibility in system design and use. Employ distributed systems that are designed to provide multiple sources/pathways or are capable of being applied in alternative ways.
- 2.4.3. Reduce vulnerability and risks. Upgrade physical and cyber protection to reduce risk and increase security for resource supply, storage, and distribution pathways, industrial control systems, supply chain, key testing facilities, and training lands.

- Major Objective 2.4: Build resiliency. Advance the capability for systems, installations, personnel and units to respond to unforeseen disruptions and quickly recover while continuing critical activities.
- 2.4.1. Maintain continuity of operations. Implement integrated and distributed technologies and procedures to ensure critical systems remain operational in the face of disruptive events.
- 2.4.2. Foster adaptability. Ensure Army operations can quickly adjust in response to disruptions in land availability, energy and water supplies, and supply chain functions.
- 2.4.3. Adapt to uncertain, changing conditions. Develop comprehensive energy, water, and land management practices, to include materiel and acquisition decisions that can adjust to evolving conditions such as climate change and increased need for defense support to civil authorities.
- 2.4.4. Adapt to climate change. Identify and assess the effects of climate change across the Army by collaborating with internal and external stakeholders. Integrate climate change considerations across four lines of effort: Plans and Operations; Training and Testing; Built and Natural Infrastructure; and Acquisition and Supply Chain.
- **Major Objective 2.5:** Drive innovation. Encourage new concepts; develop, test, and field new technologies; institutionalize continuous process improvement; and communicate best practices to maximize resource effectiveness.
- 2.5.1. Leverage expertise. Deploy the Army's science, technology, engineering, operations, and environmental expertise to increase resource-effective solutions.
- 2.5.2. Expand collaboration. Expand opportunities to work with industry, academia, other federal agencies, state/local governments, non-governmental organizations, and local communities to develop sustainable and resilient solutions.
- 2.5.3. Continuously improve. Implement continuous process improvement approaches in policies for the management and use of energy, water, and land resources.
- Major Objective 2.6: Advance the Army's ability to provide scalable capabilities in support of regional alignment of forces through policies and investments in operational energy and contingency basing strategy.
- 2.6.1. Improve efficiency and reliability at contingency bases to increase operational effectiveness by improving mission continuity and reducing the need to divert manpower to deliver fuel, and to operate, maintain and respond to outages in energy systems.
- 2.6.2. Integrate contingency base design principles that incorporate local materials, reduce energy and water requirements, reduce waste streams, and minimize environmental impacts.

Key Business Driver 3: Environment -



The Army has long made it a priority to protect the environment on installations, not only to preserve valuable resources for future generations, but to also ensure that we have the land, water and airspace needed to sustain military readiness. As a major landowner, a consumer of resources and a manager of human enterprises, the Army is bound to comply with federal, state, and local laws that protect human health and the environment. In order to do this, OASA(IE&E) provides policy, programming and oversight of the Army's Environment, Safety and Occupational Health (ESOH) compliance, cleanup, and natural, cultural, and historic resource programs; provides recommendations to milestone decision authorities on Army material regarding ESOH concerns; and executes the Army's arms control program as well as several executive agent responsibilities. While the Army's ESOH programs ensure that it responsibly addresses the footprint that will be left behind, they also provide a stronger foothold from which to move forward.

The Army's people are its most valuable resource. Army Safety and Occupational and Environmental Health (SOH) initiatives ensure the Army, its Soldiers, Civilians, and their Family members are educated and encouraged to employ risk management in their on-duty and off-duty activities and to foster a safe and healthy working and living environment. Soldiers, Families and Civilians must incorporate safety and health throughout the enterprise to preserve war fighting capabilities and enhance the force by providing a safe and healthy environment in which to live, work, and train.

Army force readiness depends on the availability of both realistic and accessible training. Army environmental quality and cultural resources programs ensure responsible compliance with federal and state air, water and waste requirements, conservation of natural and cultural resources, and consultation with federally-recognized Indian tribes and native Hawaiian organizations occurs in order to maintain access to training lands.

The Army operates in a dynamic world. As it continues to develop and acquire new technologies and information systems, it is important to ensure that environmental quality considerations are adequately addressed throughout research, development testing and evaluation to avoid creating future exposures or safety risks.

The DoD recognizes its responsibility to protect the public from the potential hazards associated with military operations, both past and present. The Army, as well as other military departments, implements cleanup and restoration programs in order to restore contaminated property to a condition that is protective of human health and the environment, and sustains mission capability. The Army Cleanup Program conducts its investigations and remediation activities in accordance with the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and other federal statutes.

Throughout history, our ability to maintain a well-trained military force has required the use of military munitions in live-fire training and testing. This use has often resulted in the presence of Unexploded Ordnance (UXO) in areas currently or formerly used for military training purposes. The Army has established a number of programs to address the full range of UXO issues, from detection to remediation to long-term monitoring. This program is primarily concerned with UXO safety, which can most effectively be achieved through robust education and outreach. The Army's UXO safety program is designed to educate military personnel and civilians alike about the potential hazards associated with UXO.

