



Kadena Air Base ESPC

(U.S. Army photo by Sgt. Mark Morrow/Released)

Kadena Air Base (AB) is the hub of airpower in the Pacific and home to the 18th Wing and a variety of associate units. Together, they form Team Kadena, a world-class combat team ready to fight and win from the Keystone of the Pacific. Nearly 18,000 Americans and more than 4,000 Japanese employees and contractors make up Team Kadena.

In 2019, NORESKO was awarded an ESPC project at Kadena AB. This ESPC has reduced energy dependence and provided a dramatic reduction in water usage – a critical resource for the installation. The project represents one of the Air Force’s largest water conservation initiatives, reducing consumption by almost 60 million gallons of water and delivering more than \$785,000 in savings in fiscal year 2022 alone. The project is also the first ESPC example of a standby microgrid, which is composed of five generators and has a total capacity of 10 MW.



This **\$85.7 million** ESPC project at the home of the U.S. Air Force’s largest combat wing will generate more than **\$154 million** in guaranteed cost savings.



Safety: this project was implemented with **no OSHA violations** or fines.



Energy conservation measures included **10 MW** of on-site power generation with standby **microgrid**, domestic **water conservation** measures, solar thermal-assisted **air conditioning**, and upgrades to nearly **200,000 light fixtures** with state-of-the-art **LED technology and lighting controls**.



This ESPC has **exceeded the annual savings guarantees** in every year of performance.



The power generation assets are part of a **new advanced microgrid** that enables Kadena AB to more effectively sustain operations and meet critical mission requirements during utility outages.



This ESPC reduced carbon dioxide emissions by **10,300 metric tons**, sulfur oxide emissions by **4 metric tons**, and nitrogen oxide emissions by **11 metric tons**, annually.



This ESPC project was recognized with a DOE 2023 Federal **Energy Management Program Award**.

NORESCO’s ESPC work for the U.S. Air Force dates back to 1998 with our project at Cape Canaveral Air Station. Since 1984, NORESKO projects have saved more than 120 million MMBtu of energy, 20 billion kWh of electricity, and 50 billion gallons of water and provided more than \$5 billion in guaranteed energy, water, and resource savings.