2023 Secretary of Defense Environmental Awards
Sustainability, Non-Industrial Installation Award

Each year since 1962, the Secretary of Defense has honored installations, teams, and individuals for outstanding achievements in Department of Defense (DoD) environmental programs. These accomplishments include outstanding conservation activities, innovative environmental practices, and partnerships that improve quality of life and promote efficiencies without compromising DoD's mission success. The 2023 Secretary of Defense Environmental Awards cycle encompasses an achievement period from October 1, 2020, through September 30, 2022 (Fiscal Years [FY] 2021-2022). A diverse panel of 54 judges with relevant expertise representing Federal and state agencies, academia, and the private sector evaluated all nominees to select one winner for each of the nine categories. These nine categories cover six subject areas including natural resources conservation, environmental quality, sustainability, environmental restoration, cultural resources management, and environmental excellence in weapon systems acquisition.

About the Sustainability, Non-Industrial Installation Award

The Sustainability, Non-Industrial Installation award recognizes efforts to prevent or eliminate pollution at the source, including practices that increase efficiency and sustainability in the use of raw materials, energy, water, or other resources. The sustainability award also recognizes energy efficiency and renewable energy practices, greenhouse gas emissions reduction efforts, toxic and hazardous chemical reduction efforts, procurement of sustainable goods and services, waste diversion, electronic stewardship, and efforts to plan for adaptation and resilience. Sustainable practices ensure that DoD protects valuable resources critical to mission success. Non-industrial installations are large or small installations that include ranges, test centers, contracting and policy agencies/organizations/offices, and research-and-development centers. The 2023 winner of the Sustainability, Non-Industrial Installation award is *Kadena Air Base, Japan.*

About Kadena Air Base, Japan

Kadena Air Base (AB), located on the island of Okinawa, is the largest base in the Pacific region at 11,017 acres. It is also home to the 18th Wing, the Department of the Air Force's largest combat Air Wing, whose mission is to deliver unmatched combat airpower and provide sovereign options that promote peace and stability in the Asia-Pacific region. The AB comprises 7,500 active-duty personnel, civilians, contractors, and dependents, and has a total population of 24,000 residents. The installation maintains a robust Environmental Management System (EMS) and exceeds DoD requirements through the successful integration of the regional EMS and navigation of two different countries' regulations. This high level of command support from the 18th wing increases the visibility of sustainability objectives and targets throughout the Pacific, and promotes continual improvement through shared challenges, successes, and lessons learned.

U.S. Air Force and U.S. Navy conduct regular flying missions over Okinawa, Japan.

Major Accomplishments in FY 2021-2022

- Kadena AB contracted a private energy company, NORESCO, in November 2019 to implement a four-part Energy Savings Performance Contract to boost the installation's mission-critical energy resiliency. This project will generate more than $153 million in guaranteed cost savings over the performance period. The keystone of the $85.7 million project is a new generator and microgrid utility system, enabling Kadena AB to sustain operations and meet critical mission requirements effectively during utility disruptions. The contract also upgraded nearly 200,000 existing fluorescent lights with energy-efficient LED components, thereby reducing lighting energy consumption by over 65%.

Contractors installing the solar assisted air conditioning unit. This innovative technology is serving as a pilot to evaluate potential application across the rest of the installation.

- Kadena AB emphasized procurement of green materials by implementing several sustainable programs. The Free Issue Program reissues unused serviceable materials to installation shops free of charge and has resulted in a savings of $79,000 by preventing purchases of unnecessary new products. The Shelf-Life Extension Program, which sends material expiration notifications, has saved $46,000 in product replacement costs and $230,000 in disposal costs. Since 2020 the total cost of purchasing green materials has increased from $75,000 to $113,000.
- In 2022, Kadena AB facilitated the removal of 18,000-pounds of Halon 1211, a Class I ozone-depleting substance (ODS), and 5,000-pounds of R-22, a Class II ODS, through its Ambient Air Quality Monitoring Plan. In addition, Kadena AB eliminated the possibility of accidental releases to the atmosphere by turning in excess ODS products to the Defense Logistics Agency Aviation Reserve, thus aiding the DoD mission for reutilization.
- Kadena AB's qualified recycling program has earned an average of $300,000 per year, diverted 8,200 tons (43%) of municipal solid waste (MSW) and 1,320 tons (98%) of construction and demolition waste from landfill and incineration. This exceeded DoD's diversion goals of 40% and 60%, respectively. Additionally, MSW disposal weights have decreased nearly 2,000 tons in the last year. Green waste and used oil recycling programs have saved the installation $1.3 million and $300,000 per year, respectively.
- Kadena AB conducted an initial cultural asset survey at the proposed Chibana Industrial complex area and uncovered an old village site that is considered a rare finding due to its relatively intact condition after island wide development occurred post World War II. This village site is named "Daikujyaku Yatoukuru Village," and the recovery effort has recorded significant historical artifacts.

The "fuuru" found at the Daikujyaku Yatoukuru Village site is an intact system of the modern-day toilet.

- Kadena AB conducted a survey, which identified 704 unique species of plants, corals, and wildlife in the Kadena and Okuma Recreation Center boundaries, to ensure protection of native species found on Okinawa. The survey findings helped guide current and future projects to restore and protect the natural habitats unique to the region. Since 2021, Kadena AB has been actively planting coral at Okuma Recreational Center to enhance the marine wildlife and educate the public on the importance of a thriving reef. Planting corals improve fishing grounds to restore a sustainable food source and increase tourism for the local economy.