There are numerous entities throughout the DoD, the federal government and non-governmental communities that require technologies for detection and neutralization of UXO. The DoD Unexploded Ordnance Center of Excellence (UXOCOE) is the only "federated" effort within DoD that provides real-time electronic access to current information on materiel solutions for the counter-explosive hazards program. UXOCOE serves as the DoD's clearinghouse for the coordination of research and engineering technologies that have application to the detection and neutralization of explosives hazards in order to acquire user required technology in a cost effective and efficient manner while reducing the potential for duplication of effort.

Environment – Key Business Driver 3 Outcome: To provide services to the operating and generating forces that are flexible, cost-effective, responsive, and adaptive; that increase resiliency, protect Soldiers, Families, Civilians and contribute to a stronger, leaner and more ready and responsive fighting force.

Major Objective 3.1: Enhance the Army safety program structure, organization and processes by balancing requirements with capabilities and resource levels.

- 3.1.1. Improve tracking and reporting through Army Safety and Health Management System in support of the annual report to Department of Labor.
- 3.1.2. Track and measure effectiveness of implementation of the goals and objectives identified in the Army's Safety and Occupational Health Strategic Plan.
- 3.1.3. Streamline the Army's Safety information technology processes via business process engineering and implement an enterprise-wide information system that will support an Armywide safety and health management system.
- 3.1.4. Develop and implement a multi-generational transition plan with the Army Safety Office to manage the execution of the Quality Work Environment (QWE) assessments.
- 3.1.5. Improve alignment of Army regulations with safety and occupational health regulations and guidelines.

Major Objective 3.2: Transform the Army Occupational and Environmental Health Program.

- 3.2.1. Align Army Occupational and Environmental Health policy, regulations and guidelines to support DoDI 6055.01 requirements.
- 3.2.2. Develop a comprehensive concept of operations that will drive policy, regulations and information technology needs for the Individual Longitudinal Exposure Record.
- 3.2.3. Draft new DoDI and manual that addresses the appropriate actions to be undertaken to assess significant long-term health risks from past environmental exposures for military personnel and civilian individuals from living or working on military installations.
- 3.2.4. Promote usage of Defense Occupational and Environmental Health Readiness System-Industrial Hygiene (DOEHRS-IH) to document and share OEH information across the Army.
- 3.2.5. Promote better understanding of the health effects of Nanoparticles and emerging materials used by Army through the DoD Emerging Contaminants Work Group.
- 3.2.6. Modernize Knowledge Based Corporate Reporting System/Defense ESOH Network and Information Exchange (KBCRS/DENIX) to prepare to accept system data interfaces with service environmental management systems and prepare for transition to an execution agency.

Major Objective 3.3: Enable readiness through provision of Chem/Bio/Munitions policies, programs, and infrastructure through partnerships and innovation in a cost-effective, sustainable manner.

- 3.3.1. Enhance the Army's 3Rs Explosives Safety Program so that it best supports the Army, Army Families, and Army-led programs as well as informs and helps protect the public from hazards associated with military munitions.
- 3.3.2. Continue research efforts with academia and maintain an effective; proactive working relationship with private industry that support munitions-related actions; and recommend response to media inquiries regarding munition-related and other matters.
- 3.3.3. Continue to implement the Recovered Chemical Warfare Material Program and develop the policies and procedures to execute that program.
- Major Objective 3.4: Transform and transition the Army Environmental Program (AEP) structure, organization and processes to balance requirements with capabilities and resource levels.
- 3.4.1. Smoothly transition Army, BRAC and Formerly Used Defense Sites (FUDS) restoration timelines and milestones to account for reduced funding.
- 3.4.2. Maintain communication with federal and state stakeholders to ensure that DoD activities and information are transmitted in an accurate and timely manner.
- 3.4.3. Finalize the structural and organizational analysis of the AEP, obtain leadership approval on a final course of action and implement approved recommendation.
- 3.4.4. Identify DoD and Army policy driven environmental program requirements that are most critical in order to focus reduced resources on legally driven environmental compliance requirements.
- Major Objective 3.5: Enable acquisition of user required counter-explosive hazards (C-EH) technology in a cost effective and efficient manner while reducing the potential for duplication of effort.
- 3.5.1. Enable C-EH technologists, program managers, and senior officials to gain visibility into a centrally managed information conduit for DoD's research and engineering investments that focus on the detection and neutralization of explosive hazards.
- 3.5.2. Engage with the DoD components' acquisition communities to look across functional boundaries to better acquire required C-EH technologies in a cost effective and efficient manner through joint collaboration and leveraging of investment dollars.
- 3.5.3. Enable DoD to maintain visibility and to leverage C-EH technology efforts within other federal, academic, and industrial organizations.
- 3.5.4. Support Assistant Secretary of Defense (Research and Engineering), Joint Staff, Joint Improvised Explosive Device Defeat Organization and Military Service discovery boards to better understand the technology capabilities available to answer existing and emerging requirements.
- **Major Objective 3.6:** Promote strategic DoD and Army environmental quality priorities through a properly managed and implemented Army Environmental Quality Technologies Program.

- 3.6.1. Identify and address environmental technology shortfalls in partnership with Army Service Component Commands and United States Combatant Command Science and Technology Advisors.
- 3.6.2. Reduce ESOH-related problems in DoD weapon system platforms and at Army installations by executing the Army's Environmental Quality Technology and the National Defense Center for Energy and Environment programs addressing high priority ESOH and Energy technology development and implementation.
- 3.6.3. Assist weapon system program managers with incorporating environmental quality considerations into material acquisition programs.



Conclusion: During his address at the Association of the United States Army's annual meeting on 13 October 2014, Secretary of the Army John McHugh reminded us that when the Nation calls, the Army must be able to answer with a robust, reliable, and ready force. Although we do not know what our Nation will ask of the Army in the future, we do know that change for the Army is and will continue to be a strategic and fiscal reality. To ensure the Army is ready to respond to that call, OASA(IE&E) will pursue new and innovative ways to manage smaller budgets while still providing the capabilities the Army needs. The IE&E community is diverse with many missions and a workforce of talented and committed professionals. Collaboration, teamwork, and internal and external outreach and an atmosphere that encourages individual excellence and organizational success make IE&E an adaptable and dynamic organization that keeps the Army resilient and strong.

Glossary (Acronyms and Terms)

Section I: Acronyms

3Rs: Recognize, Retreat, Report

AAR: After Action Review ACOM: Army Command

ACSIM: Assistant Chief of Staff for Installation Management

ARNG: Army National Guard

ARSTAF: Army Staff

ASCC: Army Service Component Commands

ASL: Authorized Stockage List BES: Budget Estimate Submission BRAC: Base Realignment and Closure

CDR: Commander

CLS: Common Level of Support

CMD: Command

CONUS: Contiguous United States

DA: Department of the Army

DASA: Deputy Assistant Secretary of the Army

DCS: Deputy Chief of Staff
DoD: Department of Defense

DoDI: Department of Defense Instructions

DOE: Department of Energy DOL: Department of Labor DRU: Direct Report Unit

EEO/EO: Equal Employment Opportunity/Equal Opportunity

EPA: Environmental Protection Agency

FIS: Facility Investment Strategy

IAE: Infrastructure Analysis and Evaluation

ICE: Interactive Customer Evaluation

IE&E: Installations, Energy, and Environment IMCOM: Installation Management Command

ISR: Installation Status Report

MDEP: Management Decision Package

MTOE: Modified Table of Organization and Equipment NMUSA: National Museum of the United States Army OCONUS: Outside the Contiguous United States

OEH: Occupational and Environmental Health

OSD: Office of the Secretary of Defense

PDASA: Principal Deputy Assistant Secretary of the Army

POM: Program Objective Memorandum

SA: Secretary of the Army

USACE: United States Army Corps of Engineers

USAR: United States Army Reserve

Section II: Terms

3Rs: The Army established a Safety Education Program to inform Soldiers and the public of the dangers associated with munitions and what to do should they suspect they have encountered one. The 3Rs Program teaches Soldiers, families and the public to protect themselves:

Recognize: When they may have encountered a munition and that munitions are dangerous. Retreat: Do not touch, move or disturb it, but carefully leave the area. Report: Report what they saw and where they saw it to their chain of command, if in combat, or local law enforcement.

Budget Control Act of 2011 (BCA) was enacted into law on August 2, 2011. The BCA set caps on discretionary spending for FY12 – FY21 and created the Joint Select Committee on deficit reduction (often referred to as the Super Committee). The BCA instructed the Super Committee to develop proposals that would save \$1.5 trillion over ten years. It mandated that if the Super Committee failed to propose at least \$1.2 trillion in savings over ten years, automatic spending cuts, called sequestration, would occur in January 2013. Sequestration would be applied equally to defense and nondefense spending.

Contingency Bases are evolving locations that support military operations by deployed units and provide the necessary support and services for sustained operations. These locations protect forces and serve as a base to project combat power. They support one or more units and their equipment, as well as support multi-service activities.

II PEG: The Installations Program Evaluation Group (PEG) mission is to build an effective and efficient base support resource program for all active, reserve, National Guard and RDT&E installations. The II PEG programs resources for installations (facilities, environment, services, and information technology) and other Army-wide support.

National Defense Authorization Act 2013, Section 331, Public-Public Partnerships encourages a Service Secretary to enter into an intergovernmental support agreement with a State or local government for the purposes of providing, receiving, or sharing installation-support services when it is determined that the agreement will enhance mission effectiveness, create efficiencies, or create economies of scale, including a reduction in cost.

Net Zero: Contributes to the Army strategy for sustainability and energy security. It is a holistic strategy that builds up on long-standing sustainable practices and incorporates emerging best practices in building and community to manage energy, water, and waste at Army installations. The Army's concept for Net Zero recognizes that more sustainable Army communities are more mission capable, resilient and compatible with local community needs.

Services and Infrastructure Core Enterprise: an integrated and collaborative body of responsible stewards that seeks to use innovative ways to provide standardized, effective, and efficient services, facilities, and infrastructure. It is a community consisting of representatives from more than 15 commands, departments, offices, and agencies. The Assistant Secretary of the Army (IE&E) and Commander, Installation Management Command are co-chairs.



